



# **iCAN 2016**

## **OFFICIAL CATALOGUE**

**- EVENT DIRECTORY -**

## THE ORGANIZER



TISIAS is a common-interest, support-management organization established by graduate students of the University of Waterloo in Kitchener-Waterloo, Ontario, Canada. Our objective is to support students, inventors, innovators, entrepreneurs, and researchers across Canada, the United States, and the Republic of Korea in a way to promote creative ideas and innovative projects to various global platform through making numerous participations in

international invention exhibitions, conferences and other relevant events to raise global awareness of intellectual property, shine with awards and achievements to aid creative qualities, profession and academic enrichment.

## THE EVENT

The event aims to provide a new exhibition platform in Canada for local and overseas inventors with spectacular ideas to showcase some of the finest inventions, innovative products as well as academic and scientific research projects. iCAN 2016 provides all-around program including display and exhibition of inventions, educational seminars and awarding ceremony.



### THE

Applications: January 1 – July 15  
Announcement of Winners: July 1 – 27

**"Finalists Selected & Confirmed"**



### *The Finals*

Date: August 27  
**Final Round Exhibition,  
Presentation & Award Ceremony**



International Invention Innovation Competition in Canada  
**iCAN-TORONTO, CANADA**



International Invention Innovation Competition in Canada  
**iCAN-TORONTO, CANADA**

PATRONAGE BY



ORGANIZED BY



MONITORED BY



LOCALLY SUPPORTED BY



INTERNATIONAL DELEGATIONS & PARTNERS



## LIST OF PARTICIPATING COUNTRIES



ARMENIA	HONG KONG	POLAND	TAIWAN
AUSTRALIA	INDONESIA	QATAR	THAILAND
BULGARIA	IRAQ	ROMANIA	TUNISIA
CANADA	I.R. IRAN	RUSSIA	TURKEY
CHINA	KOREA	SAUDI ARABIA	TURKMENISTAN
CROATIA	KYRGYZSTAN	SENEGAL	UKRAINE
EGYPT	MALAYSIA	SLOVENIA	UAE
ENGLAND	MOROCCO	SPAIN	USA
GEORGIA	PHILIPPINES	SUDAN	ZAMBIA

# EVENT OUTLINE

## **TITLE OF EVENT**

2016 International Invention Innovation Competition in Canada, iCAN 2016

## **ORGANIZED BY**

Toronto International Society of Innovation and Advanced Skills (TISIAS)

## **INTERNATIONALLY SUPPORTED BY**

International Federation of Inventors' Associations (IFIA)  
World Invention Intellectual Property Associations (WIIPA)

## **LOCALLY SUPPORTED BY**

Innovation Initiative Co-operative (IIC) "The Inventor's Circle"

## **THE ORGANIZING COMMITTEE & SUPPORTING ORGANIZATIONS**

The Inventors College Organization (ICO)  
The First Institute of Canadian Inventors (FICI)  
Association of Thai Innovation Promotion (ATIP)  
Indonesian Invention and Innovation Promotion Association (INNOPA)  
The Union of Inventors (Morocco)  
InventHelp – "The INPEX Show" Pittsburgh, USA  
Asia Invention Association (AIA)  
Korea Invention News (KINEWS)  
Korea Invention Academy (KIA)  
Farasay International Inventor's Group (FIIG)  
Romanian Inventors Forum (FIR)  
Association of Polish Inventors & Rationalizers (SPWiR)  
Turkish Inventors and Inventions Association (TÜMMİAD)  
Agrigreen (Qatar)  
International Intellectual Property Network Forum (IIPNF)  
How CREATIVE (Los Angeles, CA)  
National Defence University of Malaysia (UPNM)  
Inventors Salon "New Times" (Sevastopol, Russia)  
Uncle Bugs Academy of Inventors (Kuala Lumpur, Malaysia)

# INTERNATIONAL JURY

## *CO-CHAIRMAN OF THE JURY*

### **Mr. Bob Huybrechts, RDT**

President of the Innovation Initiative Co-operative Inc. (IIC)

### **Dr. Soung-Mo Hong**

President of Asia Invention Association (AIA)

## *VICE-CHAIRMAN OF THE JURY*

### **Mr. Otto Schmidt**

Director of Inventors College Organization (ICO)

## *MEMBERS OF THE JURY*

### **Mr. Babak Khodaparast**

President of the First Institute of Canadian Inventors (FICI)

### **Dr. Adnan Fahad Al-Ramzani Al-Naimi**

President of Agri-Green (Doha, Qatar)

### **Assoc. Prof. Dr. Muhammad Iftikhar B. Hanif**

Management & Science University (MSU) Malaysia Shah Alam

### **Dr. Ayhan Saeid Dadashzadeh**

President of Turkish Inventors and Inventions Association (TÜMMİAD)

### **Ms. Nicole M. Lininger**

Director, InventHelp's INPEX "America's Largest Invention Show"

### **Mr. Suresh Thanakodi**

Lecturer, Electrical Engineering, National Defence University of Malaysia (UPNM)

### **Mr. Ramin Aghebati**

Director General, Farasay International Inventor's Group (FIIG)

### **Mr. Majid El Bouazzaoui**

President, Union of Inventors (Morocco)

**Dr. Gersim S. Lumintac**

Education Program Supervisor, DepED Division of Surigao del Norte (Philippines)

**Mr. Mike McFarthing**

CEO, The Xpansus Group Ltd. (Canada)

**Dr. Azman Ismail**

Lecturer, Universiti Kuala Lumpur (UniKL-MIMET, Malaysia)

**Mr. Howard Lim**

Founder, HOW Creative (Los Angeles, CA)

**Mr. Jerzy Maduzia**

Director of John III Sobieski Secondary School (Jastrzebie-Zdroj, Poland)

**Mr. Amedeo Pozzebon**

Member, Innovation Initiative Co-operative Inc

***LIST OF AWARDS PRESENTED***

**TOP 3 FINALISTS**

THE GRAND PRIZE

SEMI-GRAND PRIZE

IFIA Best Invention Award

**UNIQUE INVENTORS**

People's Choice Inventor Award

Best Youth Inventor Award

Best Female Inventor Award

**BEST INVENTIONS (CONTINENTAL)**

Best Invention of North America

Best Invention of Europe

Best Invention of Asia

Best Invention of the Middle East

Best Invention of Africa

**THE PRELIMINARIES**

Gold / Silver / Bronze Award

**BEST INVENTIONS (NATIONAL)**

Best Canadian Invention

Best American Invention

Best Invention of Malaysia

Best Invention of Indonesia

Best Invention of Korea

Best Invention of Hong Kong

Best Invention of the Philippines

Best Invention of China

Best Invention of Poland

**SPECIAL AWARDS BY**

Union of Inventors (Morocco)

Romanian Inventors Forum

INVENTHELP (USA)

INNOPA (Indonesia)

AIA/KINEWS/KIA (Korea)

SPWiR (Poland)

FIIG (I.R. Iran)

## ACKNOWLEDGEMENTS



Date: 20 July 2016  
No. : 2016-2708

Dear Honorable Inventors,

On behalf of International Federation of Inventors' Associations (IFIA), I would like to extend my sincere appreciation to the Toronto International Society of Innovation & Advanced Skills (TISIAS) for taking the initiative of organizing the first annual of International Invention Innovation Competition in Canada, iCAN 2016 on August 27th.

iCAN is supported by IFIA since it certainly contributes to the promotion of innovative culture and raises awareness about the necessity of innovation in Canada which is in parallel with the main objectives of IFIA.

This event certainly offers a great opportunity for the first time to showcase the innovative products in Canada and grab the chance of marketing, licensing and financing the inventions by the Canadian businessman, stakeholders, manufacturers and financiers.

I highly encourage IFIA members to participate in iCAN 2016 in order to adore the dedicated efforts of the young members of TISIAS who have struggled hard to reach their goal.

Sincerely Yours,

Alireza RASTEGAR

IFIA President

Rue Du 31-Décembre 8,  
1207 Geneva / Switzerland  
Email: [info@ifia.com](mailto:info@ifia.com)  
Website: [www.ifia.com](http://www.ifia.com)  
Tel: +41 22 736 59 49



**Association of Thai Innovation and Invention Promotion**

1695 Rangsit-Nakornnayok Str 64,  
Thanyaburi, Patumthnai 12130, THAILAND

Tel./Fax. +66 2 050 7534

Email: atipcontact@gmail.com



Dear Mr. Chang Moonsuk,

Chairman

Toronto International Society of Innovation & Advanced Skills (TISIAS)

On behalf of Association of Thai Innovation and Invention Promotion (ATIP) I would like to congratulate to your success on **2016 International Invention Innovation Competition, iCAN 2016** in Toronto.

Even it is a first event organized by TISIAS I do believe that your leading of TISIAS to promote innovation and invention associated with many IFIA members will find success to share and show many innovative ideas in iCAN 2016. This accomplishment will say the quality of your organization and service. And now we can observe that.

As representative of our good collaboration, certain number of ATIP members join in the competition and will show and share their innovative ideas there.

Congratulations for all inventors on proving that you all had worked hard. Your immense enthusiasm, passion and determination together will result in bigger and better future.

Last but not least, I wish you all good luck and continue to have success in all areas!  
I look forward to join your next event.

Yes ! You can!

Best wishes,

Dr. Unchalee SANGUANPONG, Assoc. Prof.

President

Association of Thai Innovation and Invention Promotion







**“I** am honored to participate and be a judge at iCAN 2016! On behalf of InventHelp’s INPEX, congratulations and good luck to all the participants at this year’s event! Continue your goals of improving innovation and technology.”

**Nicole M. Lininger**

*Tradeshow Director*

InventHelp’s “INPEX” Pittsburgh, USA

**“W**armest congratulations to all winners and coaches of iCAN 2016 as well as the Organizers for such laudable undertaking with much pride and distinct honor being a part of this international competition of inventions and innovations in Toronto, Canada.”



**GERSIM SERING LUMINTAC**

*Education Program Supervisor-I, Science,  
DepED Division of Surigao del Norte, Philippines*

**“A**s the supported organization of iCAN, World Invention Intellectual Property Associations (WIIPA) would like to express the greatest appreciations to the organizer, TISIAS, for providing a fine, brand-new platform to the inventors to gain the chance to learn, explore and achieve and the sincerest congratulations to the all winners of iCAN 2016 from all over the world.”

**Hsieh, Hsin-Ming**

*President*

World Invention Intellectual Property Associations (WIIPA)



## Greetings from Indonesia!



Dear iCAN Participants,

First of all, let us congratulate you for your superb achievement in iCAN 2016, CONGRATULATIONS! As a national association of young inventors in Indonesia, Indonesian Invention and Innovation Promotion Association (INNOPA) has been actively supported young inventors from all over Indonesia to participate in any International innovation competitions around the world since 2009. It has been INNOPA's commitment to develop skill of Indonesian young inventors and help them to market their invention to the world, in order to change the paradigm of Indonesia as a consumptive country to be the productive one.

The aim of this International competition is to be a place for inventors from around the world to share knowledge, then work together, until finally, hopefully, able to create a ground-breaking project to be shown to the world. Please note, that this achievement is still the very beginning of your journey. The world needs you more, making a big impact to solve problem in this world through your invention, then together we are heading to the better world. Once again, CONGRATULATIONS on your winning!

Sincerely Yours,

**Erricha Insan Pratisi**  
President of INNOPA



## Dear Organizer of iCAN 2016,

Please accept my heartiest congratulation for organising the iCAN International Invention Innovation competition for the world to take part. It is not only a path for inventor to gain access into the Canadian and North American market but iCAN also serves as a platform for inventors to benchmark our inventions against the best ideas in the world.



We also like to take this opportunity to encourage inventors from other continents to participate in this competition because as the world gets more competitive, inventor of new products like us we need to network and support one another. Making friends within the circles of inventors is the first step to take in order to bring our new products and creations to the market place.

Thank you and I look forward to seeing you all at the exhibition and award ceremony soon.

Best wishes,

***Bugs Tan***

Uncle Bugs Academy of Inventor  
MALAYSIA



UNCLE BUGS INVENTOR ACADEMY

**Dear Mr. MOONSUK CHANG**  
**Toronto International Society of**  
**Innovation & Advanced Skills (TISIAS)**

I congratulate you from the core of my heart for the success of iCAN 2016 exhibition of this year, and I appreciate very much the efforts made by you from more than a year to ensure the success of this important event in its first edition. I also congratulate all colleagues from inventors and innovators from different countries which have very special works that enable them to get special awards and valuable medals of this exhibition. I wish them continued success in their future works and I also wish that I can meet all of them in next exhibitions of inventions that will held at different country of the world.



Sincerely yours,

A handwritten signature in blue ink, reading "H. J. Al-Daraji". The signature is stylized with a large, flowing initial "H".

**Prof. Dr. Hazim Jabbar Al-Daraji**  
President of Iraqi Forum of Inventors  
Executive Committee member of IFIA  
University of Baghdad, Baghdad, Iraq







It's an honor and a privilege to serve as a speaker and panelist at iCAN. You, the inventors are the ones shape and give texture to the world we live in. You are the creators that unveil the future. You play an incredible role shaping society and cultures.

To each inventor: be creative, remain passionate, say yes - while others say no, seize opportunities, persevere towards your vision, and rewarding moments will occur on your path.

Thank you inventors for participating. Thank you iCAN for providing the environment that fuels ideas into reality.

## **Howard A. Lim**

President & CEO  
HOW Creative®



Dear TISIAS,

I would like to express my congratulations to the members of TISIAS for organizing iCAN 2016 for the first time in Toronto, Canada. I hope that this show would accelerate its growth year after year to allow numerous inventors from various fields of research can share, network, and develop together and enable creative exchange of technologies, and impact the next generation of young inventors at the same time. Moreover, we

sincerely hope iCAN to grow into one of the best platforms where inventors from both local and abroad can collaborate and benefit.

## **Dr. Soung-Mo Hong**

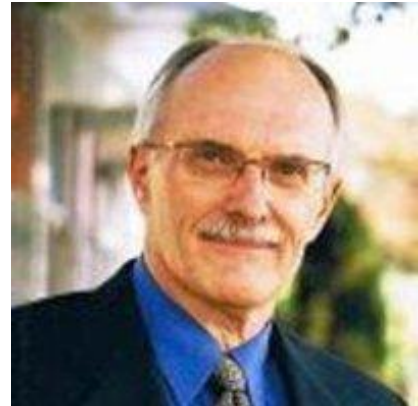
President

Asia Invention Association (AIA)



Dear Participants,

I would like to express a very special hello and welcome to all the inventors, special guests from other continents, distinguished local guests and speakers, and friends. I'm sorry and sad that I can't be here physically for this important inventions show but I am very much here in spirit and proud to support Mr. Moonsuk Chang – the Organizing Chairman of iCAN 2016 in his work and hope that this becomes the first of many successful shows.



Innovation and the inventing of new products and services are vital for the expansion of national economies and also for developing individual wealth and prosperity. That is what you are involved with right now. Be proud and excited.

Inventing is a very difficult area in which to work. Success is difficult to achieve. To get manufacturing, advertising and marketing support, distribution, and sales often takes years. Don't give up. Stay the course.

As part of the bigger circle of development, it is vital that we invite and educate companies and governments so they become aware of the ongoing need for new products and services that result in diversification and additions to company income. Inventing is an important part of the process of creative destruction, in which the old is replaced with the new, better, or different.

I wish you lots of success today at this important show. Good luck to all the inventors. May your products and services all go into the marketplace!

Best of Luck to Everyone.

**Otto Schmidt, M.Ed.,**  
Accent on Skills Consulting  
Inventors College Organization (ICO)





# **iCAN 2016**

## **LIST OF EXHIBITS**

- Alphabetically by Country -



# ARMENIA

APPLICATION No.	ARM-001
AUTHOR(S)	<b>L. Petrosian, T. Petrosian</b>
ORGANIZATION	Individual Inventor(s)
TITLE OF INVENTION	<b>MODULAR LANDING GEAR</b>

Prefabricated modular designed landing gear landing gear of two couples end levers, united into a single design by a.s. no. 233857 "Capture for products with apertures" entered the oppositivno tabs on a.s. no. 1731719. The chassis consists of two carriages, which are set forth on the axis of the front wheels in pairs of small diameter and the rear pair of wheels with a larger diameter to ensure a smooth transition during take-off with the front pair of small diameter wheels on the rear pair of wheels, and when landing-on the back a couple of wheels and moving to the front pair of wheels. The ammortiziruûšij effect, peculiar only to design a modular chassis. The simplest chassis assembly using identical end levers number in fasteners, which considerably simplifies the process of assembling the chassis, extended resource durability of steel struts of rolled-up eyes end of levers, which embody two axis trolleys with pairs of small wheels and larger diameters.

# AUSTRALIA

APPLICATION No.	AUS-001
AUTHOR(S)	<b>Valiant Yuk Yuen LEUNG</b>
ORGANIZATION	Valiant Leung Store
TITLE OF INVENTION	<b>SYNERGISTIC TRAFFIC INTERSECTION</b>

This dual mode traffic light intersection system caters and satisfies the five basic needs of all road users. They are right and left turn, stop, straight and U-turning. It allows a harmonious flow of traffic through an intersection. Utilizing the provided space to the utmost potential, whilst ensuring the safe crossing of pedestrians. A system that can be adopted in the use of all traffic light intersections and combination of lanes. This design can be synced with surrounding traffic lights, to form a continuous flow of traffic. To overcome or substantially ameliorate some of the deficiencies of current major intersection.

# BULGARIA

APPLICATION No.	BUL-001
AUTHOR(S)	<b>Georgi Evgeniev Chernev, Elena Veselinova Todorova</b>
ORGANIZATION	University of Chemical Technology and Metallurgy
TITLE OF INVENTION	<b>Hybrid sol-gel matrices used for entrapment of <i>Aspergillus awamori</i> strain, producer of xylanase</b>
<p>The purpose of the present invention is the obtaining and application of biomaterials based on silica precursors and natural polymers. The obtained results show that increasing of organic part leads to an increase of pore size and aggregates dimension on the surface and decrease of the specific surface area. The obtained biomaterials were successfully applied as matrices for the incorporation of living cells and used in laboratory bioreactor to achieve biodegradation of the toxic substrate up to 96.7 %. Immobilization of cells for biochemical conversions, and treating different nitrile-containing wastes by natural populations of bacteria is preferable and applicable.</p>	

APPLICATION No.	BUL-002
AUTHOR(S)	<b>Andriana Surleva, Iliana Bacheva, Gabriela Atanassova , Boryana Borissova, V. Peshkov, Mohd Mustafa Al Bakhri Abdullah*</b>
ORGANIZATION	University of Chemical Technology and Metallurgy
TITLE OF INVENTION	<b>Development of a protocol for analysis of acid nitrating mixture</b>
<p>The purpose of the present invention is the obtaining and application of biomaterials based on silica precursors and natural polymers. The obtained results show that increasing of organic part leads to an increase of pore size and aggregates dimension on the surface and decrease of the specific surface area. The obtained biomaterials were successfully applied as matrices for the incorporation of living cells and used in laboratory bioreactor to achieve biodegradation of the toxic substrate up to 96.7 %. Immobilization of cells for biochemical conversions, and treating different nitrile-containing wastes by natural populations of bacteria is preferable and applicable.</p>	

APPLICATION No.	BUL-003
AUTHOR(S)	<b>Vladislava Hristova Ivanova, Nadejda Emilova Krusteva</b>
ORGANIZATION	University of Chemical Technology and Metallurgy
TITLE OF INVENTION	<b>COMPARATIVE ANALYSIS OF SOME OPTICAL PROPERTIES OF THE (GeTe<sub>3</sub>)<sub>100-x</sub>In<sub>x</sub> AND (GeTe<sub>4</sub>)<sub>100-x</sub>In<sub>x</sub> GLASSY SYSTEMS</b>
<p>In this work is presented the study of the optical properties of thin chalcogenide films from the systems (GeTe<sub>3</sub>)<sub>100-x</sub>In<sub>x</sub> and (GeTe<sub>4</sub>)<sub>100-x</sub>In<sub>x</sub>. After obtaining bulk samples of the two examined sections, thin films were obtained by vacuum-thermal evaporation. The goal was to make a comparative study of the samples of the two sections and to establish the relationship of the optical properties of the composition. It was interesting to trace how the change of the quantity of the second component in binary matrix and the increase of the third component, Indium, influenced on the optical properties of the resulting thin layers. The optical transmission and reflection spectra were obtained in the spectral region 700-2700 nm. From the transmission and reflection data was calculated the absorption coefficient and its spectral distribution were obtained. Moreover, compositional dependence of some optical properties - refractive index, reflection coefficient of the glassy layers was established. Optical band gap was calculated. All studied properties are measured in both systems (GeTe<sub>3</sub>)<sub>100-x</sub>In<sub>x</sub> and (GeTe<sub>4</sub>)<sub>100-x</sub>In<sub>x</sub></p>	

## CANADA

APPLICATION No.	CAN-001
AUTHOR(S)	<b>Christopher Joseph Schroeder</b>
ORGANIZATION	Chain Boss Inc.
TITLE OF INVENTION	<b>Chain Boss</b>
<p>IF TIRE CHAINS ARE NOT TIGHT THEY WILL NOT WORK PROPERLY AND THEY WILL DAMAGE TIRES. MOTIVE: TO TIGHTEN TIRE CHAINS EASILY, MINIMIZE WEAR AND TEAR TO TIRES. I HAVE BEEN A TRUCKER FOR MORE THAN 25 YEARS AND USE TIRE CHAINS REGULARLY. CHAIN BOSS SAVES TIME AND MONEY!! CHAIN BOSS WORKS ON ALL TIRE CHAINS THAT HAVE BOOMERS AND CAM LOCKS (TIGHTENING DEVICES). WORKS ON CARS, FARM TRACTORS, ATVS, LAWN TRACTORS, SEMI TRUCKS, LOGGING AND MINING EQUIPMENT. CHAIN BOSS WORKS ON ANY APPLICATION OF TIRE CHAIN. CHAIN BOSS IS 100% COMPLETE AND FOR SALE ON MY WEBSITE.CHAIN BOSS IS MADE OF TEMPERED STEEL SO IT WON'T BEND OR BREAK.CHAIN BOSS IS A HAND TOOL THAT TAKES THE STRAIN OUT OF PUTTING ON TIRE CHAINS. PLEASE VISIT: <a href="http://www.chainboss.ca">www.chainboss.ca</a></p>	

APPLICATION No.	CAN-002
AUTHOR(S)	<b>Andrew Whitmore</b>
ORGANIZATION	Individual Inventor
TITLE OF INVENTION	<b>The Whitmore Dolly</b>
The Whitmore Dolly is a portable worktable for use in connection with supporting work pieces and tools at waist height. The portable worktable has particular utility for repairs inside finished building spaces and transport of cargo.	

APPLICATION No.	CAN-003
AUTHOR(S)	<b>DESPINA FILIPPIDIS</b>
ORGANIZATION	Individual Inventor
TITLE OF INVENTION	<b>THE CONVERTIBLE CART</b>
<b>Purpose of product:</b> The <b>convertible</b> shopping <b>cart</b> was creating for domestic uses with multipurpose functions. This practical device is able to mount and dismount in order to convert into various kinds of carts or random furniture, more than 13 household utensils with a unique mobile structure. It can be remodeled into different types of carts for transportation, as well as home furniture, office furniture, workshops furniture and for some outdoor activities. It means, this device can quickly convert into another utensil without using any tools.	

## CHINA

APPLICATION No.	CHN-001
AUTHOR(S)	<b>Valiant Yuk Yuen LEUNG</b>
ORGANIZATION	Valiant Leung Store
TITLE OF INVENTION	<b>INTELLIGENT CROSSROAD PARKING MULTICROSS STRAIGHT CHAIN HUB-TYPE PENDULUM FLYOVER</b>
A multicomplex traffic intersection that satisfies the needs of all road users and transport types. It allows for the harmonious flow of traffic through and to an intersection. This multicomplex design includes separate options for fast and slow moving traffic, public transport transit stations such as Subway trains, Buses and Taxis, overhead Bicycles trails, parking for cars and bicycles, and underground pedestrian crossings. Incorporating changes to the traffic capacity during peak hours in required directions. Providing the option to sync intersections for a green traffic light network. To overcome or substantially ameliorate some of the deficiencies of current major intersection.	

APPLICATION No.	CHN-002
AUTHOR(S)	<b>ZHU YIFENG, QIAO YINGSHAN, ZHANG XINWEN, ZHENG XUE, YU HUILING</b>
ORGANIZATION	Northeast Forestry University
TITLE OF INVENTION	<b>The Application of Green Energy to Study Organic Ecology Sustainable Development System</b>
Using networking technology to achieve precise stereo agriculture planting + renewable resource recycling "ecological agriculture type, which is based on the combination of ecological planting park and breeding park, will make full use of a variety of biological symbiosis. Each element in the food chain on together, transform one another, make full use of energy and material, thus it can form a benign ecological cycle of the material energy, and reflect the higher ecological and economic benefits.	

