

第27屆

中小企業創新研究獎

The 27th Taiwan SMEs Innovation Award

創新卓越
超越巔峰

2020

得獎專輯

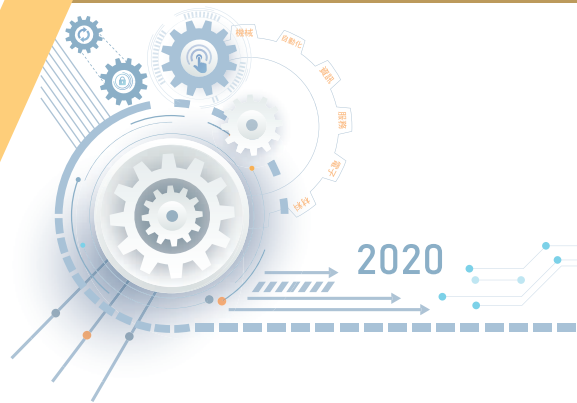
主辦單位 經濟部

承辦單位 經濟部中小企業處

執行單位 中華民國全國中小企業總會

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部長序文



2019 年臺灣中小企業家數逾 149 萬家，占全體企業 97.65%，就業人數達 905 萬人，占全國就業人數 78.73%，兩者皆創下近年來最高紀錄，中小企業向來是帶動臺灣經濟成長及穩定就業人口重要的基石，因此更須不斷加速自身的研發與創新力，以因應數位經濟蓬勃發展的時代，展現中小企業求新求變的創新精神與競爭力。

經濟部辦理「中小企業創新研究獎」目的為獎勵自行從事創新研發而有具體成效之中小企業，藉由創新研發的投入來提升技術與服務競爭力。本獎項辦理至今已邁入第 27 屆，共有 4,299 件標的提出申請，至今所遴選出來的卓越標的共 932 件，歷屆得獎企業仍持續致力於創新突破、技術升級、產業轉型，其得獎標的及技術於市場上已被廣泛應用，實為中小企業創新研發之標竿典範。今年超過 130 件申請標的中，透過初審、決審委員專業及嚴謹的審查，最終選出 35 件極具潛力與創新性之標的獲此殊榮，充分展現出臺灣中小企業持續研發創新的能量。

全球正走向數位經濟與智慧製造的時代，經濟部積極推動各項政策，帶動我國產業轉型加值應用，包含產業創新研發，以創新驅動引領產業轉型升級，致力五大產業創新、新材料循環經濟、數位創新，推動跨境電子商務、新興商業模式，全面優化產業結構；加強扶植新創及中小企業，透過完善創業生態系統，協助中小企業取得資源，發展科技應用，並強化創新競爭能量，活化在地經濟；改善投資環境，精進全球招商，帶動企業全面投資臺灣。

恭喜今年度獲獎企業，期許未來在進行創新研發之餘，更應掌握國際產業發展趨勢，運用創新優勢提升企業競爭力，朝永續經營目標邁進。在此，謹對各獲獎企業獻上最誠摯的恭賀，期盼大家再創佳績！。

經濟部 部長

王美花

中華民國 109 年 11 月 17 日

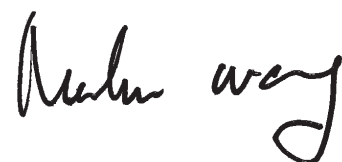
Foreword

In 2019, there were over 1.49 million SMEs, accounting for 97.65% of all businesses in Taiwan, providing jobs for 9.05 million people and accounting for 78.73% of the working population. Both figures are the highest over the years. SMEs have always been the bedrock that drives Taiwan's economic growth and stabilizes Taiwan's working population. Therefore, they need to constantly advance the own R&D and innovation to keep pace with an era where the digital economy thrives, in order to demonstrate the innovative spirit and competitiveness of SMEs.

The Ministry of Economic Affairs (MOEA) organizes the "Taiwan SMEs Innovation Award" to reward SMEs engaging in R&D and innovation with solid achievements to enhance their technical capacity and service competitiveness through R&D and innovation. It has been 27 years now since the award was first established and a total of 4,299 entries have competed for the award. So far, a total of 932 outstanding entries have been awarded. Although the award-winning entries and technologies of winners over the years have been extensively used in the market, today these winners still engage in innovations, breakthroughs, technical upgrades and industry transformations, setting an excellent model for R&D and innovation of SMEs. This year, a total of 35 extremely potential and innovative entries from over 130 entries are selected for the award through the professional and stringent evaluations by judges in the preliminary and final evaluations. They well demonstrate the ceaseless R&D and innovation capacity of Taiwan SMEs.

When the digital economy and smart manufacturing are the global trends, the MOEA is implementing various policies to drive domestic industries to engage in transformation towards value-added applications. These include industry R&D and innovation to lead industrial transformation and upgrading through innovation; leading the innovation of five major industries, the circular economy of new materials and digital innovation; promoting trans-border e-commerce and emerging business models; optimizing the industry structure; enhancing support for start ups and SMEs to help SMEs access resources and develop technology applications through a complete entrepreneurial ecosystem, strengthening innovation and competition capacity and revitalizing the local economy; improving the environment for investments and optimizing global business recruitment to attract total investments in Taiwan.

Congratulations to all award-winning SMEs this year. Apart from R&D and innovation, I hope that you can capture the trend of global industrial development to vie for sustainable development by enhancing competitiveness with your innovative strength. Here, I would like to send my sincerest regards to all award-winning enterprises and hope that you make better performance!



Minister
Ministry of Economic Affairs
November 17, 2020.



人工智能股份有限公司

AI3 Co.

QbiAI智能客服平台 QbiAI

張榮貴 / 董事長

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簡介▼

人工智能(股)公司以 AI 核心技術，及多年 CTI 與 CRM 系統整合應用經驗，深耕客服產業及 AI 專業領域。2019 年受邀代表台灣出席 2019 WCIT 世界資訊科技大會，展現「智慧台灣」AI 智慧客服之創新與研發實力。2020 年武漢肺炎疫情衝擊下，以「QbiAI 智慧客服」協助經濟部「1988 紓困振興專線」及衛福部中央健保署推出「智慧客服機器人」提供 24 小時防疫及紓困振興諮詢服務，展現科技客服國家隊之實力。其他尚包括各市政府 1999 市民專線及金融、交通、電商、物流、零售等各產業領域皆導入應用 QbiAI 智慧客服。

評語▼

- 全面及高度整合不同通路之資訊，將 Web、APP、Line、Facebook、WeChat、真人客服或企業自行開發的即時通訊平台應用，進行串接與處理，整合性高。
- 使用深度學習演算法和自然語言處理，進行對話語意理解及互動對話，透過自然對話的能力，回答客戶問題，提供更佳專業及精準的問答。
- 可將文字、語音、圖片、影像等數據資料，彙整至單一使用者的資料庫中，讓客戶服務更精準，資訊整合緊密。

Introduction▼

Focusing on AI Smart Customer Service System applications, Ai3 Co. Ltd. was founded in January 2018. The company received the Excellence Award in the first ChatBot Competition held by the Taipei City government in 2018. It later represented Taiwan in the 2019 WCIT in Armenia for innovation in Smart Customer Service System. To deal with the impact of COVID-19, Ai3's QbiAI helped Taiwan's NHIA to build a conduit of information to help the government increase public outreach in the pandemic. This included AI Chat Robot provided 24-hour service to help the public in personal insurance data inquiry and real-time mask purchasing information. Ai3 also helps The MOEA to integrate a cross-agency "1988 Relief-and-Stimulus- Measures Hotline" and AI Smart Customer Service System. With services ranging from government 1999 call center, transportation, logistics, e-commerce and retailers, important clients adopting Ai3's systems.

Commentary▼

- Fully and highly integrated information from various channels. Connect and process Web, App, Line, Facebook, WeChat, live person customer service, or IM applications developed by enterprises, with a high degree of integration.
- Apply deep learning, algorithms, and natural language process. Through characteristic learning, conduct analysis targeting the customer service text Q&A database. Provide relative market professionalism and accurate Q&A relative.
- Compile text, voice, graphic, image and other data to the database of a single user to ensure more accurate customer service and close information integration.



上陽光學股份有限公司

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SP12超短焦投影鏡頭
SP12 Ultra-short Throw
Projection Lens

簡介▼

本公司開發之 SP12 超短焦投影鏡頭，具備 4K2K 超高分解度、投射比 0.25、1.9 光圈之領先規格。創新的鏡頭設計技術，已獲得 5 件國內外自主專利，SP12 超短焦投影鏡頭突破市面上同類型鏡頭之瓶頸，除了成功迴避長期以來國外專利封鎖，在良率、產量、成本方面皆具有競爭優勢，將可應用於高階家庭投影娛樂、商業互動展示等投影機產品，推升超短焦投影市場之普及。

評語▼

- 本標的避開了日本大廠商之凹面反射式成像技術，採用直投轉折式成像技術，更有利於提高生產良率，降低成本，取得價格優勢。此技術已經取得專利，創新性高，帶來的效益亦佳，目前本標的已經供應給國際投影機大廠，並於 CES 等展覽獲獎。本標的技術有獨特性，產品規格有優勢，生命期亦長。
- 申請企業建置完成自有光學組裝廠，握有絕佳組裝技術與光學設計能力，前景相當看好。

Introduction▼

SP12 Ultra-short Throw Projection Lens provides high end specification of 4K2K resolution, throw ratio 0.25 and aperture F1.9. With patented optical and mechanical design, SP12 breaks through limits of long-term patent dominated by Japanese companies, guarantees high manufacturing yield, abundant production, and also customer don't have to pay premium. SP12 is ready to high end projectors for family entertainment, interactive exhibition applications, and also assists the market penetration of ultra-short throw projection in near future.

Commentary▼

- The subject matter opts for direct projection and turning imaging technology instead of the concave reflective imaging technology of major manufacturers in Japan, which is more conducive to increasing production yields, reducing costs, and gaining price advantage. This highly innovative technology with good benefits has been patented. Currently, the subject matter has been supplied to major international projector manufacturers and has received awards from CES and other exhibitions. The technology of the subject matter features uniqueness, advantageous product specifications, and long service life.
- The enterprise applicant has completed its own optical assembly plant. With excellent assembly technology and optical design capabilities, it has a promising future.



大愛感恩科技
DA.AI TECHNOLOGY CO., LTD

大愛感恩科技股份有限公司

DA.AI Technology Co., Ltd.

零廢循環再開發大愛
環保塑木
Zero Waste Circular
DA.AI Eco Wood

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簡介▼

大愛感恩巧妙運用海洋廢棄物與城市礦產，將『廢棄寶特瓶 (PET)、廢棄牛奶瓶 (PE) 及廢棄紡織品等材料』，研發專利結合劑與改質技術所製成塑木原料，掌控關鍵條件，成功開發「大愛環保塑木」並取得多項專利及商標認證。所開發的大愛環保塑木，使用壽命長、具阻燃特性，原料物性測試優於國家標準。大愛環保塑木延伸零廢設計的環保塑木地墊組中，連結塑木板的底座材質是『回收 PP』，將其改質再開發而成。不論原料或設計上皆創造製程零廢循環、產品零廢循環的雙循環新服務模式。不單是推廣綠色環保建材的應用，亦是落實資源永續與經濟循環的創新成果。

評語▼

- 本標的推廣回收，不斷積極考量資源永續與經濟循環的運用模式，將廢棄寶特瓶 (PET)、廢棄牛奶瓶 (PE)、Recycle to Recycle(R2R) 毛毯布邊及廢棄紡品等材料，持續導入回收製程而研發成功的綠色建材產品——『零廢循環再開發大愛環保塑木』。
- 本標的取得多項專利以及國際認證標準。

Introduction▼

DA.AI Technology effectively uses of marine debris and urban minerals, take discarded plastic bottles (PET), discarded milk bottles (PE), and waste textiles as materials, using composite key formulas and process, successfully developed DA.AI Eco Wood and has obtained several patents and trademark certification. DA.AI Eco Wood is a long-lasting wood with flame retardant characteristics, the material properties are better than the national standard. The plastic base connected to the deck tile is the extended design of DA.AI Eco Wood, modified and re-developed using "recycled PP" material. Both the raw materials and the design are creating a new dual-cycle model with the zero-waste cycles in the process and products. Not only promote the application of green and eco-friendly building materials but also implement innovations in resource sustainability and the circular economy model.

Commentary▼

- The promotion and recycling of the subject matter constantly take into consideration resource sustainability and the application mode of economic cycle. Waste PET bottles, waste milk bottles, Recycle to Recycle (R2R) blanket selvage, waste textiles, and other materials continue to be imported into recycling processes to successfully develop green building products — "Zero recycling and redeveloped environmentally-friendly plastic wood."
- The subject matter has obtained multiple patents and international certification standards.



天 明 製 藥 股 份 有 限 公 司
TIMING PHARMACEUTICAL CO., LTD

天明製藥股份有限公司

Timing Pharmaceutical Co., Ltd.



天明膠囊養生機組
Timinglife Drink
Capsules Set

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簡 介▼

天明製藥於中藥產業界擁有豐富的製藥經驗、完善的製程品控，堅持採購安全無虞的中藥材原料，以中華漢方調製研發經驗，係以傳承，發揚光大，並將以往食補藥膳的概念，開發出更貼近生活、便利快速的中藥養生飲，搭配新穎性包裝，讓消費者隨時補養，適合在家或辦公室飲用，並通過多道檢驗，層層把關，讓消費者安心購買，只要一個按鈕，隨時為您獻上最養生的營養補給，幫助您一步一步地邁向健康。結合「漢方草本」及「食尚科技」，不再費時熬煮，草本補養，原味呈現，即時品飲。

評 語▼

- 本標的為「膠囊養生機組」，基於食補藥膳的概念，開發出多種新穎性包裝之中藥養生飲「膠囊」，同時研發出仿手沖泡法之「膠囊沖泡機」，以確保沖提時有效萃取、安全充填及味道易入口等關鍵，克服中藥材不像咖啡粉易溶解、熱沖易產生香氣等特性。
- 本標的特色及創新性在於：(1) 中藥沖泡機：暗藏機台沖泡參數設計，具有仿手沖茶包的浸泡效果，既能沖泡出咖啡、高山烘培茶葉，更能沖泡出天然草本的各類原料；(2) 新穎性膠囊包裝：選擇耐熱且能回收的 PP 材質，並改良杯中濾膜，以增加料品的保存及濾滴效果，已獲專利；(3) 生產線設備規劃：設備入駐獨立空間，並完成全自動化生產線製程。

Introduction▼

Timing Pharmaceutical Group has rich pharmaceutical experience in the Traditional Chinese Medicine industry, we have the process of completed quality control, insist on purchasing safe raw materials of Chinese medicinal materials, and providing formulating research and development experience, inheriting and carrying forward the concept of food tonics and medicated meals.

It provides a more convenient and fast traditional Chinese medicine health drink that is closer to life and is matched with novel packaging to allow consumers to replenish at any time. It is suitable for drinking at home or in the office. It has passed multiple inspections, allowing consumers to buy with peace of mind. Just a button dedicated to you the most healthy herbs supplements, to help you step by step towards health. Combining "Kanfeng Herbs" and "Food Technology", no longer time-consuming cooking, herbal tonic, original flavor present, instant drinking.

Commentary▼

- The subject matter is the "Health Capsule Machine." Based on the concept of dietary supplementation and a medicated diet, a variety of traditional Chinese Medicine (TCM) health drink "capsules" in new packages have been developed. At the same time, the "Capsule Brewer" that mimics manual brewing has been developed to ensure effective extraction, safe filling, aromas left in the mouth, and other keys while brewing. The problem of TCM ingredients being not easy to dissolve nor producing aromas like coffee while hot brewing can be overcome.
- The features and innovativeness of the subject matter include: (1) TCM Brewer: With a hidden machine brewing parameter design, it produces the soaking effect of tea bags for manual brewing, is able to brew coffee, mountain roasted tea, and even various natural herbal materials; (2) new capsule packaging: heat-resistant and recyclable PP material is used. The membrane filter in the cup has also been improved for better material retention and filter drop results. Patents have been obtained; (3) Production line equipment planning: Equipment is accommodated in an independent space. Automated production line processes have also been completed.



卉橙科技有限公司

Wei-Fintech Company

金融業法令遵循風險 評估與GRC整合系統 Compliance Risk Assessment System

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簡介▼

金融界法令遵循的問題從不在法規內容的查詢，而是對於所從事之業務到底有哪些法規需要遵循以及相關的暴險為何，基於此點，我們研發了市面上唯一能完整合法遵、作業風險及風險導向稽核三者的解決方案，利用內建的分析引擎與專家知識庫，能自動辨識與分析進而達到AI的目的，以協助客戶將業務、法遵議題、法規、內規、內控與風險等元素進行關連。而下一代產品則是希望能將所有的解決方案推展至非金融業並放置於雲端處理，目前也已著手非金融業專家知識庫的設計，未來希望所有產業客戶都能以更為低廉的價格使用到此一解決方案與知識庫。

評語▼

- 本標的是市面上唯一法遵風險管理及 GRC 整合解決方案，此解決方案不只是為解決法遵的痛點，實際上裡面還包括了其他金融業二、三道防線（風管、稽核等單位）所需的模組，例如：風險事件收集、風控自評、行動方案管理、關鍵風險指標監控、風險導向稽核等，以確保未來法遵風險辨識與評估的成果能與金融業內的風管與稽核單位資訊共享與整合。
- 本標的創新性及實用性高，具有市場性，具有國內競爭優勢。申請企業成立一年多以來，已有相當之業績，未來推廣與應用性高。

Introduction▼

The problem with compliance in the financial industry is not the content of the regulations, but rather the compliance and risk associated with the business. With this in mind, we have developed the only solution in the market that seamlessly integrates compliance, operational risk and risk-based auditing, utilizing a built-in analytics engine and a knowledge base to automatically identify and analyze AI issues to help customers connect business, compliance topics, regulatory, internal control and risk. The next generation product is to extend all solutions to the non-financial industry and we have already started to design a knowledge base of non-financial experts. In the future, we plan to place this solution in the cloud and hope to make this solution and knowledge base available to customers in all industries at a lower price.

Commentary▼

- The subject matter is the only one in the market to comply with risk management and an integrated GRC solution. This solution is not only intended to solve the pain points of compliance, it also includes other modules required by the second and third lines of defense (risk control, audit units etc.) in the financial industry, such as risk event collection, risk control self-assessment, action plan management, key risk indicator monitoring, risk-oriented auditing, etc. They are intended to ensure the sharing and integration of future compliance risk identification and assessment results related information with risk control and audit units in the financial industry.
- The subject matter possesses innovativeness, practicality, and marketability, and domestic competitive advantage. Since the founding of the enterprise applicant over a year ago, the enterprise has achieved impressive performance. It has high promotion and application potential.

印能科技股份有限公司

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VTAS-60A-W
晶圓自動傳輸高溫壓力爐
Wafer Epoxy Cure System

簡介▼

印能科技開發「量能差動除泡高壓爐」搭配「高翹曲晶圓前端運送模組」來完成高階晶圓封裝自動化。
「量能差動除泡高壓爐」擁有 12 項專利，利用溶解與擴散原理搭配高壓環境，比一般壓力烤箱更有效率地去除封裝樹脂硬化時所產生的氣泡。
半導體高階封裝自動化運料產線，因許多異質材料的堆疊，皆遇到晶圓翹曲的狀況，這使得「晶圓前端運送模組」相當重要，印能科技因應客戶需求設計出適用於高翹曲晶圓的機器人手臂來傳送晶圓，以完成自動化送料系統，並搭配「量能差動除泡高壓爐」，在高階封裝、高功率元件、高性能元件、車用電子已是不可或缺的製程設備。

評語▼

- 本標的整合運用溶解與擴散原理的量能差動、除泡高溫爐及設計適用於高翹曲晶圓的機器人手臂來傳送晶圓的自動化送料系統，以快速消除封裝樹脂硬化時所產生的氣泡，解決 3DIC 封裝製程瓶頸。
- 本標的創新技術如半導體封裝之晶化黏著膠層氣泡排除，已獲發明專利。

Introduction▼

APT has developed the "Wafer Epoxy Cure System" for new high-end assembly line. It consists of the "Devoid Furnace with Density Variation Function" and the "Equipment Front End Module (EFEM) for Highly Warped Wafers" to meet the requirements of the automation of high-end wafer level package.
With 12 APT-applied patents, this "Devoid Furnace with Density Variation Function" can remove the voids induced by curing the epoxy between the die and the wafers efficiently, as compared with conventional ovens.
The principle of the density variation is to make the epoxy dissolve and diffuse the air bubbles with a high pressure environment.
Moreover, for this kind of high-end wafer level package, wafer warpage is serious. To handle the wafer warpage, the specific EFEM is needed. APT has developed the EFEM for highly warped wafers to meet the customer's requirement. Accompanied with the "devoid furnace", the equipment can be used in high power, high performance and automobile electronics.

Commentary▼

- The subject matter has integrated energy differentiation by the principle of dissolution and dispersion. In addition to soaking in the furnace and designing an automated feeding system intended for warpage robotic arms to transmit wafers, bubbles generated when encapsulating resin hardens can be quickly eliminated, thereby solving the bottleneck of 3DIC packaging processes.
- The innovative technology of the subject matter, such as the elimination of bubbles in the crystalized adhesive layer of semiconductor packaging, has obtained an invention patent.



地理即時三維空間認知
模擬實體化教學系統
Real-time Three-dimensional
Spatial Cognition Simulation
Materialized Teaching System
For Geography Learning



宇騫數位科技有限公司

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簡介▼

宇騫數位科技的互動沙盒目前針對地理輔助教學，或地理資訊系統延伸教材使用，由於地理的等高線乃抽象概念，與地形空間之關聯往往在學習上會遇到困難，我司特別結合實體道具和實體使用者介面設計，以及沙盒側板即時投影技術，並透過國家專利保護獨家設計之功能，輔助空間認知學習。有別於市面類似產品使用開源碼為基礎，我司沙盒軟體內容皆為自行內部開發，並有獨家市面上未有的功能和專利，特別強化地形剖面 and 視域的重要認知。改良後的硬體設備可以自行組裝與移動，除了可透過 iPad 平板控制功能外，也可選擇安裝第二觸控螢幕控制功能。

評語▼

- 結合實體使用者介面設計，輔助空間認知學習。可擴充之軟體功能透過調整沙盒海平面，升降模擬地形地勢高低與淹水關係，產品的軟硬整合不錯，操作簡便，具市場的新穎性。
- 產品設計是地理資訊系統延伸教材，適合國中、高中學校的教學輔助教材。在產業上的利用價值高，與同類競爭標的實用有其差異性。
- 本標的結合實體道具之使用者介面設計，界面設計容易入手操作，已在市場上銷售有清楚商業模式，可行性高。

Introduction▼

iSynReal Augmented reality sandbox is currently applied to geographic-assisted instruction or the extended instructional materials for the geographic information system. Since it is challenging to relate the abstract concept of the contour line to the topography, iSynReal is dedicated to the design of physical tools and user interface, sandbox side-plate real-time projection and exclusive functions protected by national patents to enhance the learning effects of spatial cognition. Compared to similar products based on open source, the software of iSynReal sandbox is completely insourced and characterized by exclusive functions and patents, especially on topographic profiles and viewsheds. The modified hardware can be easily assembled and moved. User can control the equipment through iPad or install the second touchscreen to use the function.

Commentary▼

- Combine the physical user interface design to assist in spatial cognitive learning. The expandable software function can simulate the relationship between terrain height and flooding by adjusting the sandbox sea level. The product has good software and hardware integration, is easy to operate, and possesses market novelty.
- The product design is an extended geographic information teaching material, an auxiliary teaching material intended for junior high schools and senior high schools. It has high industrial use value and is differentiated from other similar competing target matters in terms of practicality.
- The subject matter combines the user interface design of physical props. The interface design is easy to operate. It already has a clear business model in market sales, with high feasibility.