APPLICATION No.	CHN-003
AUTHOR(S)	<b>Xukai Jin</b>
ORGANIZATION	Shenzhen Shengshi Elevator Co., Ltd.
TITLE OF INVENTION	<b>Embedded spiral lifting safety elevator</b>
<p>1.New Technology: adopt globe initiative "open nut rail linear motion pair" technology principle, the first embedded spiral lifting in the world and completely solve the traditional elevator "crashed, header, sneak ladder" and so on a series safe hidden trouble</p> <p>2. Power off protection: when power off, can be work 4-6h</p> <p>3. Card ladder self-help: when ladder, operate elevator landed safety.</p> <p>4. Fire Escape: can be work normally with 15 min after fire, easy to escape</p> <p>5. Install Convenience: no need machine room and pit, can be install directly in the corridor, low cost, especially suitable for the need of the old building to add the elevator.</p>	

APPLICATION No.	CHN-004
AUTHOR(S)	<b>Sujian, Yumei Liu, Chenrong, Huiying Lin, Hongda Pan, Libin Zhang, Xuguan</b>
ORGANIZATION	-
TITLE OF INVENTION	<b>The high-speed railway vehicle bogie dynamic simulation test bench</b>
The dynamic simulation test bench of high speed bogie and vehicle terminal relation was developed by this invention and the other 37 invention patents and 41 practical new patents which were integrated with this invention as the core. The dynamic simulation and dynamic	

simulation test of 18-dof motion and 27 dimensions (18 force +9 moment) were realized with the joint control of three 6-dof platforms, the key and common technical problem of the dynamic simulation of track train running state and the online test of track condition in the rail vehicle testing area was solved.

APPLICATION No.	CHN-005
AUTHOR(S)	<b>Huaguang Zhang, Guotao Hui, Dongsheng Yang, Qinglai Wei, Ruizhuo Song, Bonan Huang</b>
ORGANIZATION	Northeastern University
TITLE OF INVENTION	<b>A Novel Intelligently Adaptive Throttle Control System as well as Its Adoption in Rescue Equipment</b>

This invention is a new intelligently adaptive throttle control system which is employed in the rescue equipment by designing the adaptive throttle control device and putting forward the perfect control strategy. The invention is aimed at the defects in the small “forcible entry” devices which can be carried everywhere with under power, inconvenient operation and time due to the manual shift controlling the accelerator. It not only simplified the throttle control into a button operation, but also shortens the starting time to less than 1 second. Besides, when the dynamo that brought the accelerator into operation is operated, we adopted the inertial energy saving technology and thus greatly improve and almost double the battery life.

## CROATIA

APPLICATION No.	CRT-001
AUTHOR(S)	<b>Stipan Orcic</b>
ORGANIZATION	Individual Inventor
TITLE OF INVENTION	<b>TRAFFIC TURBINE</b>

Traffic turbine (1) uses increased flow of compressed air, created by the movement of vehicles (3) on roads (4) or railroads, to power a generator of electricity. They are installed in a row along the edge of roads at certain intervals, each connected with panels (2), forming a tight wall. In this way the air flow is directed into every traffic turbine which there runs the generator. Generators of turbines are interconnected and the produced electricity is used to power the railway or road vehicles with electric drive. The surplus of produced electric energy can be distributed to other users.

# EGYPT

APPLICATION No.	EGY-001
AUTHOR(S)	<b>Yossef hany Mohamed ragaa</b>
ORGANIZATION	EL-khedwia
TITLE OF INVENTION	<b>Rapid Rescue</b>
<p>Save neighborhoods from under the rubble, Robot down under the debris and remnants of demolition in order to explore the districts and victims under the ground is estimated through wireless camera HD is 360 degrees all trends and sensitive the measurement of human body temperature and weather in laser rays inside group headed to the body is doubtful that Macedonia is district prior instructions before the disaster that cuts by his hand rays lasers when cut appears in the alarm control.</p>	

APPLICATION No.	EGY-002
AUTHOR(S)	<b>Mohamed asem abd el latif, Mohamed amer ragap</b>
ORGANIZATION	Dalgamon secondary school
TITLE OF INVENTION	<b>Potent Therapy and rapid detection for pathogenic bacteria using transgenic bacteriophage</b>
<p>It is assumed that by isolating IL-4 and CXCL13 genes from lymphocytes then adding them to the genome of bacteriophage M13 genome then injection this transgenic M13 virus to the body. Then once the invader enters its target there will be CXCL13 which is B lymphocyte chemotaxis thus B-cells will be attracted to the bacteria site and once the fitted Immunoglobulin binds to the bacteria and if it was insufficient to activate B-cell there will also be Interleukin 4 (IL-4) which will stimulate and B-cell proliferation, and the differentiation of B cells into plasma cells. We will use the phage M13 which is a template phage not lysis phage to measure the efficacy of that idea.</p>	

APPLICATION No.	EGY-003
AUTHOR(S)	<b>Mohammad Al Tookhy</b>
ORGANIZATION	The Egyptian Inventors Syndicate
TITLE OF INVENTION	<b>MT Smart Pelvic Trainer</b>
<p>A surgical training device composed of face wall cover with female anatomy, basal box with dimensions 30x30x60cm, 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.</p>	



APPLICATION No.	EGY-004
AUTHOR(S)	<b>Rania Ahmed Abd El-Wahab</b>
ORGANIZATION	The Egyptian Inventors Syndicate
TITLE OF INVENTION	<b>Solar Energy and Light Emitting Diodes (LEDs) To Control Agricultural Pests</b>
<p>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).</p>	

APPLICATION No.	EGY-005
AUTHOR(S)	<b>Rania Ibrahim Ashour EL Sayed, Hadeer Ibrahim Ashour EL Sayed</b>
ORGANIZATION	The Egyptian Inventors Syndicate
TITLE OF INVENTION	<b>M-YoKa (The Pod Mob Phone Charger by Body Temperature)</b>
<p>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.</p>	

APPLICATION No.	EGY-006
AUTHOR(S)	<b>Mohamed Elmously, Moustafa Moh'd Hassen</b>
ORGANIZATION	The Egyptian Inventors Syndicate
TITLE OF INVENTION	<b>Enjad "Artificial Physical Therapy Arm"</b>
<p>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</p>	

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.

APPLICATION No.	EGY-007
AUTHOR(S)	<b>Hebatalrahman Ahmed</b>
ORGANIZATION	The Egyptian Society for Women & Youth Inventors
TITLE OF INVENTION	<b>SPHERICAL GREEN BUILDING</b>
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.	

APPLICATION No.	EGY-008
AUTHOR(S)	<b>Hebatalrahman Ahmed</b>
ORGANIZATION	The Egyptian Society for Women & Youth Inventors
TITLE OF INVENTION	<b>RECYCLING SLAGS MACHINE</b>
The method and machine to treat slag of metal industries, the method based on improve the mechanical properties of the slag as well as prevent its interaction with water; improvement is done by bonding slag with binders in slag treatment machine. consists of mill for crushing and grinding of slag, mixer to achieve homogeneity, bunker to assemble the bonding materials that do not need grinding, tank to collect and heat mixture to become viscous and easy deformed in pipes and a bowl to collect the treated slag Advantages & New Topics *Increase mechanical properties of slag and Decrease weight *Prevent reaction with water *Suitable for all kinds of slags *Different shapes & sizes are manufactured in molds *Mass production	

APPLICATION No.	EGY-009
AUTHOR(S)	<b>Khaled Abdul Hamid Elnems</b>
ORGANIZATION	The Egyptian Inventors Syndicate
TITLE OF INVENTION	<b>E-Rain Gate (Automatically Smart Gates for Storm Water Inlets with E-Maintenance)</b>
<p>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 &amp; 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 labors..., etc.) Or any difficulties work</p> <p><b>Advantages: The Environmental Technology Invention (Green Management)</b> 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.</p>	

APPLICATION No.	EGY-010
AUTHOR(S)	<b>Basmala ali elshazly</b>
ORGANIZATION	Elekbal national college
TITLE OF INVENTION	<b>Generation of electrical energy from the seawater</b>
<p>Having a lot of problems in energy, but there are a lot of solutions and alternatives to extract energy for lighting cities and can produce energy from the large sitting room sea electrolysis first shift of ions to the chemical reaction and gain and lost electrons, ionic power output into electrical energy (voltage decomposition: 1100 volts) and then you can retrieve the ions to interact without electrical analysis? Yes, rocks can retrieve raw uranium ions in sea water for a chemical reaction converts uranium rock metal fusion to a lotion once put to sea water 273 uranium solution after heat melting the lotion makes the sea ions such as sodium chloride and potassium chloride and iodine and lots of ions that exist in the sea to a chemical reaction and extract energy for use in electrical power The proportion of radiation uranium rocks are 35% don't become damaged, and the energy produced by 2000 kW all increased the amount of uranium-filled sea water more energy and that an alternative energy production alternatives to benefit States that rely on gas and solar and wind energy, which is unreliable because of climate change at any time but depends on solar energy and can also rely on sea ions to produce energy.</p>	

APPLICATION No.	EGY-011
AUTHOR(S)	<b>Omar Abdel Hamid Mahmoud Abdel Hamid</b>
ORGANIZATION	Academy of The scientific Research and Technology
TITLE OF INVENTION	<b>The Nano Robot Dual Function</b>
<p>Nano Robot it Size Is From 0.5 micro to 1.5 micro and this Nano Robot have Nano leasers and it can break the cancer cell. Diseases can be cured because the nano robot have a Nano polluters to break the blood clot that is jobs can be the nano robot have bio job We can break the cancer disease when we choose a cancer cell and kill it by the Nano leasers in the Nano Robot and It can kill the damage cells in a fast time. The Brain clot the nano robot can break it by his nano players cells it can break this in a small amount of only less than 2 minutes.</p>	

APPLICATION No.	EGY-012
AUTHOR(S)	<b>Mohamed Atef Mohamed Rashad Mohamed</b>
ORGANIZATION	Al-ahmadyah Secondary School
TITLE OF INVENTION	<b>Metal Detector using Ground Penetrating Radar System</b>
<p>Metal Detector uses the latest ground penetrating technology "GPR" to provide critical information on utilities, concrete, metals, landmines, and other potential problem areas within existing structures or underground. Specifically, Metal Detector will plot the location of subsurface obstructions directly onto the surface, giving the contractor a clear indication of where it is safe to drill, cut, or dig and where extra caution is necessary. Additionally, using Metal Detector will make it safe and cost-effective.</p>	

APPLICATION No.	EGY-013
AUTHOR(S)	<b>FADY MOSTAFA OMAR, AMRO MOSTAFA OMAR</b>
ORGANIZATION	Abo baker el-sadik secondary school
TITLE OF INVENTION	<b>Bye Bye pi and Welcome to Tawaamia –Finding area and circumference of the circle by using any of its chord</b>
<p>In this research, a new vision to find the area of the circle and circumference by using any chord and this law is more general than its predecessor <math>A = \pi r^2</math> and this is because it can deal with all chords, diameters and radius in the circle. We depend in this research with many hypothesis, notably the hypothesis we called it "Golden Chord" because it has special properties in all circles where that square this chord equal the area of a circle directly without using pi and it is drawn from a fixed angle in all circles.</p>	

APPLICATION No.	EGY-014
AUTHOR(S)	<b>Mohamed Ashry Mohamed Abdelfatah</b>
ORGANIZATION	Individual Inventor
TITLE OF INVENTION	<b>New design of storage tank –under water floating tank</b>
<p>The present invention relates to a storage tank for petroleum substances under the sea with a floating roof. Said tank uses the physical properties (density and flotation) of sea water and the material of the tank, in which its mechanism based on the difference in density of all used substances as well as it is automatically operated. Besides, its floating roof is under continuous pressure from below and balanced from sea side as well as the pressure is equivalent to the pressure amount of filling the tank from the upper side. Upon reaching the maximum capacity. On the other hand, when the outlet valve is opened the amount of the output is equal to pressure amount in addition to sea pressure, which is considered an effective method without using a pump. Furthermore, the storage being completely immersed in water makes it always balanced in terms of pressure, in which water pressure from the outer part of the shell is almost equal to pressure inside the tank, simply because, the tank is never been empty. Therefore, When filling the tank to the maximum capacity, the roof will be under direct pressure of sea water until the stored substance is being discharged. Moreover, the amount of the discharged substance is always replaced with sea water, which in turn leads to balanced pressure amount inside and outside the tank and the roof is being floated because of the stored substance from the upper side and sea water from the lower side.</p>	

APPLICATION No.	EGY-015
AUTHOR(S)	<b>Youssef Amr Abbas Elsayed Elbadri</b>
ORGANIZATION	Rod Elfrg Army School
TITLE OF INVENTION	<b>GOEBL</b>
<p>Air pollution is a very dangerous problem. It kills more than 3 million people, in this research we think we have a solution for this problem, when we talk about air pollution we talk about increasing CO<sub>2</sub>, but what is the main reason for this problem? Electricity generation assists to increase CO<sub>2</sub> by 37%, we think that using lens collect UV we can solve this problem. By use of this lens to boil water more faster than we use vapour to push steam turbine and generation electricity more faster and exploit all the time of sunshine, then we condensate the vapour to get the energy which lost energy in pushing turbine time, and get electricity from water by push water turbine, then water will make a new course, this project is the cheapest power plant which can generate high efficiency by green power and make environment clean by clean world from UV and use it to generate electricity and clean world from CO<sub>2</sub> by clear coal power plant and using CO<sub>2</sub> to make cooling system.</p>	

APPLICATION No.	EGY-016
AUTHOR(S)	<b>Gamal Ahmed Abo Moslam Nada</b>
ORGANIZATION	Academy of Scientific Research and Technology in Cairo
TITLE OF INVENTION	<b>Struggling aircraft carrier landing</b>
<p>The present invention relates to an aircraft carrier landing stalled due to a breakdown of any of the controls for landing aircraft, particularly the wheels will not come up before and during the landing process. Aircraft carrier troubled landing due to lack of wheels out during the landing process, a ground carrier is on the runway by remote control as she was walking in one direction straight up and when the aircraft speed is equal while landing with the carrier underneath the speed of the plane landing.</p>	

APPLICATION No.	EGY-017
AUTHOR(S)	<b>Abdelrhman ahmed abdelmea</b>
ORGANIZATION	Individual Inventor
TITLE OF INVENTION	<b>GENERATING Renewable ELECTRICITY VERY low price and Small space by thermoelectric generator</b>
<p>The present invention relates to an aircraft carrier landing stalled due to a breakdown of any of the controls for landing aircraft, particularly the wheels will not come up before and during the landing process. Aircraft carrier troubled landing due to lack of wheels out during the landing process, a ground carrier is on the runway by remote control as she was walking in one direction straight up and when the aircraft speed is equal while landing with the carrier underneath the speed of the plane landing landing Normal on the surface of the carrier so that the carrier the arms of the hydraulic embraces the plane as the surface of the carrier overwrought in limiting the effects of friction and be the plane and load-bearing one's body and quickly and one is the speed zero and is gradually stopped bearing Provide full protection for the troubled landing on the aircraft carrier without friction flattened and without being destroyed, and the protection and safety of passengers</p>	

APPLICATION No.	EGY-018
AUTHOR(S)	<b>Gamal Ahmed Abo Moslam Nada</b>
ORGANIZATION	Individual Inventor
TITLE OF INVENTION	<b>Sweeping to remove mines</b>
<p>Minesweeper can get the job done safely where cleanse the earth at a rate of 2 kilometers square meters per day per machine and the minimum speed if quickly went normal step for man.</p>	

APPLICATION No.	EGY-019
AUTHOR(S)	<b>Tarek salah eldin mostafa</b>
ORGANIZATION	Individual Inventor
TITLE OF INVENTION	<b>Steel free semi arched slabs for housing concrete structures</b>
<p>The present invention relates to concrete slabs used in steel-free housing concrete constructions. The application of the inventive slabs depends on the best use of the arch system through a metal band made from reinforced steel skewers to prevent their motion.</p>	

APPLICATION No.	EGY-020
AUTHOR(S)	<b>Assem elsayed ali</b>
ORGANIZATION	Individual Inventor
TITLE OF INVENTION	<b>Interactive world globe</b>
<p>Interactive device for displaying information and educational curricula helps to display information and curriculum easy way to ensure interaction between the student and scientific material consists of anthropomorphic spherical shaped hemisphere provider sensors sensory relate screen to display the information required for a specific part of the surround-powered electrolysis normal and can be connected to a battery to be used while on the move</p>	

## ENGLAND

APPLICATION No.	ENG-001
AUTHOR(S)	<b>Andrew Smith</b>
ORGANIZATION	Raydyne Enterprises Ltd.
TITLE OF INVENTION	<b>Mixed Flow Centrifugal Pump</b>
<p>This recently patented Mixed Flow Centrifugal introduces several new inventive concepts. These concepts deliver greater pumping efficiency and production cost efficiency to the pump industry. It increases pump design options and combinations of construction materials. The design principally utilises the benefits of a specially engineered sinusoidal impeller within a toroid shaped pump chamber that closely mirrors the concave rotating profile of the sinusoidal impeller. This facilitates the use of double acting aqua plane technology to ensure ultra-smooth, reduced turbulence and interference, pumping efficiency and power. The pump is fed by a double intake suction system which counter-balances the high speed rotating impeller.</p>	



# GEORGIA

APPLICATION No.	GEO-001
AUTHOR(S)	<b>Giorgi Gelashvili</b>
ORGANIZATION	Inventors Club of Georgia
TITLE OF INVENTION	<b>System of protection and safety</b>
System of Protection and Safety is comprised of closed circuit television system, a network of microphones, a network of small guns, and a control center. This system could be used against hijacking on board of commercial aircrafts, to safe governmental and private buildings, banks, embassies etc.	

# HONG KONG

APPLICATION No.	HNK-001
AUTHOR(S)	<b>Mr. Mexci Yiu K. W., Dr. Magdy Ma H. M.</b>
ORGANIZATION	Hong Kong Invention Association (HKIA)
TITLE OF INVENTION	<b>"ECO-Lite" LED Planting Module</b>
According to the "Food & Agriculture Organization of United Nations", the state of "Food Insecurity in the World 2015", the new role of agriculture, especially the small scale farming must be leveraged for achieving broad development outcomes. Unquestionable, in this green generation, LED grow light must be as the main stream to provide appropriate photosynthesis lighting for agriculture. Our newly invented "ECO-Lite LED Planting Module" is established under new perspective; Provide an amazing solution to resist LED's unfavorable factors. The jigsaw puzzle concept plus insert molding technique producing neat and simple LED planting light. As well, the design gives flexibility and boundless combination; Furthermore, the new material -"Nitride A-140"- is another breakthrough as it can replace heavy and expensive metals such as copper and aluminum, giving much better heat dissipation result.	

APPLICATION No.	HNK-002
AUTHOR(S)	<b>YU Pun Fung, SUN Xi Ting, WU Yue Yin, LAM Tzs Shan, LIN Qi</b>
ORGANIZATION	HKSYC&IA Chan Nam Chong Memorial College
TITLE OF INVENTION	<b>Less Rice Eco-Friendly Mobile Devices Application System</b>
<p>Less Rice is an innovative and systematic solution to reduce food waste and to promote eco-friendly dining style. Based on mobile devices, it will help people to consume appropriate volume of staple food and to filter their preferences and allergens when dining outside. What's more, it will demonstrate the cooking methods of dishes and trace the origin of ingredients. Our invention will be a strong tool to assist the government's policies in waste management and food safety. Meanwhile, it will enlighten young people to balance the relation between economic development and environmental protection, by implementing innovation and technology.</p>	

APPLICATION No.	HNK-003
AUTHOR(S)	<b>Y. M. Lai, K. H. Loo, C. K. Tse, S. Y. Chau</b>
ORGANIZATION	The Hong Kong Polytechnic University
TITLE OF INVENTION	<b>Smart Indoor Cultivation Platform</b>
<p>Through innovative research and development of effective photosynthetic-active-radiation lighting system, hydroponic and aeroponic irrigation systems, network sensing and novel environmental control, and optimized growth profiles, this high performance plant cultivation platform can be integrated into urban buildings for sustainable and stable supply of plant vegetables. Compared to existing cultivation platforms, our platform provides additional features as follows:</p> <ol style="list-style-type: none"> <li>1) Much improved food safety by fully automatic process</li> <li>2) Programmable photoperiod and light intensity with specific wavelengths to promote growth</li> <li>3) Optimal growth environment for different plant species by using sensors and automatic control system</li> <li>4) Research platform for developing optimal growth profiles with automatic data collection and analysis</li> <li>5) Plant nutrient control by computer controlled nutrient feeding technique</li> <li>6) Flexible installation for urban environment with modular and scalable design</li> <li>7) Reduction of water consumption by 95%.</li> </ol>	

APPLICATION No.	HNK-004
AUTHOR(S)	<b>Dr Feng YAN, Mr Peng YOU, Dr Qidong TAI, Dr Zhike LIU</b>
ORGANIZATION	The Hong Kong Polytechnic University
TITLE OF INVENTION	<b>Semitransparent Perovskite Solar Cells with Graphene Electrodes</b>
<p>This invention describes the development of highly efficient and low-cost semitransparent solar cells, in which perovskite materials are used as the photoactive layer for light absorption and graphene as the electrodes. The semitransparent solar cells can be used to replace conventional building materials and be incorporated into windows, facades, louvers and rooftops of buildings to convert solar energy into electricity, thus increasing the surface area for solar energy collection substantially.</p>	

APPLICATION No.	HNK-005
AUTHOR(S)	<b>Dr Bin FEI, Prof. John H. XIN, Mr Jianhua LI</b>
ORGANIZATION	The Hong Kong Polytechnic University
TITLE OF INVENTION	<b>Novel Technology of Shielding Textiles against High Energy Rays</b>
<p>The invention is a safe and recoverable protective clothing made of novel materials for shielding high energy radiation. The manufacturing process requires only common equipment for melt spinning and hot press forming. These radiation shielding textiles are expected to replace existing rubber uniforms containing lead materials, which are usually heavy and bulky. The newly developed textiles are lighter in weight and softer in texture. They provide wearers with effective protection from high energy radiation.</p>	

APPLICATION No.	HNK-006
AUTHOR(S)	<b>Prof. Eric Ka-wai CHENG, Dr Xiangdang XUE, Mr Zhu ZHANG, Dr Norbert CHEUNG</b>
ORGANIZATION	The Hong Kong Polytechnic University
TITLE OF INVENTION	<b>Direct-drive Linear Switched Reluctance Actuator for Automobile Active Suspension Systems</b>
<p>This invention is an all-electric active suspension system based on a novel linear actuator which can improve vehicle suspension performance while collecting suspension energy. The whole project includes the design of a direct-drive linear switched reluctance actuator, its characterization, and the design of a converter drive which is compatible with the suspension system.</p>	

# INDONESIA

APPLICATION No.	IND-001
AUTHOR(S)	<b>Raden Cahaya Gumilang, Hafizh Widyantoro, Budyanto Jo Salli, Jesse Immanuel Democratia Diponegoro, Zakharia Fanny Kriswantoro</b>
ORGANIZATION	Trisakti University
TITLE OF INVENTION	<b>Adjustable Glasses by Gas Pressure with Android Apps</b>

The idea of making this project is to make a futuristic prescription glasses with an easy adjusting lens. By using this glasses, we can easily switch our prescription with an android device. Also, the switch can be used for an unlimited period of time. Through this glasses, we do not have worry in changing the lenses, if you're your prescription getting higher or lower. The only thing to do is controlling the lenses with your android device.

APPLICATION No.	IND-002
AUTHOR(S)	<b>RIMA NUR RAHMAWATI</b>
ORGANIZATION	ISLAMIC UNIVERSITY OF INDONESIA
TITLE OF INVENTION	<b>CAPUD (Calabura Pudding), Potential of Cherry Leaves (Muntingia calabura) to Prevent Cardiovascular Disease</b>

Cardiovascular disease (CVD) has a mortality rate number one in the world. In 2012, 17.5 billion people in the world suffer from CVD and 31% of them are died. In the last decade, research using herbal ingredient increase. *Muntingia calabura* (MC) leaves has a compounds, that are known have antioxidant activity. This content can be prevent CVD by improving endothelial function, peripheral blood pressure, and reduce arterial stiffness. Development of the era that made all instantaneous, kind of thinking, making puddings based MC. Dosage forms are simple and delicious of this can be a healthy food innovation to prevent CVD.

APPLICATION No.	IND-003
AUTHOR(S)	<b>Rizki Mendung Ariefianto, Akhmad Rizal Jiwo Prakoso, Muhammad Adam, Aidatul Khoiriaty Sakdiyah, Isyana Rosita Arroyani</b>
ORGANIZATION	Institut Teknologi Sepuluh Nopember
TITLE OF INVENTION	<b>Cool Box using Thermoelectric Cooler Powered by Solar Energy with Fan Control to Keep the Fish Freshness</b>

A cool box with thermoelectric technology as cooler media that supplied electrical energy, from sunlight conversion by photovoltaic. The temperature controller can used to know the cooling condition. The controller set with controlling fan cooler to control the cool box temperature. This invention can produce electrical energy from photovoltaic 80 watt peak about 436,7074 Wh in one day. This power used to supply thermoelectric cooler for 40 minutes. This time is nearly same with cooling time by Kenjeran fishermen. This invention also have ability decreasing temperature faster than fishermen ice thermos with efficiency until 85% in temperature 23° C.