年弘磁電工業股份有限公司

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環保回收智能化設備
Environmental
Protection
Recycling Intelligent
Equipment

簡介▼

年弘發展初期以設計及製造強力磁鐵為主，後來跨足磁選機研發。現為台灣領先專業製造環保回收磁選設備及渦電流分選機之工廠，至今已累積逾 30 年以上的經驗，並成功取得多項國際專利。

智能環保回收設備結合渦電流分選機、磁鼓及分選白鐵等專利技術，使其成為台灣獨一無二的環保回收新利器。此智能化設備穩定、易操作，運用機械自動化解決傳統工作環境不佳且耗人力的作業問題。提高分選效率、24 小時連續作業，能將有價資源分選出來，延續物命，兼具環保及減少人員傷害等多重效益。

評語▼

- 本標的為智能化設備可把物料分為不可燃的「鐵類金屬」、「非鐵類金屬」及可燃「一般物料」分選出有價資源，主要運用磁選機分離金屬物料，再利用渦電流分選及不鏽鋼分選機，藉由不同物質具有不同導電度比重之物理特性來分選。
- 本標的創新技術渦電流分選機裝置改良及渦電流選別機已獲台、日新型專利。

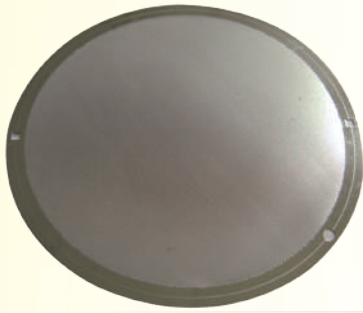
Introduction▼

In the early stage, Nian Hung focused on the design and production of powerful magnet; then, it moves into the development of magnetic separators. Now, Nian Hung is the leading company in Taiwan, able to manufacture Professional Recycling Equipment and Eddy Current Separator. The over 30-years-experience company has earned various international patent.

This intelligent recycling equipment, combining our magnet expertise, including Eddy Current Separator, Magnetic Drum, and Stainless-Steel Separator, becomes the one and only new tool for environmental protection in Taiwan. Easy and stable to operate, this automatic equipment solves the conventionally poor environment and human consuming operations. It raises the sorting efficiency, operates 24 hours and recovery valuable metals, which benefits the world in several ways, such as prolonging life cycle, environmentally friendly, reducing personnel injuries, etc.

Commentary▼

- The subject matter is a smart device, which can classify materials into non-combustible "ferrous metals," "non-ferrous metals," and combustible "general materials." Valuable resources are separated. A magnetic separator is mainly used to separate metal materials. Then, an eddy current separator and a stainless-steel separator are used to perform separation through the physical characteristic where different materials have different electrical conductivity ratios.
- The subject matter innovative technology for improving the eddy current separator and the eddy current sorter have obtained new patents from Taiwan and Japan.



利佳精密科技股份有限公司

Liga Precision Technology Co., Ltd.

精密金屬遮罩 Fine Metal Mask

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簡介▼

精密金屬遮罩應用於蒸鍍製程中，簡化並取代了 LED 封裝鍍膜製程中的曝光顯影流程，金屬遮罩上製有數以萬計特定圖案的微細開孔，可精確地轉移圖案至標的物。

以 UV-LIGA 微電鑄技術製造的金屬遮罩，其獨家開發的高強度鎳鈷合金材質具有強硬耐用的優點，同時搭配對金屬漲縮的控制技術，成功改善了使用者在製程中遇到的圖案偏移問題。這些以使用者需求為導向的創新技術開發，提供最適切的解決方案給使用端，大大提升了使用壽命及良率，同時降低生產成本。

利佳致力於 UV-LIGA 技術應用領域的發展，並逐步將技術推展至 Mini/Micro LED、半導體微探針等領域，作為新一代的製程解決方案。

評語▼

- 本標的應用精密電鑄生產方法，主要製程整合光阻壓模 / 塗布、曝光、顯影、精密電鑄、除光阻、品檢等程序。
- 本標的創新技術運用耐擊微細立體花紋金屬面板製法已獲專利，並以營業秘密保護其製程。

Introduction▼

Fine metal mask is applied in vapor deposition process. It has ten-thousands of specific micron-patterns on it and is able to precisely transfer the pattern onto the target, which helps simplifying the traditional lithography process in LED manufacturing.

Liga's fine metal masks are produced by UV-LIGA technology with nickel-cobalt alloy. The unique material brings the advantages of high hardness and durability. Also, with the metal expansion controlling technique, Liga successfully solved the pattern shifting problem that customers had met. These customer-oriented innovative technologies provide a beneficial solution of long product life time, high production yield and low cost.

Liga makes an all-out effort to develop UV-LIGA applications for years. It's now expanding the technologies to the Mini/Micro LED、micro-probe pin, and semiconductor industries for next generation manufacturing.

Commentary▼

- The subject matter applies the precision electroforming production approach. The main production processes include integrated photoresist die/coating, exposure, development, precision electroforming, photoresist removal, quality inspection, and other procedures.
- The innovative technology of the subject matter involving the use of the method for producing fine, impact-resistant, three-dimensional patterned metal panels has obtained a patent. It has well-implemented processes for protecting trade secrets.



貝克生醫股份有限公司

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"貝克" 食道置放器
"BRAXX" Esophageal
Applicator

簡介▼

貝克生醫根據放射腫瘤科醫師的臨床經驗回饋，設計新一代癌症近接治療置放器 (Applicator)，藉由可調式充氣設計精準投放治療射源，達成食道內精準定位並避免副作用，容易操作且減少臨床人力需求，可望提供食道癌患者更佳之治療手段。產品已取得多國專利及美國與台灣之上市許可。

評語▼

- 本標的為針對治療食道癌用而特殊設計之食道放置管，具有八個特殊氣球，可用於放置標靶藥時之精準定位用，而因為定位精準，因此可以增加投藥之劑量，達到更具成效之治療。
- 以「精密薄型矽膠氣球」與「多氣球獨立調控定位」能有效精準定位，改善現有相關產品操作時一些缺點，如病患需麻醉、操作及放置過程可能擠壓腫瘤等等。本標的為拋棄式設計，可簡單且順利地經鼻放置，大幅降低臨床醫護人員之負擔及醫療成本、減少嚴重副作用，提供食道癌患者更精準、有效且安全的放射治療。

Introduction▼

"BRAXX" Esophageal Applicator is a disposable applicator composed of multiple inflatable balloons for performing brachytherapy. The special design of balloons can keep the radiation source centering in the esophagus to avoid serious side effects and provide the better treatment to esophageal cancer patients.

Commentary▼

- The subject matter is an esophageal placement tube specially designed for treating esophageal cancer. It has eight special balloons for precise positioning when placing targeting drugs. Due to its precise positioning, the drug dosage can be increased, thereby achieving more effective treatment.
- The "precision thin silicone balloons" and "multi-balloon independent control positioning" can achieve effective and precise positioning. The existing disadvantages related to production operation can be improved, such as the patient requiring anesthesia, and the operation and placement process may compress the tumor. This subject matter has a disposable design, which can be smoothly placed through the nose, which substantially reduces the burden of medical and nursing staff, medical costs, and severe side effects, thereby providing esophageal cancer patients with more accurate, more effective, and safer radiation treatment.



那米亞發酵股份有限公司

Lemnaceae Fermentation, Inc.

以微生物發酵平台生產
多樣的類胡蘿蔔素產品
The diverse carotenoids
production in microbial
fermentation platform

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簡介▼

類胡蘿蔔素 (Carotenoids) 為自然界中分佈最廣的色素群之一，為生物學上極為重要的一類化合物。那米亞紅、黃、橘、橙為那米亞發酵自行延續開發以微生物代謝工程技術 (metabolic engineering) 生產的產品，為全球第一個以合成生物學概念發酵量產商品化的類胡蘿蔔素產品。其方法是利用類胡蘿蔔素之生物合成路徑，將代謝路徑導入可工業化生產之菌種，使其可快速生產具價值性之產品。系統合成生物學 (synthetic biology) 為一未來重要創新性技術，具備了破壞性創新技術 (disruptive technique) 特質。近來許多研究都證實顯示這些天然色素，具有極強的抗氧化能力，可用來對抗現代人類因慢性疾病如癌症、心血管疾病，及可作為免疫系統的調節器，以達到預防慢性病的產生。

評語▼

- 本標的產品系列包含那米亞紅 (蝦紅素 /Astaxanthin)、那米亞黃 (玉米黃質素 /Zeaxanthin)、那米亞橘 (角黃質素 /Canthaxanthin)、那米亞橙 (beta-胡蘿蔔素 /beta-Carotene) 等，為該公司以微生物代謝工程技術自行開發生產的產品，為全球少數以合成生物學概念發酵量產商品化的類胡蘿蔔素產品。
- 本標的產品特色包括：(1) 該公司規劃設計單一生產系統以生產多樣化產品之體系，可免除單一產品失敗之風險；(2) 使用較為先進且門檻較高之生物發酵系統；(3) 在原料上採用較為綠色與永續的浮萍萃取物為主要之原料。

Introduction▼

Carotenoids are one of the most widely distributed pigment groups in nature and are biologically important compounds. LemnaRed, LemnaYellow, LemnaOrange and LemnaCarotene, are microbial metabolic engineering (metabolic engineering) products developed by Lemnaceae fermentation, Inc. The products (ex. LemnaRedR) are the first commercialized carotenoid products in the synthetic biological field. The method is to use the biosynthetic pathway of carotenoids to transform the exogenous genes of metabolic pathway into the industrially host species, so that they can produce valuable products quickly. Synthetic biology is an important and innovative technology of the future, with the destructive and innovative technology (disruptive technique) characteristics. Many recent studies have proven that these natural pigments which have strong ability of anti-oxidation, have the prevention ability about chronic disease, including cancer, cardiovascular disease and regulation of immune system.

Commentary▼

- The subject matter's product series includes LemnaRed (astaxanthin), LemnaYellow (zeaxanthin), LemnaOrange (canthaxanthin), LemnaCarotene (beta-carotene), etc., which are products developed and produced by the company through microbial metabolism engineering technology. They are one of the few commercialized fermented and mass-produced carotenoid products in the world produced through the concept of synthetic biology.
- The product features of the subject matter include: (1) The company has planned and designed a system to produce diverse products through a single production system. This prevents the risk of the failure of a single product; (2) a more advanced biological fermentation system with a higher threshold is used; (3) greener and more sustainable lamnaceae extracts are adopted as the main raw materials.

noodoe

拓連科技股份有限公司

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Noodoe EV 智慧充電
及雲端營運管理系統
Noodoe EV Smart
Charging Station &
Noodoe EV OS

簡介▼

Noodoe 提供了 EV 充電服務自動化解決方案，可將停車場轉為收益自動產生器。
Noodoe EV OS 是全球最先進的雲端操作系統之一，其就像是「大腦」可以統籌城市中充電站的所有操作。
Noodoe EV OS 完全自動化服務供應、通用支付處理和能源成本降低。
Noodoe EV OS 具有下述特色：
1. 充電站全自動化操作 2. 無縫通用支付處理 3. 智能負載平衡，以避免基礎架構升級 4. 節省成本的 EV 車隊充電執行方案 5. 全方位的靈活性和控制力 6. Noodoe EV OS 兼容管理並營運各廠牌的充電站
Noodoe EV OS 可以輕鬆地對智慧城市中的充電站進行監控，並可以從中心位置進行監督，而無需人工干預。

評語▼

- 本標的包含：Noodoe EV 智慧充電站 (Noodoe EV smart charging station) 與 Noodoe 先進雲端營運管理系統 (Noodoe EV OS)，Noodoe EV 兼具充電站規劃、架設、充電樁以及充電營運服務能力。
- 藉由成熟並以使用者體驗為基礎而開發的充電硬體設備與 APP，讓使用者可透過非常簡易、且彈性的模式來開啟充電服務，進而滿足所有客群的需求，以增加客戶的滿意度。

Introduction▼

Noodoe provides EV charging service automation solutions that transform parking lots into hands-off revenue generators.
Noodoe EV OS is one of the world's most advanced cloud-based operating systems, serving as the "brain" that orchestrates the operation of the charging stations.
Noodoe EV OS fully automates service delivery, payment processing, and energy cost reduction. Noodoe EV OS has the following unique features:
1. Fully Automated Operation of Charging Stations 2. Seamless Universal Payment Processing 3. Intelligent Load Balancing to Avoid Infrastructure Upgrades 4. Cost-Saving EV Fleet Charging Execution 5. All-Encompassing Flexibility & Control 6. Charging Stations Powered by Noodoe EV OS
The charging stations in a smart city can be easily monitored by Noodoe EV OS and supervised from a central location with minimal if any necessity for human labor interaction.

Commentary▼

- The subject matter includes: Noodoe EV smart charging station, Noodoe EV OS, Noodoe EV with charging station planning, setup, charging pile and charging operation service capabilities.
- Charging hardware equipment and APP developed with maturity and user experience as the basis enable users to launch charging services through a simple and flexible mode. This in turn meets the needs of all customer groups and enhances customer satisfaction.



foundi
房地資訊站

知微科技股份有限公司

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AI房仲助理-房產分析機器
AI Real Estate Robot
Analyze Engineering

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簡介▼

知微科技的任務是解決房仲人員平時為了瞭解市場而需要投入大量人力與時間的問題。我們透過程式收集全台資料簡化房產物件開發流程，並提供更人性化的系統操作體驗。

「AI 房仲助理」藉由網路技術、統計分析、資訊整合等概念，結合 AI 聊天機器人技術與 LINE 服務，用熟悉的聊天方式就能獲得完整的物件資訊，包含各大房仲網案件、實價登錄、歷史資料、電傳、物件可能地址等資訊，同時優化定位技術，推出專屬推播系統，若附近地區有新物件，房地助理即會以即時訊息推播方式提示，搶得先機資訊不漏接！

評語▼

- 申請標的結合 data mining 技術、即時數據處理、AI 語意分析，建構一個 AI 房仲助理。整個系統開發完整，整合度也很高，有仔細考慮房仲的各項需求，具創新特殊性。
- 產品利用 LINE 聊天方式取得完整房產資訊，並結合微定位技術，讓使用者能隨時隨地收到新上市物件資訊、進行商圈物件開發、市場調查、視覺化行情分析等。對房地產從業人員具高度實用性，且產品較同類競爭標的更具完整性。

Introduction▼

The mission of "foundi" is to solve problems of real estate agents when collecting market information. We simplify the real estate development flow by gathering country-wide listings programmatically, as well as providing a more user-friendly interface to operate.

"AI Real Estate Robot Analyze Engineering" is a service that combines technologies including Network, Visualization, Big Data, etc. By using AI Chatbot, it provides an easy-to-use interface for users to instantly acquire information such as new listings, real transactions, historical prices, and cadasters. Moreover, notifications will be sent when there is a change in the market, criteria specified by users, so users can react immediately to potential sales.

Commentary▼

- The subject matter applicant combines data mining technology, real-time data processing, and AI semantic analysis to construct an AI real-estate broker assistant. The entire system is well developed with a high degree of integration, taking into thorough consideration the various needs of real-estate brokers, with innovative specificity.
- The product acquires complete real-estate information through LINE chat. In addition, combining micro-positioning technology, users can receive the latest listed objects at any time and place, engage in business district object development, market surveys, and visualized market analysis, etc. It is highly practical for real-estate practitioners, and the product is more complete than similar competing subject matters.



奕智鏈結科技股份有限公司

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文件碎形安全加密及動態
安全權限控管系統
Development of File Fractal
Security Encryption and
Dynamic Security Authority
Control System

簡介▼

- 『文件碎形安全系統』擁有兩項發明專利，可徹底解決文件「儲存」、「傳輸」、「權限管制」三大安全痛點：
- 碎形儲存：利用碎型、硬體加密、區塊鏈等技術實現高強度文件安全，不慮伺服器被駭，一舉解決了文件安全（技術）與使用者（人為）疏失難題。
- 碎形傳輸：任何電腦二元碼檔案均可利用碎形分散與區塊鏈特性傳輸，傳輸過程文件“不落地”，確保傳輸的安全性。
- 機密權限動態管制閱讀器：可以動態管制閱讀權限的文件讀取器，控制了文件「閱讀者」、「內容」、「次數」、「地點」權限，可動態調整安全屬性，不慮文件散發後回收與保密問題。

評語▼

- 本標的已研發完成實體配套包含：數位文件憑證、紙本憑證標籤、紙本讀取器終端，尚在研發配套為智能眼鏡閱讀器等。為完善資安保障，正著手研發 AI 防偷拍計畫並申請兩項專利，預計於 110 年 9 月前，完成全部碎形安全系統之相關軟硬體設備。
- 本標的使用碎形、區塊鏈、加密晶片等技術，實現文件高安全儲存，以及可動態設定權限（如：限制閱讀內容、回收、銷毀...等）的產品，創新性高，具有市場性，未來推廣與應用性高，具有國內外競爭優勢。

Introduction▼

Due to the complexity of cyberspace, IT creates security issues, especially the data. A hacker can easily steal your data.

DoQubiz provides "Data Fractal System", with two IPs, to solve the pain points of data security issues;

- Data Fractal storage; file is decomposed into pieces, and encrypted with hardware security chip performed with block-chain technology that obtaining the highest security stature.
- Data Fractal transmit, file is transmitted under 'fractal' protocol, control by 'smart contract' to ensure the ultra-secured data transmit.
- Dynamic Authority control reader; is an e-paper device, can dynamic set data attributes that control who, what, when, where, and how to browse the data after it is spread in both paper or digital format.

Commentary▼

- The subject matter has a complete physical package, including digital document labels, paper voucher labels, paper reader terminals. The smart glasses reader package is currently undergoing development. In order to perfect information security protection, the AI anti-candid shooting program is currently under development, and two patents are under application. All the fractal security system related software and hardware equipment are expected to be completed before September, 2021.
- The subject matter uses fractal, blockchain, and encryption chip technologies to achieve high-security document storage and products featuring dynamically set authorizations (such as restricting reading content, recovery, destructions, etc.) It features high innovativeness, marketability, high future promotability and applicability, and competitive advantage at home and abroad.



SPARK
CATCH

破冰者國際股份有限公司 Blackstar Corp.

夜光棒球 Spark Catch
Spark Catch baseball

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簡介▼

夜光棒球 Spark Catch – 創新的 led 棒球，所有規格都與一般棒球一致：重量、尺寸、彈性、縫線、牛皮手感，但更酷的是，它能發出如同小型投影機的光亮。只要一顆電池，就可以在昏暗的地方 Catch ball，完全不同於傳統棒球的創新專利結構，內建高亮度 led 及特殊設計的孔洞，讓光線能從棒球內透出。除此之外，夜光棒球更是非常耐用，能承受超過 135km 球速的傳接撞擊。已在台灣、美國、日本累積超過一萬五千組銷售，更獲得使用者的高評價。

評語▼

- 本標的完全顛覆傳統棒球的製作方式，從使用的材料、發光元件與球體結構設計都有顛覆性的創新，內部球體導入可回收再利用的高衝擊性熱塑彈性體材料，開發出擁有多國專利的彈性球體抗震結構，並搭配 LED 燈芯設計與球體表面加工技術，使夜光棒球即便在 140 km 發球機的衝擊下，依然能夠保護內部電路，穩定輸出光源。
- 目前已經在全球出貨超過一萬五千組，並透過自行在美國 AMAZON 上銷售數千組，並取得截至 2020/03/03 4.3 分（滿分 5 分）之高評價。

Introduction▼

Spark Catch Baseball - The world's first LED light up glowing illuminated baseball with the same weight, size, and genuine leather skin as MLB baseball. The most ideal solution for playing catch at night. Over the past 4 years, we checked multiple prototypes to develop a ball with the best materials and highest possible quality. We researched everything from different ball materials to lighting methods and battery types. We made sure the lighting was perfect from all angles to maximize visibility and fun. We also made sure Spark Catch was handcrafted by the best manufacturer in the world. We do this all because as baseball players we understand the importance of a proper grip.

Commentary▼

- The subject matter totally subverts the traditional method of baseball production. There are subversive innovations, from materials, light-emitting elements, to the structural design of the ball. The internal sphere introduces recyclable high-impact thermoplastic elastomers to develop a multinational patented elastic sphere anti-seismic structure. Additionally, an LED wick design and sphere surface processing technology enable the luminous ball to protect the internal circuits and stably output light even under the impact of a 140km ball machine.
- At present, over 15,000 sets are shipped worldwide, and thousands of sets have been sold on AMAZON in the United States, with a high rating of 4.3 (out of 5) as of 2020/03/03.



國泰皮革工業股份有限公司

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希望 Marquee

簡介▼

『希望』是在「循環經濟」的思維下，為了解決製程廢料所研發出的方案。

它是以豬皮的廢棄皮料做成，不僅是 100% 循環回收、升級再造，而且來自於最新的有機鞣革法、100% 無金屬。升級再造的執行，沒有涉及到機械或化學過程，其中手工製作的部分，皆是雇用身心障礙人士來執行。

這是一件時尚且具有智能技術的超現代皮革；它之所以智能，是因為它來自回收的廢料，並以極富想像力的時尚角度來創作完成。我們『希望』展示如何以創造力及工藝，對廢料升級再造，進而為皮革製品供應鏈，帶來更好的廢料解決方案，而我們也會繼續研發出更多的可能。

評語▼

- 國泰皮革在皮面料加工處理技術上精益求精，開發各式新的面材為國際品牌所應用，近年新工法可減少皮面料處理時所產生的污染，也善用面材廢料，可謂化腐朽為神奇，是實踐循環經濟的典範。其皮革工法技術獨步台灣，更具國際競爭力，其追求研究創新的精神與努力執得肯定與鼓勵。
- 可應用在高級婚紗禮服、皮包、飾品等應用上，是高級時尚品牌所可能採用的皮革面料。

Introduction▼

"Marquee" is a solution developed under the concept of "Circular Economy".

It is an ultra-contemporary leather with amazing soft touch like a technical fabric. It is made of seemingly useless leather waste from an organic tanning production, 100% metal free and 100% upcycled. We have designed a system that transforms these wastes into components, which are then handcrafted, by the people with disabilities, into a new fanciful leather.

"Marquee" demonstrates what can be achieved when waste is revalued, with creativity and craftsmanship, showing new approaches to solving production waste.

Commentary▼

- Kotai Tannery Co., Ltd. has kept improving its leather fabric processing technology, developing a variety of new fabrics for international brands. Its new technique in recent years has reduced pollution arising from leather fabric processing. Fabric material waste is also put to good use, making it a role model for the realization of a circular economy. The leather processing technology is unrivaled in Taiwan, with international competitiveness. The company's spirit and effort in the pursuit of research innovation is worthy of recognition and encouragement.
- The leather fabric has applications in high-end wedding dresses, leather bags, and accessories. It is the leather fabric likely adopted by high-end fashion brands.



Hiss

清展科技股份有限公司

Taroko Door & Window Technologies, Inc.