APPLICATION No.	IND-004
AUTHOR(S)	<b>Dinna Norani Pangestin, Pebri Ari Pangesti, Wahyuningyan Arini</b>
ORGANIZATION	Brawijaya University
TITLE OF INVENTION	<b>Triterpenoids of Stem <i>Paraserianthes falcataria</i> (L.) For Type 2 Diabetes Mellitus Drug <i>in Vivo</i></b>
<p>Triterpenoids OF Stem <i>Paraserianthes falcataria</i> (L.) For Type 2 Diabetes Mellitus Drug <i>in Vivo</i></p> <p>Falcata contains important secondary metabolites. The compounds include alkaloids, phenolics, tannins, flavonoids, steroids and triterpenoids. Triterpenoids group of secondary metabolites have potentially active (bioactive) in lowering blood sugar levels. This class of compounds can be used in treating or preventing an increase in diabetes mellitus. The purpose of this research is to know their triterpenoid compounds in the bark of plants sengon (<i>Paraserianthes falcataria</i> (L.)), perform extraction and physico-chemical characterization of compounds triterpenoids of bark sengon (<i>Paraserianthes falcataria</i> (L.)) and test the bioactivity of compounds triterpenoids separation results bark sengon (<i>Paraserianthes falcataria</i> (L.)) in vivo in a mouse model of diabetes. Several months of research that has been carried out the sample preparation sengon wood bark, sawdust sengon gained as much as 1.2 kg after drying and milling. The powder was macerated using n-hexane solvent and be repeated 5 times Replacement of the solvent is done every 2 days. Maceration 1, 2, 3, 4 and 5 respectively mmebutuhkan solvent as much as 2:16 L, 1.3 L, 1.3 L, 1.2 L and 1 L. Each will be repeated, the extract was filtered, and then carried concentration by rotary evaporator. Maceration concentrated extract 1 obtained a weight of 3.5 grams, concentrated extract of maceration 2 amounted to 2.89 grams, concentrated extract of maceration 3 at 2:26 grams, concentrated extract of maceration 4 at 2:03 grams and concentrated extract of maceration 5 of 0.80 grams. The next test of the extract concentrated phytochemical evaporated. The phytochemical test include tests tannins, flavonoids, alkaloids and triterpenoids. The next stage of the plan is the separation of compounds using vacuum column chromatography, manufacture diabetes in healthy mice and application of stem bark extract triterpenoids sengon to test the effectiveness of the extract as an anti-diabetes type 2</p>	

APPLICATION No.	IND-005
AUTHOR(S)	<b>Andy Aulia Prahardika, Al Birru Kausal Poso, Luthfia Adila, I Made Adhi Wiryawan, Tirta Inovan</b>
ORGANIZATION	Gadja Mada University
TITLE OF INVENTION	<b>MADS : Mercury Auto Detection System</b>
<p>Mercury has been widely-known as a-dangerous-chemical that strictly prohibited by any countries-law to use in any kinds of things that consumed by especially human. Unfortunately, there are still many products that contain mercury in our life. Mercury Auto Detection System (MADS) was designed by looking that reason and make the detection of mercury is more simple and cheaper (&lt;US\$60). The system used in MADS is spectrophotometric, the same as the researcher or Food-Monitoring Board use. In simple way, MADS will shoot the medium by using light and it will receive by the light-detector and we can know directly the mercury contain it the medium.</p>	

## IRAQ

APPLICATION No.	IRQ-001
AUTHOR(S)	Prof. Dr. Hazim Jabbar Al-Daraji
ORGANIZATION	Iraqi Forum of Inventors
TITLE OF INVENTION	<b>Artificial Insemination in Ostrich</b>
<p>This study was conducted at the main project for breeding and proliferation of ostrich / Babylon Governorate in an attempt to improve fertility and hatchability rates which indicated by many studies to be under the normal rates as a result of several reasons related to management, nutrition, veterinary care or mating behavior of both of males and females or other causes, through the adoption of a certain methods to collect semen from the males and artificial insemination of females.</p>	

## IRAN

APPLICATION No.	IRN-001
AUTHOR(S)	<b>Hossein Khouran</b>
ORGANIZATION	National Iranian Gas Company (Shahid Hasheminejad)
TITLE OF INVENTION	<b>Boosting the Partial Load Efficiency through new methodes Control Philosophy Shift in Gas Turbines</b>

It is well established that maximum achievable performance in part-load operation depends on the control philosophy adopted in various gas turbines. In particular, IGV-constant loading control of gas turbines leads to a better simple-cycle efficiency in part loads compared with that of the TET-constant (Constant turbine exhaust temperature) and TIT-constant (Constant turbine inlet temperature) control philosophies. TET logic, best suits combined cycles where the fluctuations in HRSG temperature are slim to none. This philosophy keeps the thermal shocks in HRSG components during load change reasonably low in order not to impair its components. TIT regime, on the other hand, brings about some fluctuations in exhaust temperature, but is normally ideal to prolong the life of the hot gas path early components. At the same time, this regime brings about the highest achievable gas turbine exhaust temperature which improves the thermal efficiency of HRSG, but yet can lead to time-dependent failures (creep) in mid/down-stream parts of the hot gas path components. In this way, toggling among TET, TIT or IGV control philosophy is in essence more of a tradeoff for boiler/steam turbine robustness, early hot gas path components life, plus overall cycle thermal efficiency, respectively.

APPLICATION No.	IRN-002
AUTHOR(S)	<b>Benyamin Salehi</b>
ORGANIZATION	National Iranian Gas Company (Shahid Hasheminejad)
TITLE OF INVENTION	<b>Design , Simulation &amp; Installation of Multiple Antenna on IEEE802.16(WIMAX) Protocol in a Gas Refinery</b>

Now-a-days wireless networks such as cellular communication have deeply affected human lives and became an essential part of it. There are more than two hundred different countries and almost three billion users all over the world which are using cellular services provided by Global System for Mobile (GSM), Universal Mobile Telecommunication System (UMTS), Wireless Local Area Network (WLAN) and Worldwide Interoperability for Microwave Access (WiMAX). To increase the capacity of the channels and to improve the bit error performance between mobile station and service station, it is now possible to connect one antenna with more than one communication radio device at the same time. Multiple Input Multiple Output (MIMO) systems are designed to obtain this requirement. In MIMO systems, antennas are combined in the form of small frames like coupling in cellular devices. Diversity means to obtain successful transmission and reception of radio signals with accordance to polarization and correlation. Due to diversity the capacity of the channels and bit error rate are improved, so diversity is one of the main and important properties of MIMO systems. This paper is emphasized to study WiMAX systems by implementing multiple antenna techniques, by observing the bit error rate performance and data rate in WiMAX systems using two important and currently widely applied multiple access communication techniques.



APPLICATION No.	IRN-003
AUTHOR(S)	<b>Arash Iravani</b>
ORGANIZATION	Individual Inventor
TITLE OF INVENTION	<b>Multiple Antenna Systems in WiMAX</b>
<p>Now-a-days wireless networks such as cellular communication have deeply affected human lives and became an essential part of it. There are more than two hundred different countries and almost three billion users all over the world which are using cellular services provided by Global System for Mobile (GSM), Universal Mobile Telecommunication System (UMTS), Wireless Local Area Network (WLAN) and Worldwide Interoperability for Microwave Access (WiMAX). To increase the capacity of the channels and to improve the bit error performance between mobile station and service station, it is now possible to connect one antenna with more than one communication radio device at the same time. Multiple Input Multiple Output (MIMO) systems are designed to obtain this requirement. In MIMO systems, antennas are combined in the form of small frames like coupling in cellular devices. Diversity means to obtain successful transmission and reception of radio signals with accordance to polarization and correlation. Due to diversity the capacity of the channels and bit error rate are improved, so diversity is one of the main and important properties of MIMO systems. This paper is emphasized to study WiMAX systems by implementing multiple antenna techniques, by observing the bit error rate performance and data rate in WiMAX systems using two important and currently widely applied multiple access communication techniques.</p>	

APPLICATION No.	IRN-004
AUTHOR(S)	<b>Dr. Parviz Nouri</b>
ORGANIZATION	Rushed knowledge based company
TITLE OF INVENTION	<b>Design and Manufacturing of Nano motor (Vaccine) of Stem cell Nanoparticles for anti (Aging , Cancer, AIDS) and cellular repair</b>
<p>The cancers, AIDS, aging process and cellular damage of end organ are common healths' problem of human. The aim of this invention is prevention and treatment of cancers, AIDS and aging. This invention is a nano motor stem cell which is composed of multi potential stem cells that have intelligent nano sensors and metallic nanoparticles. The metallic nanoparticles help nano motor to rapid detection of abnormal cells. In fact metallic nanoparticles are sense secretory material of abnormal cell and conduct this signal to nano motor of stem cells to attack this cell and destroy them and then repair the cells.</p>	

APPLICATION No.	IRN-005
AUTHOR(S)	<b>Mohammadreza Meymanat, Sajjad Biglari</b>
ORGANIZATION	Zanjan University of Medical Science (ZUMS)
TITLE OF INVENTION	<b>Targeted Cell Membrane Controlled Debilitation</b>
<p>By placing elongated ferromagnetic nanoparticles in an electrical device created to produce a remote high frequency alternating magnetic field, the NPs are inducted with electric, magnetic and thermal properties. This results in physical and ionic disarray in a certain radius surrounding each NP, which collectively can disturb membrane mediated cell activities such as growth, signaling and proliferation. Additionally, the scale of debilitation can be adjusted by altering certain variables. By means of bio-functionalizing these NPs and granting them the ability to attach to specific cells, many promising uses (such as cancer therapy) can be foreseen.</p>	

APPLICATION No.	IRN-006
AUTHOR(S)	<b>Ramin Aghebati</b>
ORGANIZATION	Farasay International Inventors Group (FIIG)
TITLE OF INVENTION	<b>Revitalizing, Anesthetic, Coagulator, Anti-Bacterial Band Aid</b>
<p>This band aid uses a special, unique, and complex formula based on organic herbs and natural materials. It has four main capabilities as follow: A) an anesthetic for general cuts during the first 15 minutes which reduces the initial pain B) revitalizing and an increase in speed of the cell repair process. C) A general process to speed up blood coagulating on basic variant and an additional special formula for diabetes patients. D) Providing semi anti-bacterial protection to the cuts, which is based on waterproof capability.</p>	

APPLICATION No.	IRN-007
AUTHOR(S)	<b>Mohammadmahdi Izadinazir, Maryam Samadzadegan</b>
ORGANIZATION	GREEN INVENTIONS
TITLE OF INVENTION	<b>NEIGHBOR FRIENDLY BUILDING (NFB)</b>
<p>By this invention we could provide conditions that the light of the sun could be reflected to the whole façade of the building which is in front of the building with a view to the sun. by taking the latitude of the area into consideration mirrors are placed at the optimum angle in fixed models or motorized sheets could be utilized. In the case of high-rise buildings, the mirror facade building is the building preventing to reach the sunlight to other one. However, on top of the other building, upper than the highest level of the first building, mirror sheets should be placed to reflect the sunlight to the front building and then the front building facade reflects it to other.</p>	

APPLICATION No.	IRN-008
AUTHOR(S)	<b>Behnam Rahmanloo, Mohammadtaghi Rostami, Fardin Veysi</b>
ORGANIZATION	Nano Petro Energy Corporation
TITLE OF INVENTION	<b>Nanosorb®: Novel nanoceramics for Fuel desulphurization by sorption technique</b>
<p>Authorities set increasingly stringent limits for fuel's Sulphur content because of its known dangerous effects on health and environment. Hydrodesulphurization (HDS) which is the most common technique for fuel refining, need high temperature and pressure for its process and is less effective in removing some compounds such as thiophene derivatives. In this research we have fabricated nanoceramics using combustion synthesis technique; these porous ceramic cores are made of silica or metal oxides with organic amine and metallic compounds being absorbed to its whole surface which are able to absorb a wide range of impurities such as Sulphur and Mercaptan, making a complex and form a sediment which can be easily removed from the supernatant which is the ultraclean fuel.</p>	

APPLICATION No.	IRN-009
AUTHOR(S)	<b>NEGIN NOZADI, SEYYED MILAD ABRISHAMIFAR</b>
ORGANIZATION	RUBIN PAJOOHAN FARTAK INTERNATIONAL ENGINEERING Co.
TITLE OF INVENTION	<b>Intelligent Traffic Light Monitoring Device For The Blind And Intelligent Traffic Control System Between Humans And Vehicles To Reduce Accidents</b>
<p>We solve the problem of blinds people when they are in the street and they can't know where are? This set is completely and use in Iran in some street, we use GPS and GPRS and Google map and speakers in it and SMD system order to find the geographical location and tell the location and find location for blinds. Society of Iran uses this system in some street, we use the solar power and we don't use electrical power for environment friendly. We know we have more than 80 million blinds in the world and we know the international community want to solve the problems of disable people therefore we can use this system in all over the street in the world and countries finally the economic advantage is perfect.</p>	

APPLICATION No.	IRN-010
AUTHOR(S)	<b>SEYYED MILAD ABRISHAMIFAR, SEYED ALIREZA MIRALIKBARI</b>
ORGANIZATION	RUBIN PAJOOHAN FARTAK INTERNATIONAL ENGINEERING Co.
TITLE OF INVENTION	<b>The production of WPS material with the nanotechnology for adsorb and prevent with the great increase of microwave and radio waves</b>

In our public world today. A lot of people in the streets and alleys and work places etc.. Use their phones for communicating with others by using a telephone call or spending their time by having presents in public networks We know that phones work with microwave waves which are really dangerous and can bring cancer and a lot of pregnant women haven't been safe from these waves and can cause high powered dangers for the mother's embryo. This device as a keeper of a phone is with a material which is named as WPS and is produced and paid with nanotechnology. It can reduce the waves which can touch the human's body so there is no danger. This proposal can be used in medical science industry and science industry a lot which is being registered in WIPO .

APPLICATION No.	IRN-011
AUTHOR(S)	<b>SEYYED MILAD ABRISHAMIFAR, NEGIN NOZADI</b>
ORGANIZATION	RUBIN PAJOOHAN FARTAK INTERNATIONAL ENGINEERING Co.
TITLE OF INVENTION	<b>The production of new money with high security and protection in braille language for blind people</b>

As we know ,There is no currency in the world which it the money of its currencies etc. are in braille language for blind people only the financial of it has factor outstanding security in this currency of money it has a high factors of security and protection which is known as one money in language. In this currency of money blind people no longer need to ask from others which how much is their money or they won't encounter paying or receiving problems in this way Special security string and only special paper and outstand printing set with high security factor are used. This proposal is accepted by central bank of Iran. In this way, a lot of problems will be solved. Now, The important currencies of the world like Dollar, Pound and euro can increase security factor and world currency in world for blind people with this system.

## KOREA

APPLICATION No.	KOR-001
AUTHOR(S)	<b>CHANG, SUK JONG</b>
ORGANIZATION	IZON
TITLE OF INVENTION	<b>Controller device for eye sight recovery</b>

Focus motion (by the crystalline lens)and the light and shade motion (by the iris)of medical therapy enables the eye to do rotation stare between light and shade sight and focus sight with the appropriate shutter operation according to which the involuntary muscle moves the eye. So the eye itself creatively work so that in a day in which you can see bright things and near thing, small things you shall witness the innovative change only by using of this invention. Such technicality belong to this invention.

APPLICATION No.	KOR-002
AUTHOR(S)	<b>OH, DA YEON</b>
ORGANIZATION	DAYUMMY Co., Ltd.
TITLE OF INVENTION	<b>Multi-heating and cooking device</b>
<p>In general, the food cooking &amp; baking by electrical energy is in direct or indirect manner to beam radiant heat from a heater and this electrical cooking utensil has been widely used as a temperature control functioning heat-device. The advantage of electric thermal manner is that because the heat directly to the food not only result in unequally ripen between in and out of food but also water contained in food evaporated in a short time so that severe degree nutrient destruction and the quality of food is deteriorated but this invention "DAYUMMY" adopts the idea of electrical energy which transfer heat evenly to the object and shorten the heating time as it form a space between the first and second heating element and the first heating part at one side end and the second heating part at the other end bridged by a vertically connecting column, and the bottom of a first heating give a way of electrical power to the second heating portion and each portion is controlled by individual power supplies and stoppage, and second heat portion performs warming function through up &amp; down moving rods so that maximizing the convenience and practicality. This constitutes the exclusive techniques of this idea.</p>	

APPLICATION No.	KOR-003
AUTHOR(S)	<b>KANG, SEUNG HO</b>
ORGANIZATION	SAMREUNG ELEMENTARY SCHOOL
TITLE OF INVENTION	<b>BED-PAN SEAT ALARM DEVICE FOR PREVENTION</b>
<p>The bathroom user's such easy-to-forget belongings as cellular phone or the remote control, the key, the bag, the notebook computer, the purse and the precious metal, PDA, the exercise device, the musical instrument may be lost when leaving bed-pan without circumspection on environment. At the very moment when put down bed-pan seat and relieve yourself and stand up, contra-switch is connected to the ground. While the speaker address the warning by the work of seat-push tension pin under the bed-pan and contra-switch so that bed-pan user get to be informed to take care of his/her belongings. By such mechanism this device can afford to give visual and audible warning message by the working of loss prevention alarming system.</p>	

APPLICATION No.	KOR-004
AUTHOR(S)	<b>PARK, SANG PIL</b>
ORGANIZATION	Teacher at Kyung Hwa Girls' Middle School
TITLE OF INVENTION	<b>Finger Pinch Protection Sliding Doors</b>
<p>This invention is designed to prevent fingers from being pinched while opening or closing sliding doors. When the door is closed, it stops for a little while and then closes firmly shut. A spring and a metal ball are embedded on top of the sliding door. Also a semi-circular concave part is installed on the sliding door frame. Then when you close the sliding door, the metal ball enters into the concave part of the frame and the moment, the door is stops for a little while. And when you keep pushing the door, the metal ball is pressed into the spring and the door is completely closed.</p>	

APPLICATION No.	KOR-005
AUTHOR(S)	<b>PARK, SEONG GUI</b>
ORGANIZATION	CLEAN & SCIENCE
TITLE OF INVENTION	<b>HYBRID SHOWER CLEANSER DRIVEN BY MIXTURE OF TAP WATER AND COMPRESSED AIR</b>
<p>Instead of bath method with scrubbing by palm or sponge, this invention utilizes the water pressure and its forced water wheel rolling. Equipped with in the output axis which rotates the brush of soft quality material, this invention can give quick bath to the pet. The method of drive only by the water pressure and the method of mixed drive by tap water and pressed air. This invention is the result of study the driven cleaner by those category of method. This invention has the characteristics of applying the leverage principle according to axis wheel principle and adopting Speed Reduction Gear Device while maximizing the torque for the sacrificing of reducing the rolling speed of brush. So with only 2 bar tapped water pressure you can bathe the pet with bubbles as it witness the realization of drive torque of 1.5kg.f.cm. Even in home, with ease you can bathe the pet as add the mixed oxygen quantity to pressed air so that it forms the densed micro bubbled water to heighten the cleansing effect of shower bath appliance. This is the characteristics of this invention.</p>	

APPLICATION No.	KOR-006
AUTHOR(S)	<b>CHOI, BYEONG UN</b>
ORGANIZATION	KYEONGAN ELEMENTARY SCHOOL
TITLE OF INVENTION	<b>Three-dimensional set of light refraction exploration</b>
<p>Description Summary: Although the experimental nature of light fun, but simple observation</p>	

test textbook is boring and laser pointer light by camera is shaken and trembled at risk. This is an invention that can test the refraction of light with a variety of intuitive and entertaining materials and in a variety of situations. Rotating the three-dimensional shape for light to pass through and can observe the refraction of light at different angles while moving left and right.

APPLICATION No.	KOR-007
AUTHOR(S)	<b>HAN, JOO YEUL</b>
ORGANIZATION	Kyunghwa Girl's High School
TITLE OF INVENTION	<b>Electric Portable Gum Remover</b>
This invention is to reduce the discomfort caused by gum by mobile gum remover spark heated combustible gas (LPG) flame emission burner of which nozzle is ignited by an electrical storage energy so that easily burn gum on the asphalt street of downtown in the city.	

APPLICATION No.	KOR-008
AUTHOR(S)	<b>SO, SANG WOO</b>
ORGANIZATION	Individual Inventor
TITLE OF INVENTION	<b>Non-nailed, assembled furniture</b>
Non-nailed and various form of tailored assembled book shelf in which holes more than 2 are inserted with the pillar petal in up & down direction. Inserting the support pin in the various support groove which is formed in the whole surface and the back side of the pillar petal, this kind of method and structure which combine the shelf and the pillar petal are the structure assembling the bookshelf easily. Also it does not use the metal or piece nail but anyone can possibly assemble. This invention includes such an idea.	

APPLICATION No.	KOR-009
AUTHOR(S)	<b>CHOI, SEO JUNG</b>
ORGANIZATION	CHANGDUK GIRLS' HIGH SCHOOL
TITLE OF INVENTION	<b>Alarm Timer Device Equipped Frying Pan</b>
When the set time has elapsed the alarm-timer device-mounted frying pan generate an alarm in the handle. As such, the user can effectively save energy, as well as easily confirm the cooking completed. It relates to a double-sided frying pan provided with a device of this alarm timer function.	

APPLICATION No.	KOR-010
AUTHOR(S)	<b>CHOI, WOO JIN</b>
ORGANIZATION	HIGH SCHOOL
TITLE OF INVENTION	<b>SEAT-BELT SHOCK ABSORBER</b>
<p>Automobile safety belt rewinding mounting structure takes the pressure adjustment in the chest and abdominal region of the wearer in the spring elasticity in tension unit, winding the impact absorbing delivered to the seat belt of the vehicle and the collision and braking when the occupant's belt get out of orbit gradually about approx. 10cm. and function as seat belt shock absorber to reduce the injury by reducing the charge by the winning control unit of the belt.</p>	

APPLICATION No.	KOR-010
AUTHOR(S)	<b>CHOI, WOO JIN</b>
ORGANIZATION	HIGH SCHOOL
TITLE OF INVENTION	<b>SEAT-BELT SHOCK ABSORBER</b>
<p>Automobile safety belt rewinding mounting structure takes the pressure adjustment in the chest and abdominal region of the wearer in the spring elasticity in tension unit, winding the impact absorbing delivered to the seat belt of the vehicle and the collision and braking when the occupant's belt get out of orbit gradually about approx. 10cm. and function as seat belt shock absorber to reduce the injury by reducing the charge by the winning control unit of the belt.</p>	

APPLICATION No.	KOR-011
AUTHOR(S)	<b>SEAN(Seungyun) Lee</b>
ORGANIZATION	La Salle College High School
TITLE OF INVENTION	<b>Application of Blackbox Recorder and Camera for Safe Cycling</b>
- N/A	



APPLICATION No.	KOR-012
AUTHOR(S)	<b>Chae Jeong Hoon</b>
ORGANIZATION	Yonsei University
TITLE OF INVENTION	<b>Red clay Planthouse that Improves growth rate of vegetables</b>
- N/A	

APPLICATION No.	KOR-013
AUTHOR(S)	<b>SIWOO LEE, YUSUF ABDULLAH MAREKAR, MARDIYAH JUSUF HASAN MANSOOR</b>
ORGANIZATION	Korea University
TITLE OF INVENTION	<b>DARKNESSMAP CARD FOR EASY LEARNING MAP THE STUDENT ELEMENTARY SCHOOL</b>
DARKNESSMAP CARD FOR EASY LEARNING MAP THE STUDENT ELEMENTARY SCHOOL is one of unique and interesting games for elementary school students. Those cards are arranged based on social science subject in elementary school especially for story question which need expanded answer.	

APPLICATION No.	KOR-014
AUTHOR(S)	<b>SUHO HA</b>
ORGANIZATION	NATIONALUX
TITLE OF INVENTION	<b>Multiple Viewer Video and 3D Stereophonic Sound Player System including Stereophonic Sound Controller and Method there of</b>
Media industry is a socio-economic and technological focal point where recording, capturing, and facilitating the most humanized audio and video is an extreme innovative factor for numerous media categories including concerts, musicals, movies, animations, media marketing and many more aid the biggest industry that we call “entertainment”.	

# KYRGYZSTAN

APPLICATION No.	KRZ-001
AUTHOR(S)	<b>S. Jeksheva, G. Maslenkova</b>
ORGANIZATION	Kyrgyz-Russian Slavonic University
TITLE OF INVENTION	<b>PORCELAIN MIXTURE FOR PRODUCTION OF EVERYDAY TABLEWARE</b>
The porcelain mixture for production of everyday china, using domestic non- traditional raw materials.	