完全隱藏摺疊紗窗
Invisible Pleated
Screen Window

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簡介▼

本產品的構想來自了解推射窗廠及安裝人員的痛點，開發出適合裝設於推射窗上或帷幕牆開口，提供新建案各種房屋市場的最佳解決方案；只要推射窗廠在設計窗型時納入規劃，則可在生產推窗時預置入本產品或工地施工時才將本產品裝上。

其創新功能：

- 1) 首創可收納隱藏於推射窗框的結構設計，外觀加分
- 2) 簡化組裝步驟，安裝換修，輕鬆搞定
- 3) 專利調線結構，控制紗窗開啟力道，質感升級

本產品較傳統紗窗減少近一半的鋁材用量，能與高端的門窗廠合作獲致更好的利潤，透過與窗體的極佳整體配合效果也使雙方的產品價值提升，將更好的體驗傳達給使用者。

評語▼

- 本標的「完全隱藏摺疊紗窗」係以獨立框架設計，便於模組化、一體化融入推射窗或帷幕牆開口之裝設，具有創新實用、易於安裝換修、穩定調整通氣面積，以及外觀上看不出紗窗框架存在 ... 等特色訴求。
- 針對全木窗、鋁木窗、木鋁複合窗、一般鋁窗皆可於施工時加裝或依客製化配合生產、裝設，具有廣泛運用效益。

Introduction▼

The muse of this product comes from the pain point of the window manufacture and their installation workers, we develop the best solution to apply in the casement and awning windows for the new projects of all kinds housing market. Once the window manufacture integrate the design of this product, it could be adapt into their casement/awning window and install at the site of the project.

The innovate functions are:

- 1) The screen could be integrated into the structure of the window frame and become "invisible", it's a plus for the exterior.
- 2) Making the assembling procedure become simple and lean, easy to install, maintain and exchange.
- 3) Patent string adjust mechanism, the load of pulling force to the screen window could be fine-tuned and level up the quality.

The product cut almost 50% of the Al frame material consuming/cost than the conventional Al windows, by integrating with the window manufactures, the product brings a value added result as well as creating more profit for both parties, nevertheless, a delightful using experience will be delivered to the end customers.

Commentary▼

- The subject matter's "completely concealed foldable screen window" has an independent frame design that facilitates installations integrated into entrance windows or curtain wall openings. Its feature requirements include innovative practicality, ease of installation, replacement, and repair, stable adjustment of the ventilation area, and the screen frame not externally visible.
- It can be installed when constructing wooden windows, aluminum windows, wooden aluminum composite windows, and general aluminum windows. It can also be produced and installed according to customized needs, with extensive use benefits.



清豐企業股份有限公司

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隔熱節能、防蟲及促進生長之功能性農用材料
Multi-Functional Material
For Agricultural Growth
Promotion, Enhanced
With Heat Insulator And
Insect Inhibitant

簡介▼

本公司開發之農膜強調自然農業並藉由三項光學特點，光阻隔、光肥料、光農藥，來達成隔熱節能、促進農作物生長、增加產量及防蟲等目標，並創造人與農作物和諧的綠色永續環境。

我們的產品優勢：

- 透過熱能阻隔降低種植之環境溫度，給予作物合適的生長環境，降低高溫所產生代謝受阻的生理傷害，並減少環境調控設備之耗能。
- 改變光合作用之光質的比率及強弱，提高其效率，進而促進成長，增加營養價值。
- 並利用光學遮蔽方式達到物理驅蟲之效果，減少蟲害之災損。

評語▼

- 本標的利用塑膠薄膜僅讓特定光譜的太陽光通過農作棚，達到促進農作物的光合作用，因而加速農作物的生長，除此之外因濾掉大部分的紫外光與紅外線，能使得農作棚內的溫度下降達到隔熱作用。因棚內的光譜與戶外不同，也可降低蚊蟲進入。
- 本標的與其他公司的產品相較，能針對不同農作物採用不同顏色的塑膠薄膜，並有不同的光譜透過，因此產品具差異化，本標的已取得發明專利。
- 本標的已與屏東科技大學合作，針對不同農作物受不同頻率的光之影響做深度研究，且產品已給予國內數個大農場適用，已建立數據庫市場潛力可期。

Introduction▼

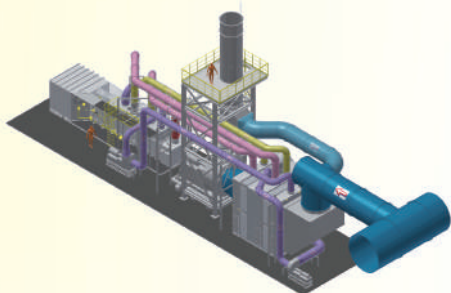
Taking Natural Agriculture as the best environmental plantation trend, we adopt the best optical properties of light to reach heat insulation, energy saving, reducing pests, aiming at enlarging total crops yield. This material is designed to develop a green, long lasting and environmental friendly agriculture, cherishing the loving kindness of our mother earth.

Our Advantage:

- Providing a suitable growth environment for crops by reducing thermal temperature within planting site, which help minimizing damage on plantation caused by heat and reducing the waste of energy on temperature control system.
- Sourcing suitable light strength and ratio to achieve better photosynthesis. Not only speed up crops growth but also increase nutritional value enhanced.
- Adopting optical shading effects to repel insects and consequently reducing loss.

Commentary▼

- The subject matter uses plastic film to let sunlight with specific spectrums to pass through the farming shed, thereby promoting crop photosynthesis and in turn accelerating crop growth. In addition, since most of the UV rays and infrared light are filtered, the temperature in the farming shed will decrease, thus achieving heat insulation effects. Because the spectrums in the shed differ from those outdoors, they can reduce the entry of insects.
- Compared to other companies' products, the subject matter can adopt plastic films in different colors targeting different crops. Different spectrums also pass through, thus achieving product differentiation. The subject matter has obtained an invention patent.
- The subject matter in cooperation with the National Pingtung University of Science and Technology has undergone in-depth research targeting the impacts of crops subject to different frequencies of light. Moreover, the product has been given to several domestic farms for use. A database has been established, with a promising market potential.



傑智環境科技股份有限公司
JG Environmental Technology Co., Ltd

傑智環境科技股份有限公司

JG Environmental Technology Co., Ltd.

趨近零排放之串聯式轉輪
高效率VOCs淨化設備
Approaching Zero
Emission Serial-Rotor
Type High Efficiency
Purification System

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簡介▼

本設備主要目的在於提供一種同時具高去除效率而趨近零排放及節能設計之含揮發性有機化合物 (VOCs) 廢氣淨化處理系統，可應用於包括半導體、光電、印刷、噴塗等產業高排氣風量、低 VOCs 濃度之製程排放廢氣，主要應用專利技術包括「發明專利 I629092 串聯式轉輪高效率淨化系統及串聯式轉輪高效率淨化方法」、「發明專利 US10603623B2 SERIAL-ROTOR TYPE HIGH EFFICIENCY PURIFICATION SYSTEM」以及「新型專利 M548246 轉輪高效率淨化系統」。

評語▼

- 本標的為串聯式轉輪高效率淨化系統，可用以處理含揮發性有機化合物之待處理系統，第一輪之吸附端尾氣會經由第二輪進行第二次吸附處理，以大幅降低揮發性有機化合物濃度，減少焚化後氣體藉由再處理反應器進行再淨化揮發性有機化合物 (VOCs) 之處理，效率可提升至 99% 以上，趨近於零排放效果。
- 本標的創新技術如串聯式轉輪高效率淨化系統及方法，已獲台、美、中等國發明專利。

Introduction▼

The benefit of our VOCs (volatile organic compound) purification equipment not only has a very high removal efficiency, but also has an optimized design with approaching zero emissions and energy saving advantage. Our system can be applied to industries including semiconductor, optoelectronics, printing, spraying and other industries with high exhaust. The main application patented technologies include "Invention Patent I629092: High Efficiency Purification System And Method Using Series-Connected Rotary Wheels", and "Invention Patent US10603623B2 SERIAL-ROTOR TYPE HIGH EFFICIENCY PURIFICATION SYSTEM" And "New patent M548246 High Efficiency Purification System Using Rotary Wheels".

Commentary▼

- The subject matter is a tandem rotary high-efficiency purification system. It can be used to treat organic compound-containing systems to be processed. The tail gas at the adsorption end in the first round undergoes second adhesion treatment in the second round to substantially reduce the concentration of volatile organic compounds and reduce incinerated gas. The reunification processing of volatile organic compounds (VOCs) through the processing reactor can improve efficiency to over 99%, approximating zero emission.
- The innovative technology of the subject matter such as the tandem rotary high-efficiency purification system and method have received an invention patent from Taiwan, the United States, and China.

VAGO

創意興業有限公司

Big Good Design Co., Ltd.



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VAGO微型真空壓縮機
VAGO Portable
Vacuum Device

簡介▼

VAGO 提供了嶄新的空間解決辦法，也是首款採用空氣動力學設計而成的全球最小的微型真空壓縮機，並在高度只有 7 公分，重量也只有 77 公克的精巧體積尺寸下可以產生超越家用吸塵器的真空壓力，讓使用者可以快速方便的壓縮軟質物品，增加行李箱與家中的收納空間，而內建的智慧感測器更可以自動偵測真空袋內的狀態，讓真空壓縮完成後自動停止，使用上非常的便利，並且 VAGO 的真空壓縮袋也是由三種特殊材質所製成，堅固耐用不易破損，而且整袋都可以水洗清潔並重複使用。

評語▼

- VAGO 為台灣原創品牌，獨家的專利設計能提供強大的真空壓力，可以輕鬆的將軟性衣物做極致壓縮。
- 全自動微型的真空機體積小又輕便，可以放在行李箱中隨身帶著走，搭配專利設計止氣閥技術的壓縮袋。
- 體積小、重量輕、整體重量僅有 77 公克，高度也只有 7 公分，外型簡潔大方，是好的設計。
- 目前已經熱銷至全球 20 多個國家，致力成為全球科技旅遊的領導品牌的企圖心值得鼓勵。

Introduction▼

VAGO offers an innovative solution when it comes to space utilisation in our day-to-day lives. It is the first product in the world to be powered by the smallest vacuum compressor designed with cutting-edge aerodynamics technology. VAGO can generate vacuum pressure that exceeds household vacuum cleaners despite being compact in size (7 cm tall and weighs 77 grams). The vacuum pressure allows users to compress soft items and increase storage capacity of their suitcases, shelves, cupboards quickly and effortlessly. The built-in smart sensor detects vacuum in the bag and stops VAGO automatically making it super easy to use. Furthermore, VAGO's vacuum bag is made of three special materials which makes it more durable, washable, reusable and less prone to breakage.

Commentary▼

- VAGO is an original brand in Taiwan. The exclusive patented design can provide strong vacuum pressure and easily achieve the extreme compression of soft garments.
- The automatic miniature vacuum machine is small and light. It can be carried in a suitcase. It also has a compression bag, with a patented air valve stop technology design.
- It has a small volume and a light weight. With a total weight of only 77 grams and height of only 7 centimeters, it has a neat and presentable appearance with a good design.
- Currently, the product has been sold in over 20 countries worldwide. The ambition to become the leading brand of global technological travel is worthy of encouragement.



晶達光電股份有限公司

Litemax Electronics Inc.

智慧交通旅客資訊系統 Intelligent Transportation Passenger Information System

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簡介▼

隨著 LCD 顯示器技術的發展，相關的應用已快速由工業自動化延伸至我們的日常生活中，戶外廣告顯示器、電視牆隨處可見，而使用場景從半戶外到全戶外的逐步擴展，根據市調資料顯示，戶外顯示器市場成長速度驚人，預期未來五年將以 88% 的年複合成長率成長，需求量持續成長中，商業性高。

產品特色如下：

- 大尺寸低功耗高解析高對比超薄邊框顯示器
- 自動調整顯示亮度與解析度之顯示器系統
- 陽光下可視技術 (Sunlight Readable)，背光壽命達 10 萬小時
- 領先業界的 IP65 防水解決方案
- 採用鋁材質進行設計，重量輕且耐腐蝕及生鏽，並且強固性佳
- 通過 SGS 跌落、振動、高溫 / 低溫測試

評語▼

- 具特殊的面板切割技術，可將大尺寸 4K 面板進行水平或垂直切割，彈性應用於不同場域。
- 具陽光下的可視技術。足夠的高亮度可確保任何光源條件下，顯示內容都清晰可讀。
- 具智慧型溫度管理技術，讓多種垂直市場建構顯示器系統時，擁有更聰明的平台架構。
- 提供符合 IP65 至 IP68 兩種標準之防水解決方案，可抵擋工業使用環境中常見的惡劣環境狀態。

Introduction▼

Along with the LCD technology development, the applications has extended rapidly from industrial automation to ours daily life. Outdoor signage, video walls are seen everywhere, and the use environment from semi-outdoor to fully outdoor. According to the research, the outdoor display market growth is astonishing, the compound growth rate is by 88% during future five years, and the demand is expected to grow continually.