# MALAYSIA

APPLICATION No.	MAL-001
AUTHOR(S)	<b>MUHAMMAD FAIZ BIN JASMIN MUHAMMAD AIMAN IZUDDIN BIN ROSTANIZAM NUR SYUHADA BT HAMZAH LUKMAN BIN MOHD NAJIB MUHAMMAD IDNOR IZZUDDIN B IDRIS</b>
ORGANIZATION	Kuala Lumpur Technical School
TITLE OF INVENTION	<b>OKU-D (ORANG KURANG UPAYA DETECTOR) (disabilities parking detector)</b>
This invention is to help disabilities to park their car in the parking lot correctly. Before, the parking lots is usually use by normal people. Parking company can use this system in their building too. The system uses two types of card, true card and false card. In this card, the code is recorded by parking management. The car driver can buy the card and registered, if they scanned the card to the scanner, and the code is correct, so they can park their car. If the code is false, the siren will sound. The system is built beside the parking lots. This system will prevent to an unauthorized person park in the parking spot.	

APPLICATION No.	MAL-002
AUTHOR(S)	<b>DR. MOHD REMY ROZAINY MOHD ARIF ZAINOL PROF. ISMAIL ABUSTAN MR. MUHAMMAD KHAIRI A. WAHAB</b>
ORGANIZATION	UNIVERSITI SAINS MALAYSIA (USM)
TITLE OF INVENTION	<b>Wall Buffer Block</b>
<p>Sump are widely used for various applications like mitigation, electric cooling tower and water supply etc. Improving performance in sump is needed to prolong the lifespan of a pump due to high maintenance costs, vibration and cavitation that affected by uneven flow, air entrainment, pre swirl and vortex. Modification in existing design is needed to eliminate the negative effects. Good modification improvements in sump design shown by many researchers in the past few years in mitigating the vortex. This can provide valuable information in order to maximize the pump performance.</p>	

APPLICATION No.	MAL-003
AUTHOR(S)	<b>Wai Kit Wong, Wei Xiong Lee, Thu Soe Min, Wei Qing Ong and Wei Yi Ong</b>
ORGANIZATION	Multimedia University (MMU)
TITLE OF INVENTION	<b>Vision Based Elliptical Geometric Floor-Pattern Tracking Mobile Robot</b>
<p>This product is a vision based floor pattern tracking mobile robot. The designed floor pattern's geometry and formulated vision based path tracking algorithm are implemented in a mobile robot platform, acts as sense of seeing, recognizing and directing the mobile robot to its destination. Our invention can overcome limitations of conventional routing methods (Railway, Line-tracking sensory and Virtual-map) for autonomous mobile robots : it need not required railway as hardware support, it will not affected by broken line as it will rotate camera to search for next direction pattern to continue its journey and it not required memorable floor plan.</p>	

APPLICATION No.	MAL-004
AUTHOR(S)	<b>KABILAN A/L RAJA, FAKHRUR RAZI BIN AHMAD</b>
ORGANIZATION	SULTAN ISMAIL SECONDARY SCHOOL
TITLE OF INVENTION	<b>SugarCDual Functions (Sun Shade and cushion)</b>
<p>A car or other vehicles that is parked outdoors on a hot sunny day can reach temperatures of up to 70 °C. This drastic increase temperature is caused by a combination of hot temperatures</p>	

outside the car and lack of proper ventilation for the hot air to escape out of the car. Ultraviolet radiation from the sun also enters through the windscreen and heats up the air in the car. The front windscreen also sometimes acts like a magnifying glass, intensifying the sun rays, and make the car interior hotter on sunny days. A most efficient for insulating our automobile

APPLICATION No.	MAL-005
AUTHOR(S)	<b>ABDURAHMAN HAMID NOUR</b>
ORGANIZATION	UNIVERSITY MALAYSIA PAHANG, UMP
TITLE OF INVENTION	<b>Biodegradation and treatment of palm oil mill effluent (POME) using Ultrasonic Membrane Anaerobic System (UMAS) as Substrates</b>

With the increasing energy prices and the drive to reduce CO<sub>2</sub> emissions, universities and industries are challenged to find new technologies in order to reduce energy consumption, to meet legal requirements on emissions, and for cost reduction and increased quality. The direct discharge of palm oil mill effluent, POME wastewater causes serious environmental pollution due to its high chemical oxygen demand (COD) and biochemical oxygen demand (BOD). Traditional ways for POME wastewater treatment have both economic and environmental disadvantages. In this invention, ultrasonic assisted- membrane anaerobic system (UMAS) was designed and used as an alternative, cost effective method for treating POME wastewater (to avoid membrane fouling).

APPLICATION No.	MAL-006
AUTHOR(S)	<b>Dr. Prof. Muhammad Iftikhar &amp; Dr. Siamak Sarrafan</b>
ORGANIZATION	Management & Science University
TITLE OF INVENTION	<b>ReWised Journal Impact Factor (RJIF) For Medical &amp; Health Sciences</b>

Journals Impact factor is the gold standard in the field of bibliometric. Inter and intra disciplinary discrepancies are main area of concern for universities and researchers. The issues of comparison of Impact Factors of different fields is like comparison of oranges to apples. Our newer method named as ReWised (Modified) Impact Factor (RIF) at disciplines, branches and specialties level is based on normalization process and termed as Red, Yellow and Green RIF. In this method, RIF of required journal is normalized compared to the Highest ISI Journal Impact Factor (100%) for that particular field or group. The whole process is dependent on Triad of Bibliometric (proper color coding, appropriate selection of highest IF & normalization). User friendly software has been designed for automatic calculation of RIF.

APPLICATION No.	MAL-007
AUTHOR(S)	<b>Prof.Ir.Dr. Sim Kok Swee, Mr.Desmond Kho Teck Kiang,</b> Ms.Ting Fung Fung, Mr.Victor, Mr. Ee Chung Seng
ORGANIZATION	Multimedia University
TITLE OF INVENTION	<b>Early Infarct detection for Brain Images</b>
<p>This is a diagnostic computer-aided system designed to help physicians and radiologists to detect early infarct cases, which is ischemic acute stroke. This system consists of four main modules, namely early infarct detection module, brain database management module, early infarct training module and the 3D visualization module. The technologies applied are window setting, window setting optimization, the colorization, database management, Isosurface reconstructed 3D model. The training module is a platform for a radiologist, a doctor or a medical student to practice in diagnosing early infarct cases. While the 3D visualization model assist doctors through constructed brain 3D model and overlay with the segmented brain lesion.</p>	

APPLICATION No.	MAL-008
AUTHOR(S)	<b>DR. MOHD NAZRI KAMA, MR. MUHAMMAD TAQI UDDIN</b> <b>ABDUL RAHMAN, MS. SITI AISHAH ZAKARIA</b>
ORGANIZATION	ADVANCED INFORMATICS SCHOOL
TITLE OF INVENTION	<b>A MULTI-SPEC ELECTRIC VEHICLE CHARGER</b>
<p>Electric Vehicle (EV) owners need to recharge, and currently there is an obvious lack of public charging infrastructure which is critical to intensify the EV industry. Currently, while different EVs require different charging loads, there is NO single charger which is able to serve such different requirements, resulting in frustration to EV owners who find that a nearby charger is not able to charge their vehicle optimally. Thus a multi-spec EV charger that solves such the problem is badly needed. This product supports the Green Technology Agenda as well as the Alternative Energy Plan of Malaysia.</p>	

APPLICATION No.	MAL-009
AUTHOR(S)	<b>DR. FADZLI MOHAMED NAZRI</b>
ORGANIZATION	UNIVERSITI SAINS MALAYSIA (USM)
TITLE OF INVENTION	<b>Software : Prediction of the Collapse of Buildings in Earthquakes (Pre-COBE)</b>
<p>Earthquakes are rightly considered one of the most disastrous natural catastrophes. One of the main difficulties arises from the ground motion uncertainty. This is because each earthquake</p>	

has different characteristics, in terms of the magnitude, frequency etc. Presently, this problem, of designing to withstand future significant earthquakes, requires constantly improving the reliability of the seismic design codes and strict regulated rules during the designing and construction stage, Therefore, this software is more realistic and can be easily used by practitioners. This software can be used as an alternative to the dynamic analysis as it requires less computational time.

APPLICATION No.	MAL-010
AUTHOR(S)	<b>Assoc. Prof. Dr. Zuriati Ahmad Zukarnain, Dr. Abudhahir Buhari, Roszelinda Abdul Khalid</b>
ORGANIZATION	University Putra Malaysia
TITLE OF INVENTION	<b>Drag and Drop Interactive based Optimized Dynamic Process Simulator: Quantum Communication as Application</b>

We propose online based design and analysis software for dynamic process simulation. This simulator can optimize for any field which requires dynamic process. Our technique is based on hybrid simulation techniques based on discrete event, continuous event and system dynamics. Client has elegant GUI based interface with drag and drop approach. Client is allowing saving and retrieving experiments designs. Client can support to build team to perform multi-user computation. Client is developed on Ruby on Rail platform. Server is designed on Python with Django framework to handle multiple requests. Currently our simulator supports quantum communication based experiments.

APPLICATION No.	MAL-011
AUTHOR(S)	<b>Mohamad Idham Md Razak (Team Leader), Prof. Dr. Hj. Ismail, Dr. Irzan Ismail, Adi Hakim Talib, Zakimi Ibrahim</b>
ORGANIZATION	Universiti Teknologi MARA (UiTM)
TITLE OF INVENTION	<b>GREEN CLASSROOM: AGE OF ULTRON</b>

This is an innovation using interactive multimedia educational content on students' learning. The subjects are for the students of UiTM Melaka Kampus Alor Gajah who undertake the Principles of Economics (ECO 120), Principles of Finance (FIN 242) and Intensive Mathematics 1 (MAT 037) subject via interactive media platform which can be reached at: [www.ecoonthego.tk](http://www.ecoonthego.tk), [www.magicmath2015.tk](http://www.magicmath2015.tk) and [www.ezfinance.tk](http://www.ezfinance.tk).

APPLICATION No.	MAL-012
AUTHOR(S)	<b>(Teacher)WONG HUI ONG, (Pupils) LAU LIK YAN, GRAHAM LAU KIONG HOO, FONG SHIONG YI</b>
ORGANIZATION	SJK METHODIST (M)
TITLE OF INVENTION	<b>AMAZING BULB CHANGER</b>
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.	

APPLICATION No.	MAL-013
AUTHOR(S)	<b>YAP CHIN ANN</b>
ORGANIZATION	MALAYSIAN PEPPER BOARD (MPB)
TITLE OF INVENTION	<b>THE DEVELOPMENT OF BIOCHEMICAL FERTILIZER FOR BLACK PEPPER</b>
A new fertilizer has been developed specifically to increase the production of pepper by 28%. Comprising both inorganic and organic fertilizing substances, and enriched with supplemental microorganisms it increase soil pH, boosting the efficiency of nutrient uptake and also enhances long term retention of nutrient in soil. Malaysian Pepper Board has transferred this technology for commercialization purposes, with total output of 830t (worth USD 383,460) in 2015 is sought to use the product in Malaysia. The current on hand order plus estimation until year-end is 2000t. Meanwhile, this product also enters into international market particularly to pepper producing countries. E.g. Vietnam, Indonesia and India.	

APPLICATION No.	MAL-014
AUTHOR(S)	<b>Muhammad Shahiq Bin Shah Jahan, Perry Bin Jefri, Lim Shevern</b>
ORGANIZATION	Sekolah Menengah Kebangsaan Datuk Onn Butterworth
TITLE OF INVENTION	<b>Cold Fusion</b>
A good way to explain the function of our invention Cold Fusion is to compare it to an allergy mask. People wear these masks over their face so that their respiratory system is protected the moment they inhale pollen and other particles. The filtered air is far less likely to cause allergic reactions or asthma. Nonetheless, this is an alternative way in order to inhale clean air rather than wearing the mask. Our invention is an eight stage filter machine which can trap airborne	

and provide cleaner air. These stages are a pre-filter, HEPA, photo catalyst filter, Nano filters, Activated carbon filter, Ultraviolet Ray followed by the fragrance. This will make the air in the room clean.

APPLICATION No.	MAL-015
AUTHOR(S)	<b>Perry Bin Jefri, Adam Anthony a/l Sebestian Titus, Lim Shevern</b>
ORGANIZATION	Sekolah Menengah Kebangsaan Datuk Onn Butterworth
TITLE OF INVENTION	<b>AUTOMATIC PET FEEDER</b>
<p>Pet care is always a burden. Their daily meals require strong attention from their owners. However, the pet owners still need to strike a balance in their daily tasks; career, family and pets. This invention helps to make life easier when one burden is off their shoulders. Feeding time for pets is well taken care of. With that, owners wouldn't have to worry on the caring of their pets. As we know, many irresponsible pet owners give up on their pets by abandoning them. This increases the number of strays in the worldwide.</p>	

APPLICATION No.	MAL-016
AUTHOR(S)	<b>Muhammad Nur Yusuf B. Bahatim Muhammad Hakeem Azhan B. Mohd Azhari Azrul Ammar B. Amiruddin Adlan B. Azman</b>
ORGANIZATION	Sekolah Menengah Kebangsaan Datuk Onn Butterworth
TITLE OF INVENTION	<b>Cocoa Husk</b>
<p>The production of activated carbons from cocoa husk is one of the most environment-friendly solutions by transforming negative-valued wastes to valuable materials. Thus, the main objective of this research was to prepare activated carbons from cocoa husks .They are burnt using a high temperature (480°C) then, chemically treated into 25% calcium chloride solution (CaCl<sub>2</sub>), activation process. Then, it is baked at 110°C. The adsorption capacity performances of prepared activated carbons in this work were investigated using two different adsorbates; methylene blue and carbon monoxide. They have high abrasion resistance, high thermal stability and small micropore diameter.</p>	



APPLICATION No.	MAL-017
AUTHOR(S)	<b>Muhmmammad Mubin B. Shobri, Iqbal Hakim B. Rizal, Irfan Hakim B. Rizal</b>
ORGANIZATION	Sekolah Menengah Kebangsaan Datuk Onn Butterworth
TITLE OF INVENTION	<b>Eco Yam</b>
<p>Our research is based on the effectiveness of yam as alternate materials for paper making. We conducted a search on several types of plants that may produce the same texture as normal papers. We found that yam can produce the best paper-like texture. Yam stems is abundantly available in our country, Malaysia. Our main objective in this project is to provide alternate option as materials in producing paper instead of depending on chopping down trees to make paper.</p>	

APPLICATION No.	MAL-018
AUTHOR(S)	<b>Ooi Chu Jing, Farisah Balqis bt. Salim Khan, Muhammad Naajy bin Roslan</b>
ORGANIZATION	Sekolah Menengah Kebangsaan Datuk Onn Butterworth
TITLE OF INVENTION	<b>The Perfect Impression</b>
<p>Our new innovative idea allows anyone to keep ironed clothes in pristine condition with bringing storage space, practicality and price into account. Such an idea has yet to surface in the market, as far as we know, and we'd like to bring it to the people's attention. It's not very world-changing, but it can make the life of the students much easier. And isn't that what technology is all about?</p>	

APPLICATION No.	MAL-019
AUTHOR(S)	<b>Perry bin Jefri, Afifa Sadaf binti Jaleel Faiyaz Ahmed, Nur Alya binti Mazlan</b>
ORGANIZATION	Sekolah Menengah Kebangsaan Datuk Onn Butterworth
TITLE OF INVENTION	<b>WATER RECYCLING SYSTEM</b>
<p>Water recycling system is invented to save the water and prevent from water crisis. As we all know, the world that we are living in fact are facing the shortage of water due to various human activities. Therefore, water conservation is important to save the environment. The world's supply of fresh water is finite and is threatened by pollution. Rising demands for water to supply agriculture, industry and cities are leading to competition over the allocation of limited fresh water resources.</p>	

APPLICATION No.	MAL-020
AUTHOR(S)	<b>AHMAD ZUBER AHMAD ZAINUDDIN, MOHD ZAKI AYOB NORFARAHIN MAHFAR, RAFIZA MOHD REDHUAN, SHAH RIZAILLI MUKHTAR</b>
ORGANIZATION	UNIVERSITI KUALA LUMPUR
TITLE OF INVENTION	<b>Biomedical Equipment Hazard Alarm Detection System (BEHADS)</b>

The development of biomedical equipment hazard alarm detection system is to provide continuous and close monitoring on false or breakdown biomedical equipment located in hospital with the intention to ensure quality service assurance of safety aspect is totally apply at all times especially during hectic hours. The prototype design has been applied on 2 parameters of bedside/patient monitor by using efficient sound detection sensor embedded with microcontroller. Detected false/breakdown alarm indicate uniform pattern of signal conditioning which finally presented to end user monitoring station in terms of triggering hazard alarm which include blinking LED red light, sound and error code.

APPLICATION No.	MAL-021
AUTHOR(S)	<b>NOOR HAFIZAH NASIR, NUR ANIS FATIN NAJWA JUFRI, FADHILATUN FARIHIN IZHAR ABADI, NUR BASYIRAH ROSLAN, NURUL AIN SYAFIEQA RAMLI</b>
ORGANIZATION	KOLEJ TUNKU KURSHIAH
TITLE OF INVENTION	<b>LEO-Wood</b>

A coconut fibre mixed with lemongrass essential oil (LEO) and polymer to replace the commercialized wood products with a light, cheap, aromatic and environmental friendly product that can control fungi and insects problem. LEO was extracted by using hydrodistillation technique and tested towards fungi (*Aspergillus*) in a medium. LEO is able to control the fungal growth. LEO-wood was tested on 30 ants and termites and it is able to repel them. A test for fungal presence was conducted on LEO-wood and is free of fungal growth after three years of production. LEO-wood was strong enough to be made into furniture.

APPLICATION No.	MAL-022
AUTHOR(S)	<b>Dr. Mohamad Salleh Bin Abdul Aziz</b>
ORGANIZATION	Cyberjaya University College of Medical Sciences (CUCMS)
TITLE OF INVENTION	<b>SOLEHRING IS A SAFE AND EFFECTIVE DISPOSABLE CIRCUMCISION DEVICE</b>
<p>Solehring is newly invented disposable circumcision device. It was created to reduces complication of circumcision using disposable device. The bullet-like design was made to enhance the performer during the procedure. The material use approved by FDA as safe for human contact. It was tested clinically as safe disposable circumcision device.</p>	

APPLICATION No.	MAL-023
AUTHOR(S)	<b>ONG YOKE EN</b>
ORGANIZATION	ORIENTUS INDUSTRY SDN BHD
TITLE OF INVENTION	<b>SINGLE HEAD 2-COMPONENT AEROSOL SPRAY PAINT SYSTEM</b>
<p>Single head 2-Component Aerosol Spray Paint System is mixes paint and hardener as and when needed. It is uniquely integrated with an inner sleeve coupled with a suction pipe for mixing and discharging of two chemicals through a single hole. Upon puncturing of the inner sleeve, the hardener contained within will flow out to mix the paint stored in the can body. Furthermore, no paint can be discharged without the full puncturing of the inner sleeve. This enables one to determine precisely that the two chemicals are mixed thoroughly upon discharging of the mixture.</p>	

APPLICATION No.	MAL-024
AUTHOR(S)	<b>HJ ABDUL RAHIM BIN MD TAHIR, HJ NORMAN BIN KUSIN HISHAM BIN MAT SALLEH, MOHD FAIRUZ BIN TALIB, SAIFULDIN BIN SABDIN</b>
ORGANIZATION	ADVANCE TECHNOLOGY TRAINING INSTITUTE
TITLE OF INVENTION	<b>DESIGN AND FABRICATE SATAY GRILL APPARATUS</b>
<p>By traditional method of satay grilling process over charcoal fire, satay skewers need to be manually turned (rotate) to prevent uneven grilling. It is also unhygienic as the ash from charcoal fire fly off to the satay meat skewer while the operator is fanning the charcoal fire with hand-held fan to make charcoal burned more strongly. Moreover, due to excessive smoke</p>	

emitted from grilling process, this is not suitable for indoor food service outlets such as food court, hotels and restaurants. Also, the worker is exposed to heat and excessive smoke for a long period of time. Although many grill machine for heating food are in a market, but most of them are extremely complex, difficult to maintain and hard to keep clean. The present invention was designed by using electric heater with the weight is less than 20 kilograms and the size is 43cm x 33cm x 76cm. Therefore, the machine is portable and easy to be transported. The main structure was fabricated by food grade 304 stainless steel materials with 240VAC 50Hz single phase power supply and the heating heater is about 2.5 kW. The machine was tested for grilling and has a capacity of 760 pieces per hour. Keywords: satay grill apparatus, satay grill machine, satay port.

APPLICATION No.	MAL-025
AUTHOR(S)	<b>Assoc. Prof. Dr. Jane Teng Yan Fang</b>
ORGANIZATION	Sultan Idris Education University Malaysia
TITLE OF INVENTION	<b>A Model of Disaster Preparedness for Capacity Building in Disaster Risk Reduction</b>

The study investigated the survivors' learning experience from the tsunami in Aceh in 2004. It examined the learning experience of the survivors as reports revealed that the lessons learnt had impacted the people's life socially and economically. Eventually, a model on disaster preparedness was developed. It is an innovative, comprehensive and sustainable model pertaining to the notion of disaster preparedness. The model is the catalyst to enhance preparedness programs for disaster as it provides the framework towards designing disaster preparedness programs and activities. It serves as the basis for disaster preparedness in curriculum, co-curriculum and community engagement projects.

APPLICATION No.	MAL-025
AUTHOR(S)	<b>Saiful Azad, Musfiq Rahman, Arafatur Rahman, Jasni Mohamad Zain</b>
ORGANIZATION	University Malaysia Pahang Thompson Rivers University
TITLE OF INVENTION	<b>An Exceptionally Secure Graphical Password for Smart Devices</b>

In the recent past, a considerable number of attacks are noted on various smart devices; where the attackers make use of the loopholes of existing password schemes. For instance, existing graphical password schemes are exposed to various attacks, e.g., shoulder surfing, smudge, and brute force attacks are prominent. To combat with these attacks, a new graphical password scheme is developed; where the existing vibration of the smart devices is converted into a

code. It is then combined with a pattern in an inseparable manner, and hence, called Vibration-and-Pattern (VAP) code. The VAP code has resilient against those aforementioned prominent attacks

APPLICATION No.	MAL-026
AUTHOR(S)	<b>Professor Dr.Fouad Hussain AL-Bayat, Dr. Mohammad Hussain Ismail, Dr Omar Emad, Dr. Anissa Lokman, Dr. Suhailah Yazid</b>
ORGANIZATION	UNIVERSITI TEKNOLOGI MARA,UITM
TITLE OF INVENTION	<b>Formulation and Evaluation of the Osteoconductive Property of Locally Synthetic Hydroxyapatite from Egg Shell as a Novel Bone Substitute – An Experimental Study in Rat</b>

**Objectives:** To evaluate the osteoconductive property and healing of locally synthetic hydroxyapatite from egg shell in extracted tooth socket. Preparation of hydroxyapatite: The process involves drying, thermal decomposition of eggshell followed by hydrothermal reaction, compacting and sintering of powder at temperature of 900-1300oC. to optimized microstructure and properties of sintered HAp. Toxicity of hydroxyapatite from egg shell was tested on fibroblast and osteoblast cells line. Upper central incisors of thirty six adult male Sprague Dawley rats were extracted. Animals were divided into four groups; sockets of group 1(control) were left empty, group 2 filled with commercially available hydroxyapatite(USA), group 3 with locally synthetic hydroxyapatite from egg shell, while group 4 with locally synthetic hydroxyapatite from egg shell and growth factor platelet rich plasma. Hydroxyapatite from egg shell showed no toxicity on fibroblasts and osteoblasts. There were no changes in biochemical blood parameters of experimental group compared to control group. Histological examination demonstrated that sockets treated with locally synthetic hydroxyapatite from egg shell and growth factor were completely filled with newly generated bone tissue significantly better than the control group.

APPLICATION No.	MAL-027
AUTHOR(S)	<b>Prof. Dr. Nidhal Abdul Wahid, Dr. Esra Hassan Al Hashemy, Dr. Maha Jamal Abbas</b>
ORGANIZATION	University of AL Mustansryia
TITLE OF INVENTION	<b>Effect of Menthol Crystals Aqueous Extracts on the Growth of <i>Candida Albicans</i> Isolated from Saliva of Type II Diabetes Mellitus Patients</b>

The aim of the research work was for isolation and identification of the oral *Candida albicans*

from patients with type II Diabetes Mellitus and healthy subject, along with testing the effect of menthol crystals aqueous extracts on the isolated species. Fasting stimulated saliva were collected by splitting method for each subject. *C. albicans* were isolated, purified and identified according to morphological characteristic on chromogenic (Chrom agar for Candida) and biochemical test on API Candida. The effect of menthol on the isolated species were determined using agar well diffusion method, sensitivities of *C. albicans* to different concentrations of menthol crystals aqueous extract was (15%, 20%, 25%, and 30%) in vitro tested according to well diffusion agar methods and viable plate count technique. The results showed that *C. albicans* was recovered from the oral cavity of (79%) diabetic patients.

APPLICATION No.	MAL-028
AUTHOR(S)	<b>LOGAISWARI INDIRAN, LIEW FOONG CHING</b>
ORGANIZATION	UNIVERSITI TEKNOLOGI MALAYSIA
TITLE OF INVENTION	<b>TOLKIDZ</b>
TOLKIDZ is a wearable wristband, embedded with mobile app for the special children. This wristband is able to identify the emotions (sad and happy) of the wearer by using two sensors; body temperature and heartbeat. TOLKIDZ is designed to help the parents and teachers to identify the emotion of the special children, who are having learning disabilities that is caused by communication disorder. Furthermore, the app allows parents and teachers to view the emotional of the children when they are at home or work, which directly helps to reduce the stress of the parents.	