Key Feature:

- Large size, low power consumption, high resolution & contrast, and ultra-thin bezel.
- Automatically adjusts the brightness and resolution.
- Sunlight readable technology, backlight life (MTBF) up to 100,000 hours
- Industry-leading IP65 waterproof & dust proof solution
- Aluminum housing, light weight, corrosion & rust-resistant, and strong construction.
- Drop, vibration, high/low temperature certified by SGS.

Commentary▼

- With the special panel cutting technology, large-size 4K panels can be cut horizontally or vertically, thereby achieving flexible applications in different fields.
- Through visible technology under the sun, the adequate brightness can ensure clear and readable contents under any light conditions.
- The smart temperature management technology enables multiple vertical markets to have a smarter platform framework when constructing a display system.
- Waterproof solutions that meet two standards (IP65 and IP68) are provided to resist harsh environmental conditions commonly seen in industrial environments.



翔宣富企業有限公司

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獨創 52:1手動矽膠槍
The Original 52X Power
Manual Caulking Gun

簡介▼

獨創 52:1 手動矽膠槍是目前業界首創發明結構專利，利用軸節機構帶動槓桿原理創造出優勢的性能，達到了 52:1，比目前市面上 26:1 產品加倍省力

當手施力按壓小手把 1 牛頓時，擠膠的力道能達到 52 牛頓以上，這遠遠領先了目前市面上所有的手動矽膠槍，即使在非常寒冷的天氣時當膠變得更黏稠時也能輕易的擠出膠！

因應製膠廠商不斷研發更先進的製膠技術，材料越來越黏稠的情況下，目前市面上所有的手動矽膠槍的性能已經無法擠壓出高黏稠的膠，必須使用電動或者氣動矽膠槍，但因價格昂貴且笨重，以及不便利的劣勢，相信我們的獨創設計能取而代之！

評語▼

- 本標的在創新研發上考慮按壓的舒適度，在功能上考量推力比、止檔力、最大出膠力與重量，因此在槓桿機構與推膠機構間，增加一肘節機構以降低使用者之手壓力道，另在槍把設計替換墊片，可進行替換單管、雙管與同心管之膠槍座。
- 本標的之創新膠槍設計已獲台、美、德、英、中、日等發明專利。

Introduction▼

The original 52:1 manual caulking gun is the first invented and patented in the market. It creates superior performance by using toggle mechanism to affect leverage. It reaches 52:1, which means it can save double effort compared with the 26:1 products.

When we press 1N at the trigger, the strength of pressing sealant can be more than 52N. It is far ahead of all of manual caulking guns we can see in the market. Even in very cold winter, it can be easy to press the adhesive out when the adhesive becomes much stickier.

To respond to the situations that the latest adhesive technology that the adhesive manufacturers keep inventing and adhesive that becomes stickier and stickier, the manual caulking guns we can see in the market now are not able to squeeze out. Therefore, the electric ones and the pneumatic ones are necessary to be used. However, they are expensive, heavy and inconvenient. We believe our unique design can replace them!

Commentary▼

- In innovative R&D, the subject matter takes press comfort into consideration. In terms of functions, the thrust ratio, stop force, maximum glue force, and weight are taken into account. Therefore, between the lever mechanism and glue mechanism, there is a toggle mechanism added to reduce the user's hand pressure. In addition, the glue gun handle has a gasket replacement design and a glue gun seat for replacing single tubes, double tubes, and concentric tubes.
- The innovative glue gun design of the subject matter has received an invention patent from Taiwan, the United States, Germany, the United Kingdom, China, and Japan.



華彩塗料實業股份有限公司

HUA TSAI PAINTS CO., LTD.

無機愛防水添加劑 I waterproof

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簡介▼

華彩塗料為專研生產無毒環保綠建材的塗料，及一系列的無機防水材顛覆傳統的施工方式！

本次申請產品為：全臺首創植物性無機長晶質鈣化物液態防水。無毒、無味、安全水性配方，施工簡易與水泥共工，取代水，可省時省工 50% 以上，CP 值高！

用於水泥和混凝土的防水添加劑，結構體好防水即完成。增強牆體防水、延長結構體壽命，給您最優越的防水效果，給建築最安心的防護！

評語▼

- 本標的為無機骨材生質之環保高性能防水添加劑，與水泥共工無毒無味之安全防水材。
- 本標的具備防水、抗滲、增強結構體、抑制裂縫、歷久耐候、抗腐蝕、易施工及縮短工時 50% 之優點，可解決業者之痛點。
- 已獲 SGS 檢驗及 CNS 規範；並已有知名建商、營造及廠商使用本標的。

Introduction▼

Huacai Coatings specializes in the research and production of non-toxic and environmentally friendly green building materials, and a series of inorganic waterproof materials to subvert the traditional construction methods! The product applied for this time is: the first plant-based inorganic long-crystalline calcification liquid waterproof in Taiwan. Non-toxic, tasteless, safe water-based formula, easy to construct and work with cement, replacing water, saving time and labor by more than 50%, high CP value!

It is used as a waterproof additive for cement and concrete, and the structure is completed when it is waterproof. Enhance the wall waterproof, extend the life of the structure, give you the best waterproof effect, and give the building the most secure protection!

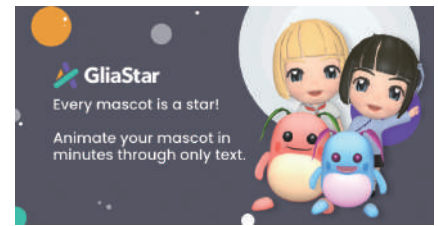
Commentary▼

- The subject matter is an environmentally friendly and high-performance waterproof additive for inorganic aggregate biomass. It is a non-toxic, odorless, and safe waterproof material that works with cement.
- The subject matter has the advantages of being waterproof, impermeable, and having a reinforced structure. It inhibits cracks; is durable, weather resistant, and corrosion resistant; is easy to contract; and reduces the working hours by 50%, which can solve the pain points of industrialists.
- It has undergone SGS inspection and is in line with CNS specifications. Well-known builders, constructors, and manufacturers are already using the subject matter.

GliaCloud

集雅科技股份有限公司

GliaCloud Co., Ltd.



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集雅科技人工智慧虛
擬角色影音製作方案
GliaStar - AI
Character Video
Creation Solution

簡介▼

「集雅科技人工智慧虛擬角色影音製作方案」主要協助毫無影音內容製作資源與經驗的文字網路媒體與一般企業，在短時間內能透過集雅自行研發的人工智慧影片合成技術，以全自動或是半自動的方式，將其原創內容與吉祥物輕鬆快速製作成有品質的影片。

創作者只要輸入文字內容，系統便會自動分析文字內容的語意，驅動其原創角色或是吉祥物模型表演相對應的情緒與動作畫面，並自動針對輸入的文字資訊進行重點摘要、圖文配對與素材剪輯，改變傳統耗費人力的影片內容產製方式，再透過虛擬角色強化企業形象，進而對未來資訊的傳播方式產生根本影響。

評語▼

- 本標的增加虛擬角色的開發設計技術 -A.I. 虛擬角色合成，無論中、英、日、韓、越等多國語言，輸入文字播報員可依文字做出搭配的動作，將其原創內容與客戶吉祥物製作成影音。減少需要進行 3D 人偶建模、綁定骨架、串聯情境模版與配音時間。
- GliaStudio 新增的 A.I. 虛擬角色合成，可以強化客戶與受眾需求的溫度與關聯度，目前已收費的使用客戶包含了台灣的中國信託，新聞媒體的股市解析，以及越南的某電視台；亦已試推包月制或廣告分潤制，能採因客戶、因使用方式等彈性方式，靈活運用，因地制宜的營運模式，值得未來的期待。

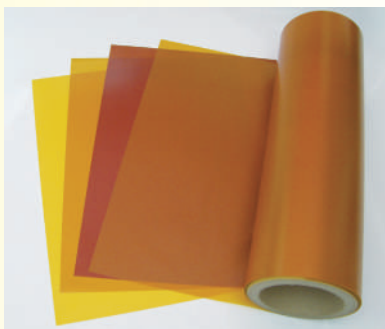
Introduction▼

GliaStar AI Character Video Creation Solution aims to empowers text publishers and marketers to easily produce quality animated videos with their brand characters from purely text content through GliaCloud's AI technology. For content creators, all they need to do is to prepare their scripts and GliaStar will analyze the semantics of the text content and produce character animation with corresponding emotions and actions. Meanwhile, GliaCloud's AI video creation system will summarize the scripts and match proper image or footage to further ease the video creation process.

This solution has proven beneficial as it raises the effectiveness of communication and brand awareness, yet saves up to 10 times production time and cost.

Commentary▼

- The subject matter has added the virtual character development design technology—A.I. virtual character generation. Whether in multiple languages such as Chinese, English, Japanese, Korean, and Vietnamese, the input text announcer can perform matching actions based on the text. The original content and the customer's mascot can be produced into a video, thereby reducing the time needed for 3D puppet modeling, binding skeletons, cascading situational templates, and dubbing.
- The A.I. virtual character generation added by GliaStudio can strengthen the bond and relevance required by customers and the general public. Currently, users imposed with charges include China Trust Bank in Taiwan, stock market analysis by news media, and a TV station in Vietnam. The monthly or advertising profit sharing modes have also been launched on trial. The business model by customer and usage-based flexible means and suiting local conditions are adapted, which is worth looking forward to.



MTC 達勝科技股份有限公司
MORTECH CORPORATION

達勝科技股份有限公司

Mortech Corporation

導熱聚醯亞胺薄膜材料
Thermally Conductive
Polyimide Film

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簡介▼

導熱聚醯亞胺膜，提供良好的導熱、絕緣與耐高溫性能，已應用在電源供應器、功率半導體及馬達控制器，產業涵蓋高階汽車電子、電腦、記憶體和遊戲、資料通信基礎設施、航空航天、手持設備和平板電腦、家用電器、照明設備、醫療儀器和電力與工業自動化等產業。近來柔性顯示器及 5G 傳輸快速成長，解決散熱問題更是需求殷切。未來市場應用潛力廣大。

達勝科技創新開發，為全球少數可生產全尺寸及導熱聚醯亞胺薄膜材料的國內公司，使材料能本土化和穩定迅速供貨，對產業轉型或技術提升不再受限國外廠商，提升產業整體競爭力非常重要。

評語▼

- 本標的利用高導熱材料添加進聚醯亞胺薄膜，使聚醯亞胺薄膜能具有良好的導熱性，但仍能維持相當好的絕緣性，因此能廣泛應用於需散熱快且能絕緣的應用，包括在手機與晶片散熱上。
- 本標的已獲相關專利，整體技術自主建立，創新技術及設備由公司團隊自行設計，可以本土化生產，且該公司具有原料合成技術，產品具有價格競爭力。

Introduction▼

Thermally conductive polyimide film offers good thermal conductivity, insulation and high temperature resistance. It has been used in power supplies, power semiconductors and motor controllers. The industry covers advanced automotive electronics, computers, memories, infrastructure of games and data communication, Aerospace, handheld devices and tablet computers, household appliances, lighting equipment, medical device, and power and industrial automation. Recently, flexible displays and 5G transmission have grown rapidly, and there is a strong need to solve the heat dissipation problem. The potential of future application market is vast.

Mortech Corporation is a Taiwan company who is one of few in the world that can produce 1~9mil of polyimide film and thermally conductive polyimide materials.