APPLICATION No.	MAL-028
AUTHOR(S)	<b>JAYASHRI SELVENDRAN J.THANAPAL (ADVISOR), MUTU PARAMASIVAM (ADVISOR), DARSHANA JAYASANGKAR PUVENTHIRAN JAYARAMAN, THESIIGAN C.SELVANAYAGAM</b>
ORGANIZATION	SJK(TAMIL)MENTAKAB
TITLE OF INVENTION	<b>AN INNOVATIVELY DESIGNED CALORIMETER (IDC )</b>
Calorimeter is a device used to measure amount of calories present in food samples. An environmentally friendly calorimeter was designed by using glass panels, copper container and waste products like sugarcane bagasse and coconut husk to determine calorie content in food samples. The body of the calorimeter was made of double layered glass panels to prevent heat lost to the surrounding. Generally, the enhanced design and materials used in this calorimeter prevents heat loss to the surrounding. Therefore, the result produced by this calorimeter for various food samples were comparable with literature values. This innovative calorimeter was designed to carry out school level experiments with higher accuracy and lower cost.	

APPLICATION No.	MAL-029
AUTHOR(S)	<b>Dr. Sri Ganesh Muthiah, Prof. Dr. Shamala Subramaniam, Hong Siaw Swin</b>
ORGANIZATION	Universiti Putra Malaysia
TITLE OF INVENTION	<b>Beyond Cancer Unemployment: An Online Job Portal Dedicated Specially To Cancer Survivors</b>
<p>An unplanned retirement is a forced retirement. This could lead to poor quality of life due to financial constraints caused by unemployment. An important group of people who fall under this category are cancer patients. Consequently, those who suffer along are their respective family members. Cancer patients are susceptible to encounter forced retirement due to the disease. Currently, there are no job portal available especially dedicated to this group of people. The objective of this innovation is to create an avenue through an online job website, to offer employment and marketing opportunities and eventually providing financial freedom to cancer survivors.</p>	

APPLICATION No.	MAL-030
AUTHOR(S)	<b>THANGESWARY ANNAMALLAI, QUBEHRAN KUMAR SIVAKUMAR, UJJAY RAJ RAJ MANI RAO, KEHVAN REDDY PERUMAL</b>
ORGANIZATION	SJK (TAMIL) KAJANG
TITLE OF INVENTION	<b>PORTABLE ELECTRIC STOVE</b>
<p>PORTABLE BATTERY OPERATED ELECTRIC STOVE. CAN BE USED TO DO SIMPLE COOKING MEANT FOR A PICNIC WITH FAMILY AND CAMPING. DO IT YOURSELF (DIY) CONCEPT, MULTICOLOURED, SAFE AND MOST IMPORTANTLY ENVIRONMENTALLY FRIENDLY STOVE.</p>	

APPLICATION No.	MAL-031
AUTHOR(S)	<b>Prof. Ida Idayu Muhamad, Abdul Syukur bin Salehan, Mohd Harfiz bin Salehudin</b>
ORGANIZATION	Universiti Teknologi Malaysia
TITLE OF INVENTION	<b>REPID – Insect Repellent Packaging with Microleak Indicator</b>
<p>REPID – is an active packaging design using porous copolymeric nanocarrier and microencapsulated natural insect repellent based on controlled release technology, and micro-leakage indicator for monitoring levels of infestation. Utilization of natural products promotes green and sustainable impact to our life. Synergy between natural insect repellent and leakage indicator in an active packaging system could be applied for different types of packaging (paper, textile, plastic, carton) and protection needed (long term storage, on-farm, point of sale). This innovation minimize food losses and wastes, increased food protection from insects contamination, lengthening of product shelf-life and promotes green technology for economical sustainability.</p>	

APPLICATION No.	MAL-032
AUTHOR(S)	<b>JUNAIDI BIN OSMAN</b>
ORGANIZATION	ADVANCED TECHNOLOGY TRAINING CENTRE (ADTEC), KULIM
TITLE OF INVENTION	<b>NEW TECHNOLOGY AUTOMOTIVE ABSORBER (NTAA) - GREEN TECHNOLOGY</b>
<p>NEW TECHNOLOGY AUTOMOTIVE ABSORBER (NTAA) is a system developed and produced to serve as a medium or a special tool as absorbent, retaining vibration, vibration and movement generated its burden of responsibility or acts of a body or object. The process of retaining and absorption power of this movement in turn will stabilize an object which is vibrating or moving object. Project NTAA is a medium or solution that is designed to use a new technology concept (NEW TECHNOLOGY) were categorized as green technology (GREEN TECHNOLOGY) in the process of retaining and vibration absorption, vibration and shock produced by a body. Use of the system as well as new technologies that use of 2 types of springs in the graft, and stretched along the conversion point of load from the top (custom) at medium to the central system (When the load or the vibration transferred to mediate between the two spring is, then the spring will act with the natural process of spring that stretch and compress each other. the natural condition of the spring which will retain its original condition will result in actions contrary ushered 2 spring and thus give the impression of slowing and stopping the movement of that happening. NTAA is a system that does not use pneumatic (gas) or hydraulic (oil) using seal oil as a shock absorber used. The advantage of NTAA is that it is new technology, green technology, durable and not easily damaged (long life), can adjustable (comfort, performance, racing), can be maintained, a lower cost. The project will also indirectly benefit the development of the technology and the benefits to consumers</p>	



APPLICATION No.	MAL-033
AUTHOR(S)	<b>MUHAMAD FAZIL AHMAD</b>
ORGANIZATION	KUALA TERENGGANU - UniSZA
TITLE OF INVENTION	<b>Pro-Patine: The Innovation of Downstream Products of Pangasius Sutchi Fish in Tasik Kenyir Terengganu for Expanding the Economic Growth of Malaysian East Coast Community</b>
<p><i>Pro-Patine</i> with multivitamin, Omega 3 and calcium hydroxyapatite are well known for their bioactive compound that provides many beneficial effects to human health. In this study, Pangasius Sutchi or <i>Patin</i> Fish extract was fortified with 1000 IU of mix multivitamin from essential oil and 290mg/100g calcium hydroxyapatite from fish bones waste. Consuming these products will rich in certain nutrients such as 55% of vitamin A, E, F and 25% calcium of recommended daily absorption for human body and blood vessels. It is an alternative source to obtain mineral and vitamins, and expand the economic growth of Malaysian east coast community.</p>	

APPLICATION No.	MAL-034
AUTHOR(S)	<b>Abdulghani Ali Ahmed</b>
ORGANIZATION	Universiti Malaysia Pahang (UMP)
TITLE OF INVENTION	<b>Intrusion Detection And Traceback (iDAT<sup>+</sup>)</b>
<p>Network intrusions have risen dramatically in recent years especially against high critical networks such as government, e-commerce, and banking networks. Detecting intrusions and identifying their sources are still time consuming; sources are identified long after the attack is completed. Intrusion Detection And Traceback (iDAT<sup>+</sup>) invention is developed to detect network intrusions in real-time. It is also developed to early trace intrusions to their true origins and then avoid further occurrence of these intrusions in the future. iDAT<sup>+</sup> is capable to filter intrusive traffic generated through several gateways and delimit responsible users through three principal phases: monitoring, detection, and traceback.</p>	

APPLICATION No.	MAL-035
AUTHOR(S)	<b>Kantan A/L P.Saminathan, Vikneswaran Muniandy, Danial Hakim Bin Mohd. Fauzi</b>
ORGANIZATION	ADVANCED TECHNOLOGY TRAINING CENTRE (ADTEC), KULIM
TITLE OF INVENTION	<b>Car Lamp Failure Detector with Warning and Backup System for Dual Filament Bulbs</b>
<p>Car lamp failures are often unnoticed and pose severe risk to oneself, passengers and other road users. Vehicles using dual filament head-lights or tail-lights will benefit from this invention. A modular design approach makes easy assembly in any vehicle with dual filament implement. The micro-controlled modules will monitor voltage and current draw from the bulb filament. Any failure will instantly trigger the driver to switch on secondary filament to preset brightness &amp; notifies the specific failure and next course of action. Whenever an override is detected, the module cuts-off and the secondary filament operates as intended. This nonintrusive &amp; non-interfering system design is perfect for enhancing safety in existing vehicles and recommended for future designs.</p>	

APPLICATION No.	MAL-036
AUTHOR(S)	<b>NILAVARASEN A/L SUBRAMANIAM, SWATHI A/P A.JAYAGANESAN, SHARVINEESWARY A/P RAAMU</b>
ORGANIZATION	SJK(T) JALAN YAHYA AWAL
TITLE OF INVENTION	<b>THE MULTI-FACILITY SCHOOL BAG</b>
<p>The Multi-facility School Bag is a unique, ergonomic student bag that can be converted into a convenient chair. The main objective of this innovation is to design a school bag with ergonomic features and medicinal properties that is readily converted into a convenient chair. The bag is designed with multi special features that include special padded layers containing sugar cane bagasse for good backbone support, medicinal benefit neck supporting layer containing herbs and <i>Elaecarpus ganitrus</i> beads string attached for neurobic exercise. Thus, Multi-facility School Bag has excellent prospects for commercialization with its novel function as a bag and a chair.</p>	

APPLICATION No.	MAL-037
AUTHOR(S)	<b>Prof Dr Ida Idayu binti Muhamad, Dr Yanti Maslina binti Mohd Jusoh, Norazlina binti Mohd Nawi, Alyani binti Mohd Padzil</b>
ORGANIZATION	Universiti Teknologi Malaysia
TITLE OF INVENTION	<b>NAT-WAVEPRO – Microwave Designed Process Specially for Natural Bioactive Products</b>
<p>Instability of natural bioactive compound is one of the major issues faced by food, beverage, cosmetic, pharmaceutical and textile industries. The stability of the natural bioactive compound can be maintained by coating it. Coating the bioactive compound helps to protect the compound from degradation due to environmental exposure and also improve bioactive compound stability and shelf-life. Microwave drying has been an alternative method to the conventional drying. The objective of this invention is to promote fast and affordable simultaneous drying and encapsulation technique of natural bioactive compound using microwave energy.</p>	

APPLICATION No.	MAL-038
AUTHOR(S)	<b>NUR SABAHIAH ABDUL SUKOR, MOHD ASHRAF MOHAMAD ISMAIL, AHMAD HALMI GHAZALI, RAIS YUSOH, NG SOON MIN</b>
ORGANIZATION	Universiti Sains Malaysia
TITLE OF INVENTION	<b>HUMANITARIAN SUPPORT SYSTEM FOR DISASTER PREPAREDNESS AND RESPONSE PLAN</b>
<p>This innovation is focused to build a data collection system that integrated with dashboard visualisation for vulnerable people. It combine the proliferation of mobile messaging applications such Telegram BOT which allows an interactive data collection of vulnerable people via crowdsourcing The Telegram API will allows a connection to the customize geospatial databases, spreadsheets, non-spatial databases powered by TuxGeo+ backend to visualizes the data on a map. Thus, the data of the people in needs/requiring supports can be integrated from the crowdsourcing data into the web based TuxGeo+ dashboard and can be visualized by the relevance government agencies.</p>	

APPLICATION No.	MAL-039
AUTHOR(S)	<b>Assoc. Prof. Dr. Mohamad Fazli Sabri, Mrs. Nurhayatul Nira Ramli, Ms. Rozita Wahab</b>
ORGANIZATION	Universiti Putra Malaysia
TITLE OF INVENTION	<b>SMART MONEY KIT : BRIGHT KIDS SMART MONEY</b>
<p>Smart Money Kit: Bright Kids Smart Money is an initiative to raise awareness among public, especially parents and educators on prudent money management among young children. This awareness is resulting of Central Bank of Malaysia's strategy to raise financial literacy in the country among Malaysians. It is a financial education programme targeting mainly young children aged from 6 to 12 years with the objective of educating them on the importance of money and money management in their lives. Research literatures revealed that, by instilling knowledge and skills on money management, it will impact children positively to manage better their finance in future. Therefore, this new innovation are developed as an alternative learning and teaching tool for children to master personal financial management knowledge and skills with guidance from parents and adults. This financial education kit comes with 10 interactive activities arranged according to children's ages from the age of 6 to 12 years old. It comprises six basic units covering financial management education i.e. getting to know money, financial goals, needs vs. wants, saving, expenditure.</p>	

APPLICATION No.	MAL-040
AUTHOR(S)	<b>Alireza Marefat, Rafidah MD Noor</b>
ORGANIZATION	University of Malaya
TITLE OF INVENTION	<b>An Optimized VANET-Based Congestion Pricing Zone Model (OVB-CPZ)</b>
<p>Congestion Pricing (CP) has been offered as the best solution to alleviate and manage the congestion in a designated area in crowded metropolises. Although several electronic-based CPZ systems are functioning around the world with different technologies, still there are various problems. Thereby, investigation on Intelligent Transportation System (ITS) applications leaded this study to find Vehicular Ad-Hoc Network (VANET) technology as a superlative choice for designing a new architecture for CPZ. The aim is to propose an optimized VANET-based congestion pricing model a new electronic-based CPZ capable of serving vehicle in Multi Lane Free Flow (MLFF). The OVB-CPZ designed based on Dedicated Short Range Communication (DSRC) with several technical enhancements.</p>	

APPLICATION No.	MAL-041
AUTHOR(S)	<b>Ir. WAN SHAH WALIALLAH BIN WAN MAT ZAIN@WAN SENIK, ZULKIFLI BIN SULIMAN</b>
ORGANIZATION	Malaysia Public Work Department
TITLE OF INVENTION	<b>METHOD OF CONTROLLING DEHUMIDIFICATION FOR COOLING COIL</b>
<p>An innovative approach by using a coil closer device to partially close any Air Handling Unit cooling coil area (AHU CCA) in order to manage the moisture with better dehumidification for existing constant air volume AHU in air conditioning system by using chilled water system. This method specifically retrofitting at cooling coil to enhance bypass air through the coil. This method has proven to improve dehumidification process to increase the rate and amount of moisture removal from the return air hence reducing the relative humidity of intended space.</p>	

APPLICATION No.	MAL-042
AUTHOR(S)	<b>Resmah Gunasegaran, Praveena Ramanathan, Yamunan Selvanathan, Hariharan Surais Kumar</b>
ORGANIZATION	SMK DATO' PENGGAWA TIMUR
TITLE OF INVENTION	<b>WHITEBOARD AUTO-DUSTER</b>
<p>This is an invention specially made for teachers. It can be also used at business meeting s and presentations. This could make teacher's job much easier. Our invention involves the mechanism of Power Window Regulator of cars. Furthermore, auto-dusters in market just uses the gear system which is very complex and can only be done by mechanical engineers .The LED strips added to the invention provides a better view of the whiteboard during rainy seasons. Our invention has potential to be commercialized especially at schools because the teachers and students are the most targeted community for our invention to be commercialized. Other than that, this invention also can be used for meeting and conference purposes.</p>	

APPLICATION No.	MAL-043
AUTHOR(S)	<b>MUNIRA BINTI ABDUL RAZAK, Wan Marzuki bin Wan Ismail</b>
ORGANIZATION	UNIVERSITI MALAYSIA PAHANG (UMP)
TITLE OF INVENTION	<b>E.R.A.t : ETHNIC RELATIONS ALTRUISTIC TEAM</b>
<p><b>E.R.A.t.</b> is an innovative and integrated modular approach to teach Ethnic Relations of the Social Sciences university's core course for the technical and engineering students. It involves comprehensive and interactive sharing sessions and assessments within 16 academic weeks as the platform for the students to synthesize the concepts and theories through optimizing both</p>	

the real and virtual classrooms. Standard university curricula tend to compartmentalize engineering and social sciences. **E.R.A.t.** aims to defy such compartmentalization, as students discover throughout this course. Four active learning strategies serves to promote unity among ethnics and to engage the future engineers to the real world!

APPLICATION No.	MAL-044
AUTHOR(S)	<b>DR. ALI SAFA SADIQ</b>
ORGANIZATION	UNIVERSITI MALAYSIA PAHANG (UMP)
TITLE OF INVENTION	<b>An Intelligent Network Selection based Vehicle to Infrastructure Wireless Communication</b>
<p>In heterogeneous vehicular networks, the most challenging issue is obtaining an efficient vertical handover during the vehicle roaming process. Efficient network selection process can achieve satisfactory Quality-of-Service for ongoing applications. In this paper, we propose an Intelligent Network Selection (INS) scheme based on maximization scoring function to efficiently rank available wireless network candidates. Three input parameters were utilized to develop a maximization scoring function that collected data from each network candidate during the selection process. These parameters are: Faded Signal-to-Noise Ratio, Residual Channel Capacity, and Connection Life Time. The results show that the proposed INS scheme is more efficient at decreasing handover delays, End-to-End delays for VoIP and Video applications, packet loss ratios as well as increasing the efficiency of network selection processes in comparison with the state of the arts.</p>	

APPLICATION No.	MAL-045
AUTHOR(S)	<b>Dr. SABA F. HUSSAIN, Dr. ASHIATUN NAIM BT ZAMAILI, Dr. SITI AISHAH BT KHALIL, Prof Dr. Fouad Hussain Al-Bayaty, Dr. Omar Imad</b>
ORGANIZATION	Universiti Teknologi MARA
TITLE OF INVENTION	<b>The Effect Of Rosuvastatin In Orthodontic Tooth Movement- An Experimental Study In Rabbits.</b>
<p>In order to evaluate acceleration effect of Rosuvastatin on orthodontic tooth movement. Six New Zealand rabbits divided into control and experimental groups. All received a special orthodontic appliance and experimental group received 2.5mg Rosuvastatin for 21 days orally, then all sacrificed at end. Assessed by digital caliber, Cone Beam Computed Tomography (CBCT) and histologically. The results showed statistically significance difference between experimental and control groups after 21 days (p value= 0.05) and highly significant in experimental (p value = 0.0010) supported with the CBCT and histological findings. Oral administration of Rosuvastatin showed high potentiality in acceleration of orthodontic tooth movement.</p>	

APPLICATION No.	MAL-046
AUTHOR(S)	<b>Dr. Mas Suryalis binti Ahmad, Prof. Dr. Fouad Hussain AL-Bayaty, Dr. Erni binti Noor, Farhana binti Ab Ghani</b>
ORGANIZATION	Universiti Teknologi MARA
TITLE OF INVENTION	<b>A new oral health educational program and tool kit for people with hearing and speech impairments</b>
<p>People with hearing and speech impairments reported of poor oral hygiene (OH), and difficulty communicating with dentists, indicating the need to develop an effective management strategy. The project introduced a toolkit to guide delivery of OH instruction and dental consultation, using instruction cards, picture booklets, OH instrument kit as well as video demonstrating communication techniques involving hand symbols, gestures and facial expression. It was designed based on the inventors' clinical experience, and knowledge of sign language. Patients' improvement in OH practice, plaque score, bleeding index and pocket depth was noted to assess the efficacy of techniques utilized using this intervention.</p>	

APPLICATION No.	MAL-047
AUTHOR(S)	<b>AZMAN ISMAIL, MOKHTAR AWANG, ZAINAL ABIDIN JANTAN, MOHD JASMIN ZAINUDDIN, FAUZIAH AB RAHMAN</b>
ORGANIZATION	Universiti Kuala Lumpur (UniKL)
TITLE OF INVENTION	<b>ORBITAL FRICTION STIR WELDING</b>
<p>Friction stir welding for tubular structure imposed a quite challenging issue. The requirement of holding mechanism is vital. Therefore, this structure is to be used to accommodate this requirement thus makes tubular structure could be welded successfully and soundly.</p>	

APPLICATION No.	MAL-048
AUTHOR(S)	<b>Ahmad Makarimi Bin Abdullah, Khairul Arieef Bin Abu Jalil, Muhamad Fadli Bin Ghani, Rohaizad Hafidz Bin Rozali, Mohamad Ibrahim Bin Ahmad</b>
ORGANIZATION	Malaysian Institute of Marine Engineering Technology, Universiti Kuala Lumpur
TITLE OF INVENTION	<b>Amphibian Vehicle cum ROV Crawler for Land and Seabed Discovery, Inspection and Research Tools</b>
<p>Underwater Remotely Operated Vehicle (ROVs) have a significant support role and play a dominant underwater robotics which has very high demand in marine and offshore field. A bottom founded-ROV give an additional value from normal ROV to expand research and survey</p>	

on seafloors. Known as UniKL Amphibious Research Crawler I (UARC I) is designed to operate underwater up to a depth of 15 meters. This vehicle specially design to withstand with the Malaysia asymmetrical precipitous terrain and sand. It is good start to fabricating the light weight crawling ROV with effective cost and can works at any asymmetrical terrain and sand.

APPLICATION No.	MAL-049
AUTHOR(S)	<b>Lt Col. AP Ir. Khalid bin Abd Jalil RMAF, Muhammad Afif bin Azmi, Muhammad Faiszlie bin Zainal, Junaidi bin Asiran, Nik Sallehudden Ayub bin Nik Zahari</b>
ORGANIZATION	UNIVERSITI PERTAHANAN NASIONAL MALAYSIA (UPNM)
TITLE OF INVENTION	<b>3 Wheels Motorcycle for Person With Physical Disabilities</b>
<p>This product is about modification and fabricating new 3 wheels motorcycle part for usage of Person With physical Disabilities (PWD) with cheaper cost. Generally this project came out of three components which support each part to give complete design start with power train system, braking system and suspension system for a design of 3 wheels motorcycle (1 wheel in front and 2 wheel on the back). It is also designed with more stability and more efficient for the safety of the user.</p>	

APPLICATION No.	MAL-050
AUTHOR(S)	<b>Suresh Thanakodi, Nazatul Shiema binti Moh Nazar, Prof Dato' Dr Ahmad Mujahid bin Ahmad Zaidi, Prof Madya Dr. Azizi bin Miskon, Norhidayah binti Johari</b>
ORGANIZATION	UNIVERSITI PERTAHANAN NASIONAL MALAYSIA (UPNM)
TITLE OF INVENTION	<b>Car Accident Detector</b>
<p>Car Accident Detector is a system developed based on Android application for smartphone. This device connected via Bluetooth to the PIC circuit board in order to detect physical contact to the car produced in a crash. In case of an accident, this device automatically detects the crash location and simultaneously sends an alert SMS to immediate family members (assigned phone number) to get an assistance for emergency rescue team. The location of the crash also included in the alert SMS using the Global Positioning System (GPS) tracking system.</p>	



APPLICATION No.	MAL-051
AUTHOR(S)	<b>Suresh Thanakodi, Nazatul Shiema binti Moh Nazar, Prof Dato' Dr Ahmad Mujahid bin Ahmad Zaidi, Prof Madya Dr. Azizi bin Miskon, Nur Fadhilah binti Zulkepli</b>
ORGANIZATION	UNIVERSITI PERTAHANAN NASIONAL MALAYSIA (UPNM)
TITLE OF INVENTION	<b>Low Battery Indicator</b>
<p>The low battery indicator monitoring system monitor the car's battery level and alerts the owner &amp; maintenance company. This project proposes a controlled system to monitor the battery level wirelessly using smartphone, PIC Controller, Bluetooth and a voltage sensor. When the car battery found to be low, the system automatically alerts the owner to do the necessary maintenance action through SMS &amp; hand phone alarm. This invention is environmentally friendly as it allows the user to make necessary changes only when needed as well as safe the user from stuck in the middle of any journey due to battery failure.</p>	

APPLICATION No.	MAL-052
AUTHOR(S)	<b>Suresh Thanakodi, Nazatul Shiema binti Moh Nazar, Kol Prof Ir Dr Norazman bin Mohamad Nor, Prof Madya Dr. Azizi bin Miskon, Saiful Izzuddin bin Shamsul Bahri</b>
ORGANIZATION	UNIVERSITI PERTAHANAN NASIONAL MALAYSIA (UPNM)
TITLE OF INVENTION	<b>PIEZOELECTRIC MONITORING SYSTEM</b>
<p>This invention able to monitor the voltage produced by the piezoelectric system wirelessly. The produced data can be monitored in real time as well as being extracted in excel data format for recording purpose. In the previous project, the piezoelectric were embedded in army boots for energy scavenging purpose to charge hand phone. Monitoring the voltage output utilizing multimeter not feasible at all, hence this invention solves the challenges of monitoring the piezoelectric voltage output.</p>	

APPLICATION No.	MAL-053
AUTHOR(S)	<b>Suresh Thanakodi, Nazatul Shiema binti Moh Nazar, Prof Dato' Dr. Ahmad Mujahid bin Ahmad Zaidi, Prof Madya Dr. Azizi bin Miskon, Ahmad Iqram bin Azhar</b>
ORGANIZATION	UNIVERSITI PERTAHANAN NASIONAL MALAYSIA (UPNM)
TITLE OF INVENTION	<b>Survival Tracking System</b>
<p>Survivor tracking system is a device that detects human heartbeat by using pulse sensor and sends the information to a smartphone via Bluetooth. Apart from muscle sensor and accelerometer sensor that has difficulty in monitoring condition of users, pulse sensor is one of the alternatives that can provide high portability and require small surface area for analysis. This invention uses a wireless system. The design is achieved by utilizing a smartphone with Android Operating System, Peripheral Interface Controller (PIC) Microcontroller and Bluetooth. This invention monitors user's heartbeat rate, durable and effectively SMS to get medical help for the user.</p>	

APPLICATION No.	MAL-054
AUTHOR(S)	<b>Suresh Thanakodi, Nazatul Shiema binti Moh Nazar, Prof Dato' Dr. Ahmad Mujahid bin Ahmad Zaidi, Prof Madya Dr. Azizi bin Miskon, Muhammad Syafiq Najmi bin Mazlan</b>
ORGANIZATION	UNIVERSITI PERTAHANAN NASIONAL MALAYSIA (UPNM)
TITLE OF INVENTION	<b>Temperature Recorder System</b>
<p>A temperature recorder system is based on the changes of the patients' temperature over a fixed time that uses the advantages of a smartphone. This project proposes a wirelessly controlled system to achieve reliability and mobility of the user. The wireless system was achieved by utilizing a smartphone, PIC Controller and Bluetooth to a device that's been installed with the temperature sensors. This system can be used for medical purpose to monitor and record 24/7 of the patient's temperature consistently which can systematically save manpower, time and lives.</p>	

APPLICATION No.	MAL-055
AUTHOR(S)	<b>Suresh Thanakodi, Nazatul Shiema binti Moh Nazar, Prof Dato' Dr Ahmad Mujahid bin Ahmad Zaidi, Lt. Kol. Prof. Madya Khairul Hasni bin Kamarudin, Nur Amira Syuhaida binti Rizal</b>
ORGANIZATION	UNIVERSITI PERTAHANAN NASIONAL MALAYSIA (UPNM)
TITLE OF INVENTION	<b>Traffic Light Failure Detector</b>

A traffic light failure detector is a device that can detect the malfunction or failure in the traffic light system and automatically send a notification to the specific authority that responsible to take care of it or to the phone number that have been pre-set. This device will ensure the traffic light can be fully functional. It also helps the authority that responsible to take care of the traffic light by getting a fast notification of the traffic light's malfunction. It will help to reduce the occurrences of traffic congestion due to traffic light malfunctions.

APPLICATION No.	MAL-056
AUTHOR(S)	<b>Dr. Erni Noor, Prof Dr Fouad Hussain al-Bayaty, Dr Muhammad Hilmi</b>
ORGANIZATION	University Teknologi MARA UiTM
TITLE OF INVENTION	<b>Oral Hygiene Care (OH-CARE) Vending Machine</b>

Electronic vending machine is commonly used commercially to dispense food and drink items. These electronic vending machines are usually loaded with food and drink items which contain high quantities of sugar, which predispose consumers with adverse dental conditions such as tooth decay and gum diseases. The British Dental Health Foundation showed that, teenagers in academies and employees in the workplace are at risk of unhealthy choices as the ease of accessibility of these electronic vending machines. This specialized electronic vending machine, the 'Oral Hygiene Care (OH-CARE)' vending machine on the other hand has a dual function. It promotes and educates consumers to healthy dental health practice and also dispenses dental aids, which they require. Furthermore, it offers easy access and 24-hours of access to oral hygiene care products like toothbrush, interdental brush, toothpaste and tongue scraper. The aim of this innovation is to promote education and access to oral hygiene care tools. Since this specialized electronic vending machine is portable, it can be strategically located at areas such as in public schools and in remote areas where access to dental health aids are scarce. This machine may help in promoting dental health awareness among the population and ease of accessing dental aids.

APPLICATION No.	MAL-057
AUTHOR(S)	<b>DR. ABDUL HAMID DALEH, DATO DR. MARZALINA MANSUR, MISS YANTI ABDUL KADIR, KHAIRUL MASSEAT, SASABINA RECREATION AND INDUSTRIES SDN. BHD</b>
ORGANIZATION	FOREST RESEARCH INSTITUTE MALAYSIA (FRIM)
TITLE OF INVENTION	<b>Engineered Palm Wood Veneer for Seating Component (E = PaWV)</b>

This is what you want to be introduced here as the product E-PaWV or Products Veneer Palm Engineered as a step to introduce the results of research and development (R & D) raw material is wasted and worthless but can be translated into higher value products through technology in the manufacture of components of furniture and interior products. In fact, the product can be proud of Malaysia because of its sources of raw materials and at the same time be Malaysian identity. General Objectives: Producing value-added component curvature seats and interior products using the veneer of a palm trunk through process engineering technology or a high frequency of heat stress.

APPLICATION No.	MAL-058
AUTHOR(S)	<b>Assoc. Prof. Dr. Zaiton Haron, Dr. Khairulzan Yahya, Lim Ming Han, Dr. Shek Poi Ngian' Dr. Lee Yee Ling<sup>2</sup></b>
ORGANIZATION	Universiti Teknologi Malaysia, Universiti Tunku Abdul Rahman
TITLE OF INVENTION	<b>Smart Noise Mapping Prediction Software (NoiseMAPSS)</b>

A new invention of noise mapping technology, namely Smart Noise Mapping Prediction Software (NoiseMAPSS), was developed to solve the current industrial noise mapping problem. NoiseMAPSS applies the stochastic simulation process to predict the strategic noise map, noise risk zone and personal noise exposure level. This technology could effectively simulate the random movement and random duty cycles of machinery in a complex and dynamic working environment. It had eliminated the laborious process in conducting the noise mapping measurement, and also provided reliable information to enhance the effectiveness of noise monitoring, environmental impact assessment and noise abatement planning.

APPLICATION No.	MAL-059
AUTHOR(S)	<b>Norazlina Khamis, Lim Mei Guey</b>
ORGANIZATION	Universiti Malaysia Sabah
TITLE OF INVENTION	<b>IMPLEMENTING INDOOR POSITIONING SYSTEM IN INDOOR CAR PARKING NAVIGATION</b>
<p>Most of the time drivers have to spend a lot of time to look for an empty parking slot in the indoor car park. This is because there is no guidance provided for the drivers and they have to find by their own effort. Some of the indoor parking provide only the information on the availability of the parking slots but not showing the directions. The existing apps uses Global Positioning System (GPS) approach, which only performs well in the outdoor environment. So the mobile application cannot use GPS to track the location of the vehicle in the indoor area car park. Without knowing the current location of the cars, the mobile application cannot give the precise information about the parking slot and provide navigation for the drivers. The purpose for this project is to develop a car park navigator apps using an indoor positioning system to guide drivers in finding the available parking slots in the indoor environment</p>	

APPLICATION No.	MAL-060
AUTHOR(S)	<b>FARIZA PUTEH BEHAK, NORMAZLA AHMAD MAHIR, RAMIAIDA DARMI, HALIZA HARUN, SHAHIRAH SULAIMAN</b>
ORGANIZATION	UNIVERSITI SAINS ISLAM MALAYSIA
TITLE OF INVENTION	<b>ONLINE MULTILITERACIES PROJECT APPROACH (E-MULPA)</b>
<p>In the wake of online learning paradigms, many people resorted to using online tools in their teaching, but some may use technological tools with traditional learning process. e-MULPA is a learning framework that highlights the cultivation of 21<sup>st</sup> century knowledge processes alongside the usage of online tools. This framework has been implemented in an English as a Second Language (ESL) classroom in Universiti Sains Islam Malaysia (USIM) for two semesters in 2015-2016, involving 120 students. Data was collected through interviews and personal reflections and analysed using qualitative thematic analysis. Findings suggest that the learners had a meaningful learning experience which include enhancement in terms of English language, communication, collaborative and technological skills.</p>	

APPLICATION No.	MAL-061
AUTHOR(S)	<b>Afzan Mat Yusof, Muhammad Lokman Md Isa</b>
ORGANIZATION	International Islamic University Malaysia
TITLE OF INVENTION	<b>Malaysian Clay Hand-Made Soap</b>
<p>Washing skin with soap is believed to be an effective, low-cost approach and great method to remove impurities from oil, dust and dirt. However, not all soap is hand-made, can remove germs, natural product-made, free from artificial colour and scent. Hence, this soap invention innovation is hand-made from high quality Malaysian clay blended with high quality Malaysian oil palms with no artificial colour and scent. The microbe and parasite tests revealed that the soap is able to remove them on the skin surface. This invention is to be likely desirable commercially hand-made Malaysian clay soap with strong scientific based research.</p>	

APPLICATION No.	MAL-062
AUTHOR(S)	<b>ROZITA ABDUL JALIL, PROF DR. ZAIDATUN TASIR, DR. SHAHARUDDIN MD SALLEH</b>
ORGANIZATION	UNIVERSITI TEKNOLOGI MALAYSIA
TITLE OF INVENTION	<b>RMATHs – Mobile Based Numeracy Learning Applications for Learning Disabilities Students</b>
<p>Mobile Based Numeracy Learning Applications (RMATHs) is an educational tool that consists of five mobile applications that is specifically designed for learning disabilities (LD) students in primary schools in Malaysia, specifically, for students in Special Education Integration Program (SEIP) classes. The unique features of RMATHs include the use of an attractive technology-based tool, namely mobile devices; and the design of learning interactions and activities is suitable for LD students. This invention also can improve LD students' performance and motivation in learning Mathematics. RMATHs is a market-ready product with five copyrights and one trademark filling and looking forward to be commercialized.</p>	

APPLICATION No.	MAL-063
AUTHOR(S)	<b>PUNEET SINGH GREWAL, MARC JOHN FERNANDEZ, SURHEERN RAVINDRAN</b>
ORGANIZATION	MAZ INTERNATIONAL SCHOOL
TITLE OF INVENTION	<b>PORTABLE DESALINATION UNIT</b>
<p>The portable desalination unit allows people in all parts of the world access to clean, fresh and healthy water at a cost as low as possible. The unit comprises of 4 different sections which are joined together to make the unit function. The main compartment which contains the heat</p>	

absorbing tower absorbs the reflected sunlight. There are also 8 individual mirrors which fold out once the box is opened up. The unit works by taking in unsalinated water and converting it to clean and drinkable water. This is done by evaporating the water into steam by using sunlight and then condensing it into liquid form.

APPLICATION No.	MAL-064
AUTHOR(S)	<b>NAZAHA AHMED NADEEM, SANISHA DAS, TANISHA MUKHERJEE, ATTIKA AFROZ, SUDIKSHA SARAVANAN</b>
ORGANIZATION	MAZ INTERNATIONAL SCHOOL
TITLE OF INVENTION	<b>ORGROW SUSTAINABLE MODEL FOR AN EDIBLE GOME GARDEN</b>

ORGROW sustainable model uses the ORGROW potting mix formulated from household waste replacing soil and fortified with ORGROW compost (made from household and local waste). The ORGROW plants had a better overall growth in terms of number of leaves, height of the plant, breadth of stem and most importantly fruiting doubled in ORGROW medium compared to plants grown in garden soil and commercial soil. The model demonstrates the viability of growing healthy pesticide free food at homes using organic household waste as medium and compost, reducing household waste and improving productivity.

APPLICATION No.	MAL-065
AUTHOR(S)	<b>MANSOR BIN HJ MOHAMAD SAMAN, KHAIRUL SYAKIRIN BIN SULAIMAN, NOR FAIRUS BT YUSOFF, SITI NORBAYA BT KASA, NABILAH BT OTHMAN</b>
ORGANIZATION	SIRIM Berhad
TITLE OF INVENTION	<b>SUPERCAPACITOR CELL USING SYNTHESIZED GRAPHENE METAL OXIDE AND ACTIVATED CARBON DERIVED FROM LOCAL MANGROVE</b>

Currently, graphene has been identified as a promising material for supercapacitor due to larger surface area, excellent electrical conductivity, good chemical and thermal conductivity, which could reach specific capacitance of 550 F/g. However graphene itself easy to agglomerate and restacking among the graphene nanosheets. To solve the problem, metal oxide nanoparticles are inserted as a spacer in between the graphene layers. Meanwhile, the mesoporous structure is important for energy storage especially in supercapacitors for free ion mobility and accessible during charge-discharge. Therefore development of mesoporous carbon derived from mangrove charcoal using demineralization and activation process has been selected as a source of carbon owing to available and relatively cheap with high carbon content about 70-80% as compared to other agricultural residues

APPLICATION No.	MAL-066
AUTHOR(S)	<b>Lau Teik Hock</b>
ORGANIZATION	Far East Pyramid Sdn Bhd
TITLE OF INVENTION	<b>Reduce Electromagnetic Radiation from Electrical Appliance</b>
<p>Nowadays the electro-magnetic radiation has become the fourth large pollutant in the world. Any electric appliance with AC can produce the electro-magnetic radiation. The radiation caused by computer and home appliance is harmful seriously to human body. As people do not touch home appliances closely too much, the hazards caused by home appliance are less. However, the radiation caused when using the Mobile phone / Computer cannot be neglected, it makes more serious harms to human body. This product can eliminate the Electro Magnetic computer radiation.</p>	

## MOROCCO

APPLICATION No.	MCO-001
AUTHOR(S)	<b>Anis KIRAMA</b>
ORGANIZATION	Anitech
TITLE OF INVENTION	<b>ANITECH SMART PLUG</b>
<p>Innovation is a smart plug that is intended safety against electrical accidents: it electrically isolates connected equipment during an overload or short circuit, it monitors the state of connected equipment, it controls the connected smartphone support and electrically isolated at the end of loading or during a call setup, it follows the current consumption of each outlet and provides access to the user to also monitor in real time the distance consumer.</p>	

APPLICATION No.	MCO-002
AUTHOR(S)	<b>Younes KARFA BEKALI, Mohamed ESSAIDI</b>
ORGANIZATION	Abdelmalek Essaadi University, Mohamed 5 University
TITLE OF INVENTION	<b>Reconfigurable Antenna for 3G and 4G for Mobile communication Networks</b>
<p>This invention concerns the field of reconfigurable antennas for third (3G) and fourth (4G) generation mobile communication networks operating in the 2.1 GHz and 2.6 GHz bands respectively. This antenna is very compact and can therefore be incorporated into portable mobile communication devices such as mobile phones, smartphones, PCs and tablets. Moreover, the production cost of this antenna is very low</p>	



APPLICATION No.	MCO-003
AUTHOR(S)	<b>Majid EL BOUAZZAoui</b>
ORGANIZATION	Union of Inventors
TITLE OF INVENTION	<b>Multiview Screen</b>
<p>This device will help people to watch different video sources simultaneously on the same screen, where each person can watch one video source depending on his point of view in relation to this screen. For example, in a home, the installation of this device with a TV screen, will allow the father to watch a sports broadcast on a terrestrial television channel, the mother to follow a cooking show via satellite receiver on the same TV screen. In this example, each family member will be able to watch only the video source which interests him and will not be able to watch the other video sources as they will be hidden in his point of vision even if that video sources can be viewed at the same time and on the same TV screen by other family members who are located in different viewpoints.</p>	

APPLICATION No.	MCO-004
AUTHOR(S)	<b>El Mostafa RESSAMI; Hassan Aït BENHASSOU; Hicham BOUZEKRI; Hassan SEFRIoui; Brahim Lakssir</b>
ORGANIZATION	Moroccan Foundation for Advanced Science, Innovation & Research
TITLE OF INVENTION	<b>Lab-On-Card – Electronic System for Infectious Diseases Diagnosis based on LAMP Method</b>
<p>This innovation reports an Electronic System of a credit card size for the detection of infectious diseases. This system called "Lab-On-Card" (LOC) uses LAMP method for detection of target DNA sequences. The whole process is triggered by the end user after deposition of the biological sample in the tube. The reaction is controlled by the circuit that lights a Green LED to indicate that the reaction is proceeding as the requested protocol, and display a message to indicate that the test is complete and the results are ready for analysis. The end user will see if there is a color change, indicating the presence or not of the infectious disease agents.</p>	

APPLICATION No.	MCO-005
AUTHOR(S)	<b>Ouadi SAIDI, Brahim LAKSSIR, Issam KADMIRI, Ilham BOUZIDA, Kaoutar YAAKOUBI</b>
ORGANIZATION	MAScIR (Moroccan foundation for Advanced Science Innovation and Research)
TITLE OF INVENTION	<b>Smart Soil Analyzer</b>
<p>Smart Soil Analyzer allows you to monitor the soil quality and then optimize yields and investments taking into consideration the variability linked to the soil distribution in the field. The Soil Analyzer performs a quick and in-situ analysis of your field, while providing recommendations in fertilizer depending on the crop type and yield target.</p>	

APPLICATION No.	MCO-006
AUTHOR(S)	<b>Brahim LAKSSIR, Khadija ELKAMOUNY, Mohamed HAMEDOUN</b>
ORGANIZATION	Moroccan Foundation for Advanced Science, Innovation & Research
TITLE OF INVENTION	<b>Thermoelectric cooling micro inverter for Photovoltaics system</b>
<p>Solar inverter system has to consider these two main requirements: harvest available energy from the PV panel and inject a sinusoidal current into the grid in phase with the grid voltage. The most popular solution is string connected converter and inverter systems, which decreases the reliability due to the fact that if any one device in a string fails, the whole system fails (domino effect). A part from that the shading effect on cells could create multiple maximum in the operating characteristics of the cell hence harvesting the maximum energy decrease efficiency. A grid interactive Modular Integrated Converter (MIC) also called Micro inverter, can act as a solution to most of these problems. Each PV module is equipped with its own MIC and can act as plug in power generator so that if a problem affects a module in the string, only the concerned module is affected. Our project consists on developing an efficient and low cost micro inverter with high performance</p>	

# PHILIPPINES

APPLICATION No.	PHI-001
AUTHOR(S)	<b>Lydia F. Lavares, Marygrace E. Nanol, Ma. Edylyn L. Noguerra</b>
ORGANIZATION	Surigao del Norte National High School
TITLE OF INVENTION	<b>Phytoremediation in Lead-Contaminated Sites Using “Pakong Buwaya” or Eagle Fern/Common Bracken (<i>Pteridium aquilinum</i>) as Lead Hyperaccumulator</b>

The study entitled “Phytoremediation in Lead-Contaminated Sites Using “Pakong Buwaya” or Eagle Fern/Common Bracken (*Pteridium aquilinum*) as Lead Hyperaccumulator,” was conducted from April to August 2015. “Pakong Buwaya” or Eagle Fern (*Pteridium aquilinum*) plants can take up and accumulate toxic metals in their roots, stems and fronds where they can be disposed of easily. Bundles of “Pakong Buwaya” or Eagle Fern’s (*Pteridium aquilinum*)” were gathered at Brgy. Mat-i, Surigao City. The plants were air dried for three days. The roots, stems and fronds of the plants were carefully removed. One Kilogram (1 Kg) of the roots, stems and fronds of “Pakong Buwaya” or Eagle Fern were collected. The samples were brought at the University of Immaculate Concepcion, Davao City, Philippines for Laboratory Analysis. The remaining bundles were planted on a contaminated soil placed in black plastic bags. Results show that there are components present in “Pakong Buwaya” or Eagle Fern / Common Bracken(*Pteridium aquilinum*) that make it effective in absorbing Lead and other possible heavy metals in contaminated mining sites. Actively growing roots provide a barrier which restricts the movement of lead to the above-ground parts of plants. This restricted movement of lead may explain why lead and other heavy metals concentrations in shoots were relatively less than in the roots. Findings from t Test reveal that there is significant differences among the different concentrations of heavy metals tested in the different parts of “Pakong Buwaya” or Eagle Fern / Common Bracken(*Pteridium aquilinum*) such as the roots and stems before and after three months of planting in the tested soil. There is no significant difference in the fronds. The Roots of Pakong Buwaya” or Eagle Fern / Common Bracken(*Pteridium aquilinum*) absorb greater amount of heavy metals tested specifically the Lead.

APPLICATION No.	PHI-002
AUTHOR(S)	<b>FLORAMYR P. SARVIDA, LUDEM C. BACOLOD, ROMELINA C. TAN</b>
ORGANIZATION	Surigao del Norte National High School
TITLE OF INVENTION	<b>“The Antimicrobial Effect of Hagonoy (<i>Chromolaena odorata</i>) Leaf Extract” on the growth of <i>Staphylococcus aureus</i>, <i>Bacillus subtilis</i> and <i>Escherichia coli</i>”.</b>

The study entitled “The Antimicrobial Effect of Hagonoy (*Chromolaena odorata*) Leaf Extract” aims to ascertain the antimicrobial effect of Hagonoy (*Chromolaena odorata*) on the growth of test organisms. Hagonoy plant samples were collected, washed with flowing tap water, air dried for three days, cut into smaller pieces, soaked in ethanol for extraction, filtered to separate the plant parts and the extract and was evaporated with the use of rotary evaporator to get the pure leaf extract to be used in the Phytochemical Analysis and Antibacterial Tests. Three treatments were prepared with 100% concentration of the leaf crude extract; 100% concentration of Chloramphenicol as the positive control and 100% concentration of Ethanol as the negative control with three replicates for each treatment. These levels of concentrations were applied to the selected cultured bacteria – *Staphylococcus aureus*, *Bacillus subtilis* and *Escherichia coli*. Antibacterial assay reveals that Hagonoy (*Chromolaena odorata*) can inhibit the growth of tests organisms – *Staphylococcus aureus*, *Bacillus subtilis* and *Escherichia coli*. Phytochemical analysis farther reveals that Hagonoy (*Chromolaena odorata*) contains medicinal substances that can inhibit the growth of the selected test organisms. The ANOVA: TWO FACTOR WITH REPLICATION shows that the treatments vary significantly among the test organisms and there is a significant difference between the plant extract and chloramphenicol.

APPLICATION No.	PHI-003
AUTHOR(S)	<b>BENITO A. BAJE and ROWENA A. ARNAIZ</b>
ORGANIZATION	Surigao del Norte National High School
TITLE OF INVENTION	<b>Touch and Cure Ointment</b>

This is a FIRST AID product for everyone with antibacterial property and able to enhance wound healing ability. This is an ointment derived from nature that provides protection to speed up healing process for wound and skin infections. TOUCH AND CURE OINTMENT is made up of *chromolaena odorata* (Hagonoy) leaves that are found to be a highly efficacious medicinal herb according to traditional systems, olive oil, and white beeswax. The *chromolaena odorata* infused oil was produced via hot infusion and formed into an ointment using white beeswax. Laboratory tested to inhibit against *S. aureus* and speed up blood clotting time.