Commentary▼

- The subject matter uses high thermal conductive material added to polyimide film in order for the polyimide film to possess sound thermal conductivity while maintaining fairly good insulation. Hence, it can be extensively applied in applications that require fast heat dissipation and insulation, including heat dissipation in mobile phones and chips.
- The subject matter has obtained relevant patents. The overall technology has been self-established. Innovative technologies and equipment are designed by the company team and are produced locally. The company possesses raw material synthesis technology, and its products demonstrate price competitiveness.



精呈科技股份有限公司

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NP500L 智慧化高精度線
馬線切割加工機
NP500L Intelligent High
Precision Liner Motor
Wire EDM Machine

簡介▼

NP500L 為精呈開發之優良實用的高精度中型機。此機種擁有高精度、高效能、高捷能、智慧聯網、自動化等機能，並符合歐洲安全規範，通過 TUV CE 認證，兼具安全及美觀並操作方便，操作輕盈且不佔空間，是因應工業 4.0 概念而生的產品。

本產品特色與定位如下：

- (1) 人性化操作介面
- (2) 全數位式放電控制技術 DPM
- (3) 日夜不間斷之自動穿線系統，極高穩定性與成功機率

評語▼

- 本標的定位在加工高精度模具及醫療零件等客戶需求，主要創新特色包括高速自動穿線、自動銅線消耗補償以改善加工銅線因放電消耗所造成工件垂直度不佳問題，減少銅線使用消耗量，運用線上量測以及時補償確保加工精度良率，及建置遠端監控與管理系統。
- 本標的創新技術如放電加工機伺服裝置等，共獲台灣 11 件新型專利及 2 件發明專利。

Introduction▼

NP500L is an excellent and high-precision medium-sized machine.

This model has Qualified high-precision, high-efficiency, smart networking, automation and other functions. And it also meets European safety regulations which has passed TUV CE certification.

It is safe and looks attractive with gentle in operation and does not take up much space. It is suitable and comfortable for industry 4.0 products concept.

The features and positioning of this product are as follows:

- (1) Human machine interface
- (2) Fully Digital power Management (DPM) control technology
- (3) Automatic threading system without interruption of day and night, extremely high stability and success rate.

Commentary▼

- The subject matter is positioned to suit the customer needs for processing high-precision modes and medical components. The main innovative features include high-speed automatic threading, automatic copper wire consumption and compensation, and improvements on undesirable work piece verticality due to the electrical discharge and consumption of copper wire. Online measurements are applied to promptly compensate and ensure machining accuracy rates and construct a remote monitoring and management system.
- The innovative technologies of the subject matter, including discharging servo devices, etc., have obtained 11 new patents and two invention patents.



REAL[®]
SINCE 1972

寬豐工業股份有限公司

REAL LOCKS & SECURITY CO., LTD.

NFC雙機制櫥櫃密碼鎖 (RL9046B-NFC) NFC Combination Locker Lock (RL9046B-NFC)

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簡介▼

「NFC 雙機制櫥櫃密碼鎖」是兼具電子鎖具管理的便利性及機械鎖具的耐用、高安全性的新式鎖具，其使用方式是將「具 NFC 功能並且安裝 APP 的智慧型手機」置於鎖具感應區上，透過 NFC 訊號和 Dynamic Tag 讀取 MCU 解密後的 GPIO 的狀態，依序撥動每個字輪，即可解讀到字輪的正確位置，「NFC 雙機制櫥櫃密碼鎖」可適用於個人鎖具，方便公共櫥櫃的管理。

「NFC 雙機制櫥櫃密碼鎖」(RL9046B-NFC) 是目前鎖具產業唯一不須電源供應、不用電子零件驅動，卻能進行鎖具管理的全新技術，搭配穩定、不易破解、破壞的機械鎖制機構，沒有電池、馬達及感應元件，亦沒有待機限制、不需休眠...等優點，為市場上具創新性的產品。

評語▼

- 傳統的鎖具包含兩類不帶電力的機械鎖具與需直流或交流供電的電子式鎖具。申請公司的標的「NFC 雙機制櫥櫃密碼鎖」，同時擁有遠端管理及鎖具使用歷程管理的優點，且無電力消耗、停電、及更換電池等問題，產品具創新性。
- 本標的規劃應用於公眾場所的置物櫃中。產品定位與創新處相當明顯，未來銷售方向與規劃也明確。

Introduction▼

RL-9046B-NFC is the latest innovation of electronic-mechanical integration to solve issues like: 1) No operation records and inconvenience from traditional mechanical locks, and 2) troubles of power source of electronic locks. RL-9046B-NFC is using mobile phone to retrieve the code, and the APP and cloud management help to enhance the security level by monitoring and recording the status of the locks on your smart phone.

Unlike other electronic locks, RL-9046B-NFC is not only cost saving on installation as there is no power source / wire needed, but also cost saving on maintenance as the NFC system does NOT structured with motors and solenoid valves.

The manager would never worried lost or duplicated of master keys. Our product design allows manager to share the access authorization on the mobile phone and making management more easier for everyone.

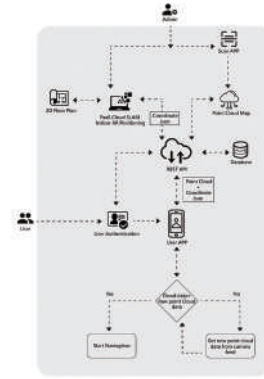
Commentary▼

- Traditional locks include two types of locks, one of them is mechanical locks without power, and another one is electronic locks requires DC or AC power. The "NFC Combination Locker Lock" from REAL Locks & Security Co., Ltd. has the advantages of remote (cloud) management and lock use history (records) management. This product is innovative to obtain the advantages of electronic locks without power consumption, power outage, or battery replacement problems.
- The planned application of the subject matter is inside lockers in public places. The product positioning and innovation are obvious, and the future sales direction and plan are also clear.



德廣數位設計有限公司

DE GUANG DIGITAL DESIGN CO., LTD.



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可視覺化室內空間相對定位PaaS平台
Smart Retail：SLAM
INDOOR AR OMO

簡介▼

透過同步定位與地圖構建科技發展智慧導覽服務，打造更高品質的室內導覽智慧新服務，已成產業關注焦點。然而，現今市面上眾多導覽行動應用程式僅提供單純的圖文資訊，難以增加使用者對於平台的使用黏著度，以致於推出行動應用程式後使用率低。德廣數位設計公司研發『可視覺化室內空間相對定位 PaaS 平台』提供 iOS 與 Android 雙平台行動應用程式。此服務旨提供使用者新穎的操作模式，不僅圖文資訊，更結合了擴增實境技術，讓使用者能夠體驗虛擬與實境結合的互動服務。同時結合同步定位與地圖構建技術，達到區域性的主動資訊即時服務。

評語▼

- 德廣專注研發 SLAM(同步定位與地圖構建) 技術，結合 AR 技術來擴充消費者的體驗。
- 該技術主要利用多點的感測與定位技術，來對目標進行多點測距運算，提供非常突破性的精準定位效果。該技術的發展潛力在消費市場方面，不但能針對消費者提供極為客製化的服務體驗，商家更能有效利用實體展櫃空間，擴增行銷組合與手法。
- 生產製造端則能趕上工業 4.0 與生產智能化趨勢，協助廠商更加智能地進行生產管理，其後續技術應用的外溢效果絕不容小覷。

Introduction▼

Indoor navigation based on SLAM is already a possibility in our services. De Guang Digital Design Co Ltd explained how to use the SLAM technology provided to achieve inside-out mobile AR tracking. The combination of Indoor AR is the first of its kind and can revolutionize a host of industries, including:

- Shopping and retail: Retailers can use this technology to point customers to particular parts of a store, for instance, or to highlight specific product offerings in a particular aisle.
- Entertainment and gamification: The technology can be used to make AR treasure hunts and games more engaging, as items can be placed in exact locations to enhance users' experience and enjoyment within their surroundings.
- Tourism: Indoor AR can power AR tours of tourist attractions with a virtual guide or enhance AR entertainment for large concert spaces and sport stadiums.

Commentary▼

- De Guang Digital Design Co., Ltd. focuses on the research and development of Simultaneous Localization And Mapping (SLAM), which combines with AR technology to expand consumer experience.
- The technology mainly uses multi-point sensing and positioning technology to perform multi-point ranging computation on the target. It provides breakthrough precision positioning results. The development potential of the technology lies in the consumer market, not only providing extremely customized service experiences targeting consumers, but also enabling businesses to effectively use the physical showcase space to expand the marketing mixes and methods.
- The manufacturing end is keeping up with the trends of Industrial 4.0 and production intelligentization, assisting vendors to better engage in smart production management. The spilling effects of subsequent technological applications cannot be underestimated.



歐思佛生物科技股份有限公司

Dr. Oxford Biotech Factory Co., Ltd.

多層次超音波變頻萃取技術 The Multilevel Ultrasonic Frequency Conversion Extraction Technology

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簡介▼

多層次超音波變頻萃取技術 - 化妝品與保健食品應用

此創新研究技術可於低溫破壁萃取出中草藥等草本植物之活性成分可安全的應用於醫藥品及保健食品或化妝品，目前已成功應用在多項保健食品及化妝品商品上市熱賣中。

此多層次萃取在無氧下進行破壁且應用變頻超音波於低溫萃取，此技術不僅能夠於較短時間內自植物細胞中萃取出有效成份，可有效縮短萃取時間，並且能夠有效防止有效成份被氧化，使得萃取液保持高度活性高產率且顏色清淡透明。

本技術應用綠蜂膠萃取提高 PPLS 活性成份以及樂得髮洗髮精系列，以達到低成本高活性成分，本技術榮獲中華民國發明專利。

評語▼

- 本標的應用為利用多層次超音波變頻的技術來萃取綠蜂膠。萃取物可成為保健食品、化妝品與日常生活用品（洗面乳、洗髮精等）。
- 本標的特色為萃取過程能利用超音波震裂細胞壁並維持低溫，不讓萃取物因升溫而產生破壞，能應用到不同農產品的萃取，並得以保有較高的營養素，已獲發明專利。

Introduction▼

The Multilevel Ultrasonic Frequency Conversion Extraction Technology-Cosmetics And Health Food Applications

This innovative research technology can extract the active ingredients of Chinese herbal medicines and other herbs at low temperature. It has been successfully applied in a number of health food and cosmetic products on the market.

This extraction breaks the wall under anaerobic conditions and applies ultrasonic frequency conversion to low-temperature extraction. This technology can not only extract effective ingredients from plant cell in a short time, but also effectively shorten the extraction time and effectively prevent the effective ingredients from being oxidized.

The application of this technology to improve PPLS active ingredients and LadéFa[®] shampoo series, low cost and high active ingredients, this technology won the invention patent of the Republic of China.

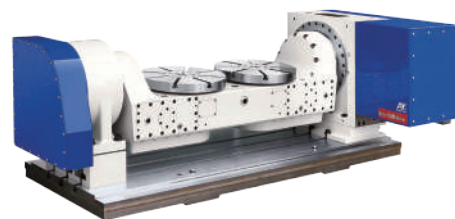
Commentary▼

- The applications of the subject matter include the use of multi-level variable-frequency ultrasound technology to extract green propolis. The extract can be used as health food, in cosmetics, and other daily necessities (face wash, shampoo, and so on).
- The subject matter features the use of ultrasound to rupture cell walls and maintain low temperatures during the extraction process. This is to ensure the extract does not get destroyed due to elevated temperatures. It can be applied in the extraction of different agricultural products and the retention of more nutrients. The product has obtained an invention patent.