APPLICATION No.	PHI-004
AUTHOR(S)	<b>ROLYN S. TABIGUE, GERSIM S. LUMINTAC, ADELA S. CABUGA, JULIETA P. ERAZO, HELEN R. ESCALADA</b>
ORGANIZATION	CLAVER NATIONAL HIGH SCHOOL
TITLE OF INVENTION	<b>LEMONERIC OINTMENT</b>
<p>This project is made possible since the applicants were Science Teachers and they have the necessary knowledge and experience in conducting such research. This project is all about the miraculous healing power of the extract from the combination of natural herbal plants namely: Lemongrass, Turmeric and Coconut oil. The combination resulted into a product called Turmeric ointment, which was then applied to the skin diseases like skin allergies, rashes and wounds and as observed the mentioned skin problems were all healed in a short period of time. This project manifests the relevance and characteristics that fit to the identified aforementioned division. Besides, the practical use and application of the product yield from this scientific investigation are suited and relevant in the above mentioned division. This product is also relevant because it makes use of natural herbal plants which are readily available in the community. The said herbal plants used in this project are safe to use and does not have side-effects because it contains natural substances. This herbal plants used in this product contain healing properties that were proven to heal identified skin problems.</p>	

APPLICATION No.	PHI-005
AUTHOR(S)	<b>MARICHI P. GIGAYON, CRISMIE E. QUIREQUIRE, ROLYN S. TABIGUE, MARIA M. ACELO</b>
ORGANIZATION	CLAVER NATIONAL HIGH SCHOOL
TITLE OF INVENTION	<b>LEFTOVER BEEHIVE EXTRACT AS AN ALTERNATIVE OIL FOR LAMPS</b>
<p>The creators of this project were Science teachers. They possess the necessary knowledge and experience in carrying out this project. The product that was created fits to the aforementioned division since the product yield from this scientific investigation is suited and relevant to the above mentioned division. The product usage is related to the nature and nomenclature of the Housing &amp; Kitchen Equipment/Tools division. The product was created because it will be of great use to the individuals within the community especially to those areas that does not have electricity. It can serve as an alternative source of light energy that can help in saving electricity. It also serves as an alternative fuel to lamps. The main purpose of the creators of this project is to have alternative oil for lamps that will be used in households during power outages or even for those who don't have electricity at home. This project is originally created by the researchers and no similar projects has been created. Lastly, the product also creates energy, this was the light produced from lamp filled with oil created from the leftover beehive extract.</p>	

APPLICATION No.	PHI-006
AUTHOR(S)	<b>Adonis G. Cuevas, Ceana A. Epley, Gersim S. Lumintac, Mercedes B. Miasco, Juanita G. Espinoza</b>
ORGANIZATION	Tubod Central Elementary School
TITLE OF INVENTION	<b>Turkey (Melagris gallopavo) Manure as an Organic Feed Enhancer for Tilapia (Oreochromis niloticus) Growth</b>
<p>The resources of the world's fish reserves long regarded as inexhaustible, are in fact quite limited. Despite the habit of ever more sophisticated fishing techniques, total world catches are not progressing, and are even showing a tendency to regress. This study, Turkey Manure (Melagris gallopavo) as an Organic Feed Enhancer For Tilapia Growth (Oreochromis niloticus), was developed to test the potential development of tilapia fishes popular for Aquaculture. The turkey manure was gathered from Brgy. San Isidro, Surigao del Norte. Commercial fish feed was collected from Surigao Pet Doctors and the small tilapias were accumulated from the Bureau of Fisheries in Surigao City. The small tilapias were distributed into three tubs. The first group of tilapia was fed with the commercial fish feeds. The second group was fed with the dried turkey manure, and the third group was fed with the fresh turkey manure. Before, all the tilapias were weighed initially. During the experimentation, the tilapias were fed with their corresponding food within ten (10) days. After ten days, the tilapias were again readied for their final weight measurement. The outcomes were then gathered. The researchers found out, that there is a substantial difference between the Commercial Fish Feed and the Turkey Manure. It was also revealed that turkey manure was proven to be an effective organic feed enhancer for tilapia fishes.</p>	

APPLICATION No.	PHI-007
AUTHOR(S)	<b>DAVE REY G. BALILI, GERSIM S. LUMINTAC, DR. ELENA M. NAVALLO, BEDA G. MURCIA, DR. ALICIA N. MAINIT</b>
ORGANIZATION	HAYANGGABON ELEMENTARY SCHOOL
TITLE OF INVENTION	<b>Coco Coir Dust as Growth Enhancer of Sweet Pepper, Tomatoes and Pechay Grown in Lateritic Soil</b>
<p>Experimental study focused on the effects of decomposed coco coir dust to the growth of sweet pepper, tomatoes and pechay grown on lateritic soil, which lack of the essential nutrients in agricultural production. 4.5 kg. of coco coir dust were collected, air dried and utilized in four treatments and 3 replication as reflected in the research design. Initial data on the growth of 12 sweet peppers, 12 tomatoes and 12 pechay plants were recorded. After 45 experimental days final data on the plants height and number of leaves for each treatment and replication were analyzed and interpreted. T4 produced best result where the coco coir dust has significantly enhanced the upper mentioned plants.</p>	

APPLICATION No.	PHI-008
AUTHOR(S)	<b>MA. VICENTA E. VILLAMOR, JERCELLYN JOY G. DAGOC, GERSIM S. LUMINTAC, DR. LEONILA J. FLORIA, DR. DOMINIC P. LARONG</b>
ORGANIZATION	TOLEDO S. PANTILLO SR. NATIONAL HIGH SCHOOL, SISON CENTRAL ELEMENTARY SCHOOL
TITLE OF INVENTION	<b>Larvicidal Effects of <i>Jatropha curcas</i> Leaf Extract on Mosquito Larvae (dengue carrier mosquitoes)</b>

This study aimed to determine its potentiality in killing mosquito larvae. 2 kilograms of *Jatropha curcas* were cleaned, air dried, and chopped. Afterwards, the ground *Jatropha curcas* were put in an Erlenmeyer's flask and soaked in methanol solvent and distilled water and left to stay overnight. 500 ml of extract was diluted to 100%, 75% and 50% concentration. Extracts were applied to 240 live mosquito larvae with 3 replications in each time interval. It has 4 treatments wherein each contained of specified levels of concentration. Based on the statistical analysis, it revealed that there was a significant difference among different concentrations at 0.05 level of significance. The 100% concentration of *Jatropha curcas* T2 was the most effective mosquito larvae killer among three treatments of varying concentrations (T2, T3, and T4). It showed that these treatments have the capability to kill mosquito larvae at a certain time. Hence, *Jatropha curcas* pure extract (T2) is comparable to the commercial insecticide (T1). A direct relationship between the concentration and different effects. The Larval mortalities ranged between low and moderate. The survival pupae percentage treated with different concentrations revealed that increased significantly as the concentrations vary. The *Jatropha curcas* leaf extract based on a laboratory test conducted contained potent larvicidal compound caryophyllene oxide, germacrene D and caryophallene. The characteristics investigated here indicated that the leaf extract of *Jatropha curcas* can be effective alternatives for controlling the mosquito Larvae. Hence, the *Jatropha curcas* extract is an effective Mosquito Larvae controller.

APPLICATION No.	PHI-009
AUTHOR(S)	<b>Mr. Rolando C. Dela Cruz, et al.</b>
ORGANIZATION	Filipino Inventor Society
TITLE OF INVENTION	<b>Topical Herbal cream Preparation in the Removal of external Basal Cell Carcinoma (BCC) Skin Cancer using Cashew nut oil extract (<i>anacardium occidentale</i> linn).</b>

This invention relates to a natural herbal cream preparation for removing Basal Cell Carcinoma (BCC) or skin cancer. The herbal cream preparation cashew nut oil extract cauterizes the skin cancer or Basal cell carcinoma (BCC). The advantages of this invention is easy to apply and its non-surgical treatment.

APPLICATION No.	PHI-010
AUTHOR(S)	<b>Mr. Rolando C. Dela Cruz, et al.</b>
ORGANIZATION	Filipino Inventor Society
TITLE OF INVENTION	<b>Topical Herbal cream Preparation in the Removal of Warts, Moles and other skin imperfections using Cashew nut oil extract (anacardium occidentale linn).</b>
<p>This invention relates to a natural herbal cream preparation for removing Warts, Mole and other skin imperfections. The herbal cream preparation cashew nut oil extract cauterizes the warts, moles and other skin growths. The advantages of this invention is easy to apply and its non-surgical treatment, single treatment.</p>	

APPLICATION No.	PHI-011
AUTHOR(S)	<b>Mr. Rolando C. Dela Cruz, et al.</b>
ORGANIZATION	Filipino Inventor Society
TITLE OF INVENTION	<b>Topical Herbal cream formulation in the Removal of Condyloma Acuminata (GENITAL WARTS) and the Like using (anacardium occidentale linn) Cashew Nut oil extrtact</b>
<p>This invention relates to a natural herbal cream preparation for removing Genital warts (Condyloma Acuminata) and the like. The herbal cream preparation cashew nut oil extract cauterizes the genital warts gives similar effect of laser and electrocautery. The advantages of this invention is easy to apply and its non-surgical treatment, single treatment,</p>	

## POLAND

APPLICATION No.	PLN-001
AUTHOR(S)	<b>The team from John III Sobieski Secondary School No 6 in Jastrzebie-Zdroj</b>
ORGANIZATION	John III Sobieski Secondary School No 6 in Jastrze
TITLE OF INVENTION	<b>The system “EduSpec” supporting education of people with disabilities</b>
<p>EduSpec system is an innovative educational platform that uses the technology of html 5.0, CSS, and JavaScript. The platform was built on an innovative engine designed by students. It was constructed for pupils and students, including those with disabilities and with different dysfunctions. The main elements of the platform will be content with the scope of science and</p>	



early childhood education. They will comprise: computer animation, interactive educational films, documentaries and educational games and books for school education. An additional element of the platform will be "SÓWKA" for all people with communication disorders, in particular for children with autism, Down syndrome, Asperger's, of alalia, aphasia, with reduced intellectual capacity, with delayed speech development. Another part of the platform will be the application "Notes" which is a network system for the exchange of notes created for children absent from school. It consists of a program that allows you to add information to the database and the website, through which students have access to the resources of the class. The last element of the platform will be a computer system "Wentox", which may assist the process of teaching in a school, college or all sorts of courses by generating text from any subject, department or a selected topic.

APPLICATION No.	PLN-002
AUTHOR(S)	<b>Sandra Sitek, Adrian Kuca, Marcin Lasak, Sandra Sitek</b>
ORGANIZATION	John III Sobieski Secondary School No 6 in Jastrzebie-Zdroj
TITLE OF INVENTION	<b>Iamlost – system that helps lost people find their destination</b>

"Iamlost" is an innovative computer system that is designed for people suffering from different kinds of diseases (Alzheimer's, Asperger's syndrome or autism) that directly or indirectly cause the loss of their orientation outdoors. The system is also helpful for parents whose children got lost and can't safely come back home. This device would allow such children come back to their home stay. The „Iamlost” system was created in order to assist people with above mentioned impairments find their way back home. Each person using this application has got his guardian who, if necessary, gets information on his phone that the user of application is lost. An additional option of this program is to create a way back to the person who was lost. The system determines the way back to the place that was chosen by the guardian during the initial registration. Iamlost program also automatically searches for bus service from the nearest bus stops from which a lost person can go back home.

## QATAR

APPLICATION No.	QTR-001
AUTHOR(S)	<b>Dr. Adnan Fahad Al-Ramzani Al-Naimi</b>
ORGANIZATION	Agri-Green
TITLE OF INVENTION	<b>Water Production from Humidity</b>

Agri-Green invention will provide solution to the water scarcity problems affecting most countries having shortage of underground water. Aside from water production it produces cold air using renewable energy (sun and wind). This machine is eco – friendly as it does not use fossil fuel and protects the environment from the negative effects of climate change. It is also a Clean Development Mechanism and is able to improve agricultural production by providing water to strengthen the food security program. Agri-Green is able to revitalize dairy farms. It is able to produce cold air for Football Stadiums, large halls and labor accommodation.

## ROMANIA

APPLICATION No.	ROM-001
AUTHOR(S)	<b>Deak Gyorgy, Badilita Alin, Raischi Marius, Tanase Bogdan, Tanase Georgiana</b>
ORGANIZATION	National Institute for Research and Development in Environmental Protection – INCDPM
TITLE OF INVENTION	<b>DKTB ichtyofauna monitoring station, especially sturgeons, through remote sensing, with ultrasonic tags in different hydromorphological conditions</b>

The invention is applied for research in the fields of biodiversity and dynamics of aquatic ecosystems, for monitoring the water quality parameters and the migration of aquatic species. This system is a useful tool for decision makers to establish conservation political measures. The DKTB system has the main advantage of reducing the loss risk of the receiver stations that are used for detecting the ultrasonic signals emitted from the tags implanted in the captured fish. Hence, this invention leads to an increase of the informational volume regarding the migratory fish species. The invention is adapted to the river's hydrological conditions.

APPLICATION No.	ROM-002
AUTHOR(S)	<b>Deak Gyorgy, Raischi Natalia Simona, Badilita Alin Marius, Raischi Constantin Marius, Silion Marius Madalin, Tudor Marian</b>
ORGANIZATION	National Institute for Research and Development in Environmental Protection – INCDPM
TITLE OF INVENTION	<b>DKMR-01T mobile station to monitor through remote sensing, the ichtyofauna, especially sturgeons with ultrasonic tags in difficult hydromorphological conditions</b>

The technical problem solved by the DKMR-01T mobile station refers to the monitoring of the

ultrasonic tagged sturgeon and also, the water quality. This monitoring process is carried out continuously and independently of the geomorphological conditions of banks, meteorological factors and water level variations. This invention allows the achievement of new and important information from areas inaccessible so far. DKMR-01T monitoring equipment meets the need to adapt to the specific hydrological conditions of surface rivers with inaccessible areas.

APPLICATION No.	ROM-003
AUTHOR(S)	LASCHI MIHAI, MUSCALU VASILE, OLTEANU URSACHI IULIAN, TATARU LIVIU-DINEL, NISTOR CATALIN
ORGANIZATION	ARC INVENT SRL
TITLE OF INVENTION	INSTALLATION AND PROCEDURE FOR OBTAINING MAGNETISED WATER

THE INVENTION REFERS TO AN INSTALATION FOR THE PRODUCTION OF MAGNETIZED WATER IN CONTINUOUS FLOW WITH THE POSSIBILITY TO VARY THE MAGNETIZATION DEGREE OF WATER BY USING WATER FROM LAKES AND RIVERS AND THE USE OF MAGNETIZED WATER IN AGRICULTURE FOR PLANTS TREATMENT, LEADING TO IMPORTANT BENEFITS FOR PLANT PRODUCTION WITH LARGE PRODUCTION CAPACITY ACCORDING TO THE INVENTION, THE INSTALLATION IS MADE UP OF TWO REACTORS AND A PIPELINE FROM WHICH WATER FROM THE FIRST REACTOR CHAMBER IS DISCHARGED, CONNECTED TO A PIPELINE WITH AN ELECTRIC VALVE MOUNTED ON THE SIDE, CONNECTED TO A SUCTION PIPELINE OF A PUMP THAT PUSHES WATER THROUGH A PIPELINE WITH AN ELECTRIC VALVE MOUNTED INSIDE, INTO THE CHAMBER OF THE SECOND REACTOR. TO THIS PIPELINE ANOTHER PIPELINE THROUGH WHICH RECYCLED WATER IS RETURNED TO THE CHAMBER IS CONNECTED, TO THE PIPELINE TO WHICH THE WATER EJECTION PIPELINE FROM THE FIRST REACTOR CHAMBER IS CONNECTED, THERE IS CONNECTED ANOTHER PIPELINE WITH SOME ELECTRIC VALVES ON THE INSIDE AND TO WHICH THE WATER EJECTION PIPELINE FROM THE SECOND REACTOR CHAMBER IS CONNECTED TOO, FROM WHICH WATER IS FORCED BY A PUMP THROUGH A COOLER AND A FILTER IN A STORAGE TANK IN ORDER TO BE USED IN AGRICULTURE.

APPLICATION No.	ROM-004
AUTHOR(S)	<b>Mircea MANOLESCU</b>
ORGANIZATION	Arexman Construct
TITLE OF INVENTION	<b>iSENTINEL<sup>®</sup>, the intelligent earthquake protection system</b>

The system will save thousands of lives during next major earthquake by both alerting people of the imminence of a major strike and triggering the protection procedure (especially cutting the combustible gas supply before the entrance in the building, electricity, water or any personalized protection) for saving lives and assets. Thus it ensures the life and assets protection but also the business continuity.

APPLICATION No.	ROM-005
AUTHOR(S)	<b>I. SANDU, C. LUCA, I.C.A. SANDU, M. HAYASHI, I.G. SANDU, V. VASILACHE, A.V. SANDU</b>
ORGANIZATION	Romanian Inventors Forum
TITLE OF INVENTION	<b>Method for determining normal range of variation of equilibrium moisture content</b>
<p>The invention relates to a method for determining the normal range of variation of equilibrium moisture content in wooden samples, in order to determine some archaeometric characteristics involved in the authentication and in compatibility or compatibilization studies referring to certain treatments, in the new wood placement or in interventions in active presentation and restoration of old wood. According to the invention, the method consists in performing the gravimetric analysis of a sample exsiccated in exsiccators, at a moisture content of over 99%, up to a constant mass, corresponding to the saturation point of the material hygroscopicity, being then dehydrated again, at a residual atmospheric humidity of less than 10%, up to a constant mass corresponding to the separation limit between the reversible and irreversible material hygroscopicity, the values comprised between the two hydration and dehydration curves representing the normal range of variation of the equilibrium moisture content in terms of reversible hygroscopicity</p>	

APPLICATION No.	ROM-006
AUTHOR(S)	<b>Kamel EARAR, Luoana- Florentina PASCU, Andrei Victor SANDU, Mădălina Nicoleta MATEI, Ion SANDU, Ioan Gabriel SANDU</b>
ORGANIZATION	Romanian Inventors Forum
TITLE OF INVENTION	<b>ECOLOGICAL TOOTHPASTE WITH MULTIPLE IMPLICATIONS</b>
<p>The inventions refers to an ecological toothpaste made of powders of egg shell, rice, aromatic plants (mint, rosemary etc), cardamom seeds, calcium hydrocarbonate and sea salt, mixed with mint oil, juice of pineapple and grenadine. The product has good stability and a very good taste, cleans well the teeth and mineralizes the enamel.</p>	

APPLICATION No.	ROM-007
AUTHOR(S)	<b>Dan CASCAVAL, Alexandra Cristina BLAGA, Anca Irina GALACTION</b>
ORGANIZATION	Gheorghe Asachi Technical University of Iasi
TITLE OF INVENTION	<b>Pertraction cell for separation of bioactive compounds</b>
<p>The equipment can be used for separation of bioactive compounds, with pronounced chemical and thermal lability, by free or facilitated pertraction. This equipment does not require the use of tensides for stabilizing the liquid membrane, thus increasing the purity of the pertracted compounds. The pertraction equipment with free liquid membrane allows obtaining and easily maintaining a solvent layer between the two aqueous phases and consists on a U-shaped glass pipe with three compartments for feed and stripping phases, and for liquid membrane, respectively. Compared with other separation methods, the extraction and transport through liquid membranes presents the following advantages: reduction of the solvent loss during the separation cycle; small quantity of solvent and carrier needed, owing to their continuous regeneration; the possibility of solute transport against its concentration gradient, as long as the pH-gradient between the two aqueous phases is maintained; no surfactant needed for stabilizing the liquid membrane.</p>	

## RUSSIA

APPLICATION No.	RUS-001
AUTHOR(S)	<b>V. Goch, V. Selishchev</b>
ORGANIZATION	„TSEL” LTD
TITLE OF INVENTION	<b>ENERGY CONCENTRATION DEVICES</b>
<p>Generation of high positive energetic zones by means of device configuration effect which combines golden section and Reich accumulator effect (phenomena). ECD application permits: oil viscosity; increase the productivity of agriculture, plant, animals and fish keep food; increase food quality and its subsistent properties; eliminate insects and rodents in living and working areas and other. Patents of Russian Federation, Ukraine, Eurasian Patents (2009, 2011).</p>	

APPLICATION No.	RUS-002
AUTHOR(S)	<b>V. Goch, Yu. Skomorovskyy, A. Sergienko, L. Kruchinin, N. Chornobay, N. Goch</b>
ORGANIZATION	N/A
TITLE OF INVENTION	<b>ENERGY CONCENTRATION DEVICES</b>
<p>Accordance is found between the external form of pictographic resonators and corresponding their essence of the inlaid composition, that strengthens the harmonizing effect of their influence on activity of the living systems. Patents of Russian Federation, Ukraine.</p>	

APPLICATION No.	RUS-003
AUTHOR(S)	<b>D. Krivich. Scientific Advisor: A. Karlov</b>
ORGANIZATION	N/A
TITLE OF INVENTION	<b>MULTIFUNCTIONAL MODULE MACHINE TOOL WITH NC</b>
<p>Multifunctional module machine tool with NC combines together some different types of industrial machine tool: 3D printer, milling, etching, grinding machines. Combination of technology function machine tool within on limits on one base allows increase accuracy of processing at the expense of concentration operation and principle unity of the base. Mode of 3D printing can create models volume-skeleton structure, using waste. The following operations of mill, etch, grind are performed on this machine without changes surfaces of based and fixing. Resource economy of manufacture area in workshop formed automatically at the expense of the idea of combines of function variously machine tools with NC in one. It all as a result directed on the main idea of machine tool – reduction of cost piece, which will production on the machine tool such a class. There is layout with control module and testing program milling/grinding virtual piece on C++.</p>	

## SAUDI ARABIA

APPLICATION No.	SAU-001
AUTHOR(S)	<b>Dr. Manal Jameel Kiki</b>
ORGANIZATION	King Abdulaziz University
TITLE OF INVENTION	<b>(SGY) Medium for isolation and enrichment halophilic actinobacteria</b>
<p>(SGY) is a new nutritional medium consists of starch, glucose and yeast extract supported with artificial sea water, designed for isolation and enrichment a useful bacterial group called</p>	

halophilic actinobacteria from saline environments. (SGY) medium enhances the abundant growth of these bacteria during short period of time compared to other media. Notable, that the produced biomass has important practical applications in biotechnology.

APPLICATION No.	SAU-002
AUTHOR(S)	<b>MWAFFAK ABDULHAFIZ SHAMMA</b>
ORGANIZATION	Individual Inventor
TITLE OF INVENTION	<b>THE GREEN BRICK</b>
IT IS SAME THE TRADITIONAL BRICK THAT WE USE IT IN THE CONSTRUCTION OF BUILDINGS PROVIDED WITH PHOTOVOLTIC CELLS TO GENERATE GREEN POWER AND REDUCE THE CONSUMPTION OF ELECTRICITY AND SAVE THE INVITOM ENT.	

## SENEGAL

APPLICATION No.	SEN-001
AUTHOR(S)	<b>Etienne Yves Christian THIBAUT</b>
ORGANIZATION	Privé
TITLE OF INVENTION	<b>AGGLOFIL</b>
I am using filaos seed that I am grinding and I am using as a binder Arabic gum. All that process gives the “bois aggloméré” which is 100% natural wood that we obtain without cutting trees, without chemical product and it is stronger than the wood made with trees.	

## SLOVENIA

APPLICATION No.	SLO-001
AUTHOR(S)	<b>Edo Karnicnik</b>
ORGANIZATION	N/A
TITLE OF INVENTION	<b>ATTACHMENTS FOR WORKING MACHINES WITH LOW CHASSIS AND BELT TRANSMISSION OF POWER TO THE ATTACHMENT (ATTACHED FROM FRONT OR BEHIND)</b>
A device and a method for transmitting of power to the attachment. The technical solution is functional, technologically suitable for the manufacture, economical, safe for people and	

environment, solid and reliable. The attachment is designed to be used on the machines with low chassis and belt transmission. An integral part of the invention is a special panel, which in combination with the gearbox housing, enables various heights and the usage of the rotary plow on both sides of the machine, in such a way that the wheels run on the groove, and thereby prevent possible damage of the chassis.

## SPAIN

APPLICATION No.	ESP-001
AUTHOR(S)	<b>Imanol Murua Fuertes</b>
ORGANIZATION	PISAFIRM
TITLE OF INVENTION	<b>Handle support and handle for electronic equipment for TABLETS,MOBILES,COMPUTER</b>

The invention is as follows: We all know that you to seize the tablets without sleeve is uncomfortable, in a corner, with the palm etc of laptops that are disengaged and creates a touch tablet. In the market there are thousands of media but not to perform all the sections simultaneously with it Its size is small and portable, weight 10kg When you use the tablet you can use with the mobile or laptop. With this device was seized from behind leaving the left hand free to write etc...Also has two positions of grip for small hands (children, women), big hands (men). Also sirba of apollo for mobiles, tablets and the laptops to put it back by doing so saises it more ergonomi. We can perform tasks on the tablet even lying, unless your hand get tired us. All persons that it prove want one.

## SUDAN

APPLICATION No.	SUD-001
AUTHOR(S)	<b>Muzammil Ibrahim Abd Elrhman Amin</b>
ORGANIZATION	University of Khartoum – NIUTS project
TITLE OF INVENTION	<b>The Self-Flying Aircrafts</b>

I provide a new generation of things that could work as satellites. NIUTS is just the name of my invention it is simply a self-flying object could fly inside earth atmosphere for a long periods of time during to earth gravity and wind forces , other characteristics. NIUTS is a self-flying object that means it doesn't have any kind of fuel or propulsion engine, it will be sent to stratosphere layer with a special kind of rocket with velocity more than 2000 km/h and it will fly in elliptic path with changing in altitudes and velocities due to special equations and laws. NIUTS use its



gradient in the direction of weak wind to provide its thrust like a glider bird , And using the semi -stable wind speed in the stratosphere to make its lift force with its wings.

## TAIWAN

APPLICATION No.	TWN-001
AUTHOR(S)	<b>Wen-Chung, Chang &amp; Chia Ching, Wu &amp; Shen-Ming, Wang &amp; Yung-Sen, Yeh &amp; Sheng-Chien, Su</b>
ORGANIZATION	Southern Taiwan University of Science and Technology National Taipei University of Technology Kao Yuan University
TITLE OF INVENTION	<b>Digital Calcium Loop Capture Carbon Interactive Educational Games</b>

We calcium loop capture carbon technologies echoes the building materials manufacturing process of carbon reduction technology, heating in the cement manufacturing process using calcium oxide (CaO), generated with the cement of carbon dioxide (CO<sub>2</sub>) in combination, the film is by game design approach, by targeting the Earth wiping a carbon atom, the carbon atom bonded with calcium oxide, a more environmentally friendly way to reduce the carbon content of the Earth which can effectively address the impact of the greenhouse effect caused by the Earth, and by the way the game so that everyone We know the main principles and applications of the present creation

APPLICATION No.	TWN-002
AUTHOR(S)	<b>Wen-Chung, Chang &amp; Jian-Cheng, Lu &amp; Li-Jhen , Ou &amp; Shu-Mei, Li &amp; Chih-Yung,Wang</b>
ORGANIZATION	Southern Taiwan University of Science and Technology Kuen Shan Senior High School
TITLE OF INVENTION	<b>Educational Course Material For Puppet Animation Creation Environment</b>

The invention combines to a knowledge of water resources, geological resources ... environmental conservation, based on the story of the creation of the script and the characters, even through animation and filming and editing for the creation of the movie. The use of systematic production process, so that the instructor can use modular scenes and dolls, subject only to the teaching content by editing the script, you can create new instructional video, high degree of freedom of creative flexibility, increase the teaching content richness.

APPLICATION No.	TWN-003
AUTHOR(S)	<b>Chi-Cheng Chuang &amp; Ying-Hsun Lai &amp; Kuan-Yu Chen</b>
ORGANIZATION	Institute for Information Industry
TITLE OF INVENTION	<b>In-Light – Intelligent Street Lighting Monitoring System</b>
<p>The uniqueness of In-Light lies in that only one monitoring box beside power cabinet is installed to monitor up to 100 or more street lights, and this is different from traditional street monitoring services which required the installation of sensing device on every street light. In addition, In-Light makes use of a main claimed patent, the invention of multiple street lights diagnosis technology, to detect any street light fault events in street circles according their historical information and multi-dimensional factors. Under well hardware and software cooperation, the invention can achieve 50% cost down compared with traditional street light monitoring services and provide real-time failure event detection which improves from 48 to 24 hours in response time of repair.</p>	

APPLICATION No.	TWN-004
AUTHOR(S)	<b>Lin, Chi-Chang</b>
ORGANIZATION	Tunghai University
TITLE OF INVENTION	<b>Microfluidic Diffusion Device</b>
<p>This invention is an innovation design for creating a parallel flow with controllable gradient concentration by paralyzing hollow fibers as a microdiffusion platform. Major technique design is using hollow fiber as micro-flow channel and the various number of fibers can be setup according to the needs. The medium, nutrition and/or drug solution flow within the hollow fibers and part of solution can penetrate out of hollow fiber via micro-pore of hollow fiber membranes. The different supplied solutions in different groups of hollow fiber channels may create out-flow liquid with gradient concentration on the surface of hollow fibers. This device can be used for drug screening, protein and/or nutrition study, and supports rapid analysis for medical, clinical and biological application on biochemical test and dosage dependent (i.e. minimum inhibitory concentration, MIC) researches.</p>	

APPLICATION No.	TWN-005
AUTHOR(S)	<b>Wen-Chung, Chang &amp; Shiou-Ya, Chen &amp; Yung-Tso, Kuo &amp; Fu-Lin, Lin &amp; Chih-Yung, Wang</b>
ORGANIZATION	Southern Taiwan University of Science and Technology The Affiliated School for Students with Hearing Impairments of National University of Tainan
TITLE OF INVENTION	<b>The Rainwater Collectors of Planting Rain Containers</b>
The creative combination of rain water storage function and a piggy bank ceramic pots with permeable characteristics, production can be placed outdoors to accumulation of rainwater planting containers.	

## THAILAND

APPLICATION No.	THA-001
AUTHOR(S)	<b>Dr. Nasapon Povichit, Dr. Yohji Ezure, Ms. Nitapha Inchai Yung-Sen, Yeh &amp; Sheng-Chien, Su</b>
ORGANIZATION	Detox(Thailand) Co., Ltd.
TITLE OF INVENTION	<b>CURMA MAX AND GREEN CURMIN : Water soluble curcuminoids for Anti-Hyperacids</b>
Curcuminoids is coming from the <i>Curcuma longa</i> which is poor solubility and wettability of curcumin leads to poor dissolution and hence shows poor bioavailability. CURMA MAX product contains water soluble and water insoluble curcuminoids. It can control the balance of the activities of curcuminoids in stomach and intestine. Then pancreatic lipase inhibitors can be preferably applied to the formulations to protect the micelle against pancreatic lipase and exerting the excellent bioavailability. Absorption of curcuminoids in gastrointestinal tract will be enhanced.	

APPLICATION No.	THA-002
AUTHOR(S)	<b>Miss Kanittha Jankajonchai</b>
ORGANIZATION	Detox(Thailand) Co., Ltd.
TITLE OF INVENTION	<b>PleePreme™ : Banana blossom extract powder for Maternal Breastfeeding</b>
PleePreme™ is banana blossom beverage for maternal breastfeeding. Through this period, various benefits will be obtained to breastfeed baby i.e. strong bond with their mother, balance immune system, better digestive system and reduction of sickness. Therefore, mother	

health is important for breast milk production. The nutrients in banana blossom are nutritious and it has flavonoid acid which helps the mother to recover faster. With certain high temperature, it is processed to obtain its freshness and taste. Whereas Saponin, as major active ingredient to encourage milk secretion is extracted. The formulation is easy for customer usage.

APPLICATION No.	THA-003
AUTHOR(S)	<b>Mrs. Wilasinee Kositchaiwat</b>
ORGANIZATION	VOWDA Co., Ltd.
TITLE OF INVENTION	<b>Coffee compact powder</b>
Coffee compact powder produced by coffee pericarp and coffee waste (after extracted cosmetic active ingredients). The innovation is bringing the waste to increase market value because coffee pericarp often used in animal food industries or made into fuel. For innovation process is bring coffee pericarp and low grade coffee beans to extract oil and then bring it to chemical process for modified raw-material and milling for fine particle size. This research is a collaboration between Thailand and Laos by use resource from Laos and use innovation from Thailand. In order to strengthen the good relations.	

APPLICATION No.	THA-004
AUTHOR(S)	<b>Ms. Naruemon Taksa-udom</b>
ORGANIZATION	HILLKOFF CO., LTD.
TITLE OF INVENTION	<b>Coffee Cherry Tea: High Nutrient Super Food From Value Added Coffee Residue</b>
Coffee cherry tea is high anti-oxidant infusion drink. Featured with various benefits such as high anti-oxidant content from polyphenol that resists cancer, reduces cholesterol level and stimulates body to generate collagen, coffee cherry tea is tasty and aroma. It can be prepared in the same way as any other sachet teas. Milk, sugar or lemon can be added in. Under certain conditions fresh coffee cherry, by-product of coffee bean processing, were treated to fasten the process and keep as much benefit as possible within the same day. Therefore coffee cherry tea manufacturing can contribute in reduction of carbon waste as zero waste coffee industry.	

APPLICATION No.	THA-005
AUTHOR(S)	<b>Assoc. Prof. Surasak Sanguanpong ;Mr. Kasom Koth-Arasa; Mr. Surachai Chitpinityol</b>
ORGANIZATION	Kasetsart University
TITLE OF INVENTION	<b>WebScreen®: High Performance Legal Web Filtering for International Internet Services Providers</b>
<p>Web filtering is a crucial device in today's Internet for prohibiting computer clients to access restricted websites. Deployment of generic web filtering in 100 Gb/s rate in the international Internet Services Providers (ISP) is a complex task with high cost. This invention (<b>WebScreen</b>) is a design and development of a software-based web filtering system that can run under an open standard computer server (COTS) without special hardware as required in commercial system. Our own in-memory compression and fast URL matching algorithms are the core design to drive the system to achieve 100 Gb/s performance. <b>WebScreen</b> offers simplify deployment and tremendously lower cost of investment with more features such as multilingual and cloud based services. Several <b>WebScreen</b> units are currently widely deployed in International gateway to meet lawful enforcements criterion and performance conditions.</p>	

APPLICATION No.	THA-006
AUTHOR(S)	<b>Dr. Unchalee Sanguanpong</b>
ORGANIZATION	Rajamangala University of Technology Thanyaburi
TITLE OF INVENTION	<b>Nim-O ® : Formulated Neem Oil-based Pellet Against Rice Weevil</b>
<p>Nim-O® is innovative formulation of neem oil with volatile substances or essential oils such as cinnamon oil, citronella oil and menthol. Mixture of neem oil and various ingredients are prepared as micro emulsion and pelletized, then packed in the so called Nim-O® sachet. By impregnation of Nim-O® in specific pot in rice container, bag or storehouse, it is applied as bio-fumigant against postharvest damage by rice weevil. As by product from small-scale industrial production of Thai neem-based biopesticides, neem oil is therefore value added to Nim-O® sachet. Furthermore it is also found to be a promising environmental friendly botanical insecticide.</p>	

APPLICATION No.	THA-007
AUTHOR(S)	<b>Nattawut Whangsomnuek, Utan Jamjai, Rattanabhorn Junthip, and Doungporn Amornlerdpison</b>
ORGANIZATION	Maejo University
TITLE OF INVENTION	<b>Biocompound from torch ginger for cosmeceutical products</b>
<p>New natural compounds are extracted from torch ginger, a colorful and aroma flower of the ginger in family Zingiberaceae. The bioactive compounds consist of quercetin, tannin, flavonoid, terpene and ascorbic acid (vitamin C) which are benefit for skin. The torch ginger extract shows pharmacological activities such as antioxidant, superoxide radical scavenging and antibacterial activities. Interestingly, the compounds exhibited anti-tyrosinase activity which can decrease melanin pigment production. Therefore torch ginger extract has potential as active compound of whitening cosmetics especially for skin disorder as melasma. This innovative compound can promote high value of Thai herbs as facial cosmeceutical products.</p>	

APPLICATION No.	THA-008
AUTHOR(S)	<b>Mr.Bunyuen Tunthong, Mr. Wanchana Klahan, Mr.Tanit Onboonya, Mr.Sikawas Kuntaroj, and Mr.Preechayut Sokuma</b>
ORGANIZATION	Thailandpost Co., Ltd.
TITLE OF INVENTION	<b>EVAPORATOR WASHING MACHINE WITHOUT REMOVING THE AIR BOX &amp; THE CONSOLE</b>
<p>The research team invented the evaporator washing machine without removing the air box and the console. This machine can look for the dirt and manage the cleaning process inside the evaporator via mini camera with flexible pipe and monitor. The other pipe will spray the cleaning detergent and then water to clean the dirt, and make it dry with the blower. In addition, It also has the smell elimination system to get rid of undesirable smell in the passenger zone of a vehicle with the Ozoning process in Corona Discharge system. This invention is found out to reduce the work hours from 6 ½ hours to 2 hours and to reduce the needed labours from 3 to 1. The expense is also reduced from 1,185 baht to 150 baht per vehicle per job.</p>	

APPLICATION No.	THA-009
AUTHOR(S)	<b>Siseerot Ketkaew</b>
ORGANIZATION	Ramkhamhaeng University
TITLE OF INVENTION	<b>Electrostatic Eliminate and Generator by Electric Field Intensity Energy</b>
<p>Electrostatic eliminate and generator by applied high non-uniform electric field using ionization process. Which has brought high-voltage power supply. (AC and DC high voltage) adjustable power supply to the electric field intensity and electric field pointed cells. When the experiment was adjusted energy intensity electric field can result in increased production volumes increased with both positive and negative ions. The fan is leading the charge to have produced pieces that need to or want to get rid of the charge. Production and eliminate static test of actual use and distribution of the product is already in commercial and industrial companies in the country.</p>	

APPLICATION No.	THA-010
AUTHOR(S)	<b>Ms. Natthida Khaenkham, Ms. Thanatchaya Namkham, Ms. Warinthorn Chaikaew, Ms. Darunee Jansuta, Mr. Arkom Khamlangreng</b>
ORGANIZATION	Move World Together Project
TITLE OF INVENTION	<b>RUBBER LUMP DRYING HOUSE</b>
<p>Para rubber is an important crop for Thai farmers. Rubber in northeastern region is processed into 'rubber lump' (latex clotted in the cup) instead of 'sheet rubber'. Rubber lump is dried by sunshine and wind on cement floor and is turned over time to ensure proper drying. Rubber lumps are stained with dirt and sand. The lumps must be collected when rain occurs. This practice takes time, energy, extra costs and resulting in low price due to low quality. This invention helps lump dries faster in cleaner condition. Lump turning is not required, and use natural energy hence reducing costs.</p>	

APPLICATION No.	THA-011
AUTHOR(S)	<b>Asst. Prof. Khiensak SEANGKLIENG, Ph.D., ASA.</b>
ORGANIZATION	Thammasat University
TITLE OF INVENTION	<b>SMART RESORT</b>
<p>An innovation of living architecture designed with integrated solution. Design principle is approached into an expertise of professional development through research-based design applying for hospitality environment and tourism development in resort contexts. SMART</p>	

RESORT represents as a portable resort architecture which can easily be transported by road and placed almost anywhere. The design of resort unit is strongly emphasized the passive aspects and the concept of green and sustainable design as well as the sufficient architecture in the context of Climate Change.

APPLICATION No.	THA-012
AUTHOR(S)	<b>Asst. Prof. Khiensak SEANGKLIENG, Ph.D., ASA.</b>
ORGANIZATION	Thammasat University
TITLE OF INVENTION	<b>SEED of LIGHT</b>
The first lighting fixture made from the combination of an innovative material of banana leaf, trunks, white bamboo charcoal. The Outstanding of design product is the lighting performance of ambient feature which provides a sense of transparency and natural values through innovation and integration of environmental design approach	

APPLICATION No.	THA-013
AUTHOR(S)	<b>Paluckcharoen Limited Partnership, Assistant Professor Dr. Korawinwich Boonpisuttinant</b>
ORGANIZATION	Thai Traditional Medicine College (TMC) Rajamangala University of Technology Thanyaburi (RMUTT)
TITLE OF INVENTION	<b>PLANT LOVE® BATHING LIQUID : THAI NATURAL EXTRACTS FOR POSTPARTUM WOMEN</b>
PLANT LOVE® BATHING LIQUID: THAI NATURAL EXTRACTS FOR POSTPARTUM WOMEN has been developed from the folklore wisdom of Tak Province, The Northern part of Thailand, which is high efficiency for relaxation and increasing milk of mother with cost effective, safety to use, and conservation of Thai folklore wisdom. This project has been approved and financial supported by National Science and Technology Development Agency (NSTDA), and National Innovation Agency (NiA), Thailand	



# TUNISIA

APPLICATION No.	TUN-001
AUTHOR(S)	<b>Amine ELgheryeni</b>
ORGANIZATION	University of Toulouse II Jean Jaures
TITLE OF INVENTION	<b>BIOLIVART</b>
We injected our invented dyes in the xylem of the olive tree where dye directly between and among the nutrients of the plant. After what will sprout again in the colors were obtained colored olive fruit we resort to obtaining seeds in boxes kneaded, the aim is to invent four different fruits that grow on this olive bonzai different taste. The preparation and creation of organic colors are detailed in the patent copyright France for organic painting - copyright 53E31CB	

# TURKEY

APPLICATION No.	TRK-001
AUTHOR(S)	<b>SAEID AYHAN DADASH ZADEH</b>
ORGANIZATION	TÜMMİAD
TITLE OF INVENTION	<b>ELECON</b>
N/A	

# TURKMENISTAN

APPLICATION No.	TRM-001
AUTHOR(S)	<b>Enterprize (Ashgabat, Turkmenistan)</b>
ORGANIZATION	Ashgabat, Turkmenistan
TITLE OF INVENTION	<b>MENGLI</b>
Innovations in window decoration, design of interior, artmetal.	

# UKRAINE

APPLICATION No.	UKR-001
AUTHOR(S)	<b>A. Bardashevskii S. Bardashevskii</b> <b>The supervisor of studies: I. Mikulionok</b>
ORGANIZATION	National Technical University of Ukraine "Kyiv Polytechnic Institute"
TITLE OF INVENTION	<b>PROTECTIVE GLOVE</b>
<p>Product concerns to protective sports or working clothes, in particular protective elements for brushes of hands, and can be used during trainings or sports competitions, and also in sports medicine for the organization of optimum control of training process. The glove provides possibility of effective control of the user loading dynamics during user training or sports competitions. Patent application of the Ukraine u2015 11631 (2015).</p>	

# UAE

APPLICATION No.	UAE-001
AUTHOR(S)	<b>Ahmed Abdulla Mohammed Majjan</b>
ORGANIZATION	n/a
TITLE OF INVENTION	<b>SMART HELMET</b>
<p>Multi-functional helmet for motorcyclist have distinctive features:</p> <ol style="list-style-type: none"> <li>1. Motorcycle engine will not be started until the rider puts on this helmet.</li> <li>2. Convenient phone calls with pre-set emergency numbers</li> <li>3. Turn over alert by messages of location map link</li> <li>4. GPS tracking</li> <li>5. Micro spy camera</li> <li>6. Mini Solar PV panels as power supply</li> <li>7. Lighting device as direction indicators</li> </ol>	

APPLICATION No.	UAE-002
AUTHOR(S)	<b>Ahmed Abdulla Mohammed Majjan</b>
ORGANIZATION	n/a
TITLE OF INVENTION	<b>Smart Horse Saddle Apparatus</b>
<p>There haven't been ever any horse saddles like our Smart Horse Saddle which enhances the experience of horse riding to the pinnacle. Beneath the exterior of comfortable padding, the Smart Horse Saddle have the features below:</p> <ol style="list-style-type: none"> <li>1. In-built heart pulse system for the analysis of health statistics and horse performance;</li> <li>2. Blue-tooth connection with rider's helmet for the convenience of rider to communicate with trainer;</li> <li>3. GPS tracker- pinpoint the location</li> <li>4. Inner cooling system for the horse and the rider</li> <li>5. Rear &amp; front view cameras for recording</li> <li>6. Gyro compass for direction</li> <li>7. LED flash red-Laser alert light</li> <li>8. Self-chargeable solar panel for the full system</li> </ol>	

APPLICATION No.	UAE-003
AUTHOR(S)	<b>Ahmed Abdulla Mohammed Majjan</b>
ORGANIZATION	n/a
TITLE OF INVENTION	<b>Smart Walking Stick</b>
<p>It's created with humanitarian care for senior-aged, disabled and visually impaired people.</p> <ol style="list-style-type: none"> <li>1.Dial emergency contacts and send SOS message of location map</li> <li>2.Micro-spy camera to stream live video, shoot pictures and record audio</li> <li>3.Proximity sensor and buzzer keep the user in a safe distance from 4.obstacles</li> <li>5.Eco-friendly solar PV power supply</li> <li>6.Handy LED flash light to illuminate in dark &amp; dimly-lit places</li> <li>7.Removable pin to trigger security alert and make a sound of siren</li> </ol>	

APPLICATION No.	UAE-004
AUTHOR(S)	<b>Ahmed Abdulla Mohammed Majjan</b>
ORGANIZATION	n/a
TITLE OF INVENTION	<b>Solar GPS Tracking Pet Collar</b>
<p>This Solar GPS pet collar has been developed into a multi-functional intelligent gadget to assure your pet's safety in case of emergency. Main features as below:</p>	

1. GPS tracking by mobile app & settings
2. Solar PV charger
3. Mini phone with effortless click for calls to 2 master numbers
4. Anti-theft Belt removal alert by triggering the inset sensor to automatically send message of pet location map link to master numbers.
5. Waterproof- IP 65
6. Automatic Flash light at night for visibility
7. WIFI technology for indoor signal to improve GPS accuracy

APPLICATION No.	UAE-005
AUTHOR(S)	<b>Ahmed Abdulla Mohammed Majjan</b>
ORGANIZATION	n/a
TITLE OF INVENTION	<b>Solar Bicycle GPS Tracker</b>

This GPS Tracking device is created, specifically for cycling safety. The main functions it has are as below:

1. GPS Location tracking
2. Self-chargeable solar panel
3. LED flash alert light ( at night, to warn the passers-by & other vehicle driver on the road)
4. LED Bike Lane Laser marker

APPLICATION No.	UAE-006
AUTHOR(S)	<b>Khaled Abdul Hamid Elnems</b>
ORGANIZATION	U.A.E. SCIENCE CLUB
TITLE OF INVENTION	<b>Blind Spot by Bluetooth (BSB)</b>

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 \$

APPLICATION No.	UAE-007
AUTHOR(S)	<b>Khaled Abdul Hamid Elnems</b>
ORGANIZATION	U.A.E. SCIENCE CLUB
TITLE OF INVENTION	<b>Safety Electronic Protection Glasses</b>
<p>It is a Safety electronic protection glasses (for protection the eyes) only when worn it in the face will be order another device by connected wirelessly to powered the (dangerous consequences) like (cutter and trimmer trees devices or a welder or holder devices) to protect the worker The Advantages : 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</p>	

APPLICATION No.	UAE-008
AUTHOR(S)	<b>Khaled Abdul Hamid Elnems</b>
ORGANIZATION	U.A.E. SCIENCE CLUB
TITLE OF INVENTION	<b>The Sun Printer by Mobile</b>
<p>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)</p>	

## USA

APPLICATION No.	USA-001
AUTHOR(S)	<b>MARGARET ANNE SINCLAIR</b>
ORGANIZATION	MY MAGGIES LLC
TITLE OF INVENTION	<b>MAGGIES FASHION MAGNETS &amp; MAGGIES SNAPS</b>
<p>WHEN TRYING TO FIND A SOLUTION FOR WEARING SARONGS, SCARVES AND SHAWLS, I FOUND THAT THERE WAS NOT A FASTENER AVAILABLE WHICH DID NOT PENETRATE OR DAMAGE DELICATE FABRICS SO I DECIDED TO EXPERIMENT WITH MAGNETS. THE RESULTING PRODUCT WAS A MAGNETIC SPHERE SURROUNDED BY A METAL DISC.</p>	

APPLICATION No.	USA-002
AUTHOR(S)	<b>Kristin Hatfield</b>
ORGANIZATION	EquiptBaby
TITLE OF INVENTION	<b>EquiptBaby Comfy Canopy</b>
<b>Indoor • Outdoor • Day-to-Day Use • Rest &amp; Play • Extended Stay</b> <ul style="list-style-type: none"> <li>• Our SPF 50 material protects baby's sensitive skin</li> <li>• Sets up in less than 2 seconds with only one hand</li> <li>• Protects from flying or crawling insects</li> <li>• Fine mesh panels provide full visibility and easy access</li> <li>• Machine washable padded insert</li> <li>• Weighs less than 1 oz. for convenient, portable use</li> </ul>	

APPLICATION No.	USA-003
AUTHOR(S)	<b>Albert R. Lindstrom</b>
ORGANIZATION	PORTABLE FRAMING SQUARE
TITLE OF INVENTION	<b>TAKE-APART FRAMING SQUARE</b>
FULL-SIZED FRAMING SQUARE CAN BE TAKEN APART AND HAVE ABILITY TO FIT INTO HAND-CARRY TYPE TOOL CHEST. THIS TAKE-APART FRAMING SQUARE CAN NOW BE DISSEMBLED AND FIT INTO A TOOL BOX FOR SAFE TRANSPORT TO DIFFERENT WORK SITES. WILL GET MANY MORE USES OUT OF THE TAKE-APART FRAMING SQUARE AS IT WILL NOT GET DAMAGED BY TRAVELLING.	

APPLICATION No.	USA-004
AUTHOR(S)	<b><u>Current Employees:</u> Guy Geier, Luis Bustamante, Christina Galati, Patrick Koch, Brandon Massey</b> <b><u>Former Employees:</u> Mark Bearak, Karen Bookatz, Emily Alli, Jonathan Coble, Haley Cohen, June Kim, Seiji Watanabe</b>
ORGANIZATION	FXFOWLE
TITLE OF INVENTION	<b>NYC Loop</b>
Designed to replace New York City's ubiquitous but outdated pay phones, NYC Loop combines a beautiful, contemporary pay phone with a uniquely tailored public space that can be chosen to suit New York's diverse communities. It provides sound-harmonizing technology with a screen for making calls and enhancing personal mobile communication. The Loop also features a responsive projector that creates an "information puddle" on the sidewalk with which any passerby can interact – an amazing opportunity for local artists, or as a means of generating revenue from advertising space.	

APPLICATION No.	USA-005
AUTHOR(S)	<b>Bao Tran</b>
ORGANIZATION	KareGiver
TITLE OF INVENTION	<b>Personal emergency response (PER) system</b>
<p>A wearable system includes one or more sensors to detect activities of a mobile person or object; and a processor coupled to the sensor and the wireless transceiver to classify sequences of motions into groups of similar postures each represented by a model and to apply the models to identify an activity of the object.</p>	

APPLICATION No.	USA-006
AUTHOR(S)	<b>Dr. Thienna Ho, Ph.D.</b>
ORGANIZATION	CandyLipz LLC
TITLE OF INVENTION	<b>Extreme Lip-Shaper® System: Instant Natural Lip Enlargement Device</b>
<p>The CandyLipz lip plumper contains 2 elements: 1) it uses a suction element, adapted from a 3,500-year-old Chinese 'cupping' method, to enlarge the lips. 2) To give the lips a smooth plumping effect and beautiful lip shape, the lip plumper contains a BUILT-IN advanced lip-shaper technology which allows users to shape, contour, and enhance the appearance of lips instantly and beautifully. CandyLipz is designed to work on 15 anatomical zones of the lips and it can produce 2 lip styles: the POUTY LIPS look of youth and the double-lobed lower lip.</p>	

## ZAMBIA

APPLICATION No.	ZAM-001
AUTHOR(S)	<b>Reu Ngonga Ndumba</b>
ORGANIZATION	NIL
TITLE OF INVENTION	<b>Road Accident Reducer</b>
<p><b>Novel Features</b>-After checking all the road accident reducing systems, I did not find any system similar to mine. I found one speed limiter device which is attached to the vehicle, however this device have very little help as compared to mine. I believe that my invention has the following novel features which are not disclosed in the prior art.</p> <p><b>Advantages</b>-My invention fits any vehicle, easy to install and greatly reduces the amount of road accidents. It is made of infrared remote control and a receiver. No prior art advice provides the novel features and results listed above.</p>	



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