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新型凸輪式雙
回轉軸結構分度盤
Dual Rotary Cam
Structure Rotary Table

簡介▼

換料倍速、稼動率超升級！歐權科技推出新型凸輪式雙迴轉軸結構分度盤，搭載 Roller CAM Driver 無背隙滾齒凸輪核心。兩組迴轉軸同時由一組動力源驅動，分割精度及幾何精度與單盤面產品無異；提升產能同時保有精度表現。傳動效率達 85% 以上，僅需使用較小型伺服馬達便可驅動兩組盤面，並保有 Roller CAM Driver 高轉速特性。過去用蝸桿蝸輪產品當磨耗產生背隙時，多組盤面要匹配調校幾乎是不可能，往往只能報廢；但 Roller CAM Driver 採滾動式無背隙、低磨耗設計，讓分度盤應用提升至更高檔次。

評語▼

- 本標的運用滾齒凸輪機構以達成滾動接觸傳動與傳統市場既有產品使用渦桿與渦齒摩擦接觸傳動比較，具有高精度、高剛性及壽命長的優點，更適合於成對零件同時加工或組裝配合的工件，且自組專用加工機加工重要零件，如軸承；並自行完成軸承預壓、滾子分割及齒輪齒合等組裝程序。
- 本標的創新技術如雙旋轉凸輪結構等已獲台、美、日專利。

Introduction▼

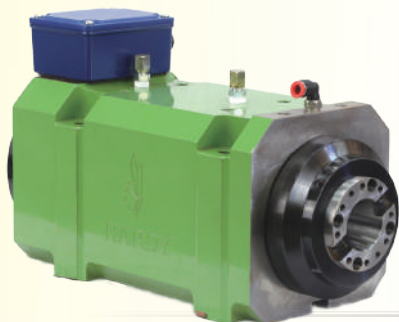
Double production speed! AutoCam presents the all new Dual spindle Roller Cam Driver tilting rotary table. Two rotations are driven by only one servo motor; furthermore, it keeps accuracy and performance as good as a single spindle model. It does increase the production volume and precision at the same time.

The transfer efficiency of Roller Cam Driver can reach over 85%. Although two rotaries are driven by only one motor; it still working for heavy loading with high speed.

Dual spindle design is impossible to adjust the mechanical accuracy if the rotary core got wear and backlash. However, Roller Cam Driver is a durable core chosen, which build by no-wear and non-backlash structure; it is a ideal selection for multi-spindle application.

Commentary▼

- The subject matter uses a roller gear cam mechanism to achieve rolling contract transmission. Compared to existing products in the traditional market that use worm and gear friction transmission, the product has the advantages of high precision, high rigidity, and long life, making it more suitable for paired parts and processing or assembling matching work pieces. Additionally, the special processing machine is self-assembled to process important parts, such as bearings. Bearing preloading, roller division, gear toothing, and other assembly procedures are also self-completed.
- The innovative technologies of the subject matter, such as double-rotation cam structure, have received patents from Taiwan, the United States, and Japan.



翰坤五金機械有限公司

Hann Kuen Machinery & Hardware Co., Ltd.

內藏式搪銑主軸頭 Built-in Motor Spindle Unit SM55

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簡介▼

本公司研發之 SM55 內藏式主軸頭，產品結構精良，變頻馬達內藏於主軸，簡化材積和組件數量，安裝配置在專用機上更具彈性。內置冷卻設計，能有效冷卻動力源，確保溫升維持穩定範圍，進氣孔的特殊設計，能有效排除殘存切削液，延長產品的使用壽命。有效解決業界專用機組件體機龐大笨重、安裝不易、加工精度、加工效率不足等問題，符合專用機市場高品質、高精度和高效能發展趨勢。

評語▼

- 本標的主要為因應專用機市場往縮小體積提高效率發展，將內藏式感應變頻馬達之轉子設定於定子內，且同軸套接於主軸，以驅動主軸旋轉提升加工精度，冷卻水套設置於空殼體內，藉由冷卻流道對動力源達到冷卻效果，另設計進氣孔，以有效排除殘存切削液。
- 本標的已申請台灣及大陸新型專利，並獲第 28 屆台灣精品獎及 2019 台灣創新技術博覽會發明競賽銀牌獎。

Introduction▼

HARDY has developed an excellent base structure for SM55 built in motor spindle. The inverter motor is embedded inside the spindle, which reduces the product dimensions and simplifies the number of components. This also makes more flexible and easy for the installation and configuration on the special machine. The spindle cooling design can be effectively cooled by an oil cooler and ensure a stable temperature rise. The air inlet can effectively eliminate the residual cutting fluid and extend the service life of the product. SM55 spindle effectively solves the problems of the industry's special machine tools such as huge and heavy, difficult installation, accuracy correction, and processing inefficiency. This new product accords with the demands of high quality, high precision and high efficiency in the special machine market.

Commentary▼

- The subject matter is mainly in response to special machinery developing towards size reduction and improved efficiency. The rotor of the built-in induction variable-frequency motor is set in the stator, which is coaxially sleeved on the spindle, thereby driving the spindle to improve machining accuracy. The cooling water jacket is placed in the empty case. The cooling channel is used to cool the power source. An air inlet has also been designed to effectively eliminate residual cutting fluid.
- The subject matter has applied for a new patent in Taiwan and China. In addition, it has been awarded the 28th Taiwan Excellence Award and the silver medal at the 2019 Invention Contest of Taiwan Innotech Expo.



邁雅設計有限公司

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FORMART智慧真空成型機
FORMART Smart Vacuum
Former

簡介▼

全世界第一台智慧真空成型機 FORMART，鎖定微型創業少量生產不易的痛點，重新設計傳統真空成型機，並賦予智慧化、人性化操作介面，透過彩色螢幕動畫引導、單鍵操作，任何人都可以立即變身專業設計師快速實現創意，並克服少量生產障礙。

FORMART 更提供三種吸力模式控制，允許使用者自行定義吸力，讓多樣化的模具材質應用成為可能！創業者再也不用為了昂貴的模具與極高的最小訂量而煩惱。此外 FORMART 更是全世界第一台僅推廣環保板材使用的成型機，不但所有原廠塑膠板皆符合無毒、食品級應用，更在塑板的四個角落印上回收標示，讓後續廢料的回收管理更加方便。

評語▼

- 本標的友善的操作介面，使無經驗的使用者都能輕易上手操作，可製作產品外殼、個性化包裝、文創面具 ... 等用途；非常適合微型創業者、工作坊、廣告設計 ... 等使用。主要創新包含塑板自動辨識、除溼、快速切換、吐氣脫模、加熱快速、操作防呆安全等設計。
- 本標的創新技術真空吸塑之塑板設備已獲台灣發明專利。

Introduction▼

FORMART is the world first smart vacuum former which allows people to make plastic blisters in their house. Compare to traditional Vacuum Former, FORMART has a modern appearance, smaller size and lighter weight. It has patented machine structure with build in intelligent control system, multiple sensors and full color LCD. Through the colorful animation, everyone can easily operate the machine step-by-step without needing any experience. FORMART greatly reduces the complexity and improves the success rate of the forming process. It brings more creative possibilities to home entrepreneurs to support them realize their creations immediately.

Besides, FORMART promote only environmental friendly materials, all plastic sheets are non-toxic and conform to food applications. Furthers, all of the sheets got recycle label during each corner which make it easily to be recycled.

Commentary▼

- The user-friendly operational interface of the subject matter enables inexperienced users to easily operate it. It can produce product casings, personalized packaging, cultural and creative masks, etc., which are highly suitable for micro-entrepreneurs, workshops, advertising design, and other uses. The main innovations include automatic identification of plastic boards, dehumidification, fast switching, exhalation and demolding, fast heating, foolproof safety, and other designs.
- The innovative vacuum forming plastic board of the subject matter has obtained an invention patent in Taiwan.

FUJACOOK
富 甲 酷 客



FUJACOOK即食鍋
FUJACOOK Fusion Cooker

薩摩亞商富甲一方餐飲管理 顧問有限公司台灣分公司

Samoa Providers FUJIAYIFANG Restaurant
Management Consultants Ltd. Taiwan Branch

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簡介▼

- FUJACOOK 即食鍋除外型突破傳統，前後方鍋可層層堆疊，同時前後鍋分開獨立控溫，用哪鍋開哪鍋，吃多少煮多少，永無剩菜，改善空燒不便與浪費能源，追求健康、經濟又環保。
- FUJACOOK 即食鍋顛覆傳統鍋具，集鐵板燒、煎炒鍋、湯鍋、燜鍋、蒸鍋、火鍋、不沾鍋等優點於一體，實現「一鍋萬用、即烹即食」！
- 歷經四年投入超過九千萬新台幣，改良、試用、再精進，絕不向品質妥協，結合各式精巧配件免換鍋即可滿足蒸、涮、燜、燒、煎、煮、炒、燉等各式料理需求，是真正意義上的一鍋萬用，方便料理盡在 FUJACOOK 即食鍋。

評語▼

- 本標的「即食鍋」為一體式呈高低構成之兩矩形鍋具，採獨立分開加熱（前鍋 500W，火鍋 700W），依食材不同，便於快速進行八式料理（燜、燒、煎、烤、蒸、燉、涮、煮），且易於水洗清理；就現在生活來說，可提供創新、實用、輕巧、簡便之煮食功能。
- 鍋具設計及相關配件已獲有新型、新式樣等專利；已於百貨公司、全家便利商店及網路銷售，應有更大之可期商機。

Introduction▼

- The FUJACOOK fusion cooker breaks through the tradition. The front and rear pots can be stacked one after another with extra utensil. At the same time, the front and rear pots are separated temperature control. Cooking food as need without any waste which is good for health, economy and environmental protection.
- FUJACOOK fusion cooker overturns traditional pots, integrating Teppanyaki, frying pan, soup pot, stew pot, steaming pot, hot pot, non-stick pot and other advantages into one, realizing "one pot, all-purpose, instant cooking"!
- Being four years of investing more than NT\$90 million, we've been improving, testing, and made further progress to meet high quality. Combining varies accessories, the fusion cooker can do well in different cooking ways and without changing the pot. FUJACOOK fusion cooker is truly one-pot all-purpose, convenient cooking

Commentary▼

- The instant pot is a pot constituted of two rectangles with high and low heights. Independent separate heating is adopted (front pot 500W; hot pot 700W). Eight-style cooking can be quickly performed (simmering, roasting, frying, baking, steaming, stewing, roasting, instant boiling) depending on food ingredients available. It is also easy to clean with water. As far as modern living is concerned, the product features innovativeness, practicality, is lightweight, and offers convenient cooking.
- The pot design and related accessories have obtained new and design patents. It is now sold in department stores, convenience stores, and on the internet. Greater business opportunities are anticipated.



FONTRIP
豐趣科技股份有限公司

豐趣科技股份有限公司

Fontrip Technology Co., Ltd.

雲端多階層目的地旅遊服務平台



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雲端多階層目的地
旅遊服務平台
Multi-Tiered Destination
Tourism Service Cloud
Platform

簡介▼

豐趣科技一直專精於目的地旅遊資源管理服務平台的技術開發與服務維運，雲端多階層目的地旅遊服務平台為豐趣科技研發多年的臺灣目的地旅遊資源管理服務平台，完全由豐趣科技自行研發和建置，運用 Multi-sided platform 架構串接旅遊資源供給端（周邊景點與交通合作店家）、產品設計與包裝端（旅行社 / 代理商）以及多渠道分銷端（國內外銷售通路），即時提供整合且清楚的資訊流、服務流、物流與金流服務給供給與銷售端，加速跨產業間水平與垂直的合作，並且可以有效降低繁瑣的資訊傳遞與清分清算所耗費的營運成本與時間。

評語▼

- 持續研發雲端多階層目的地旅遊服務平台的衍生性設備 -- 定點式自動售票機，可以置放在飯店和景點，讓旅客可以在飯店大廳或是景點現場直接透過定點式自動售票機了解週遭的遊程，不須透過旅客個人的手機和網路，就可以直接在機器上以無帳號方式進行購買，藉此提高旅客購買的意願、頻次與滿意度。整體服務模式創新立意頗佳。
- 目前平台上已有超過 3,000 個以上旅遊合作供應商並發行 250 萬套的旅遊套票商品，銷售額達 1,700 萬元在系統架構上整合多階層的電子票券發行與清分清算機制，金流端則串接 10 間以上的金融服務業者。

Introduction▼

Fontrip is dedicated to becoming the best solution provider for the global destination tourism industry. Multi-tiered destination tourism service cloud platform is the tourism resource management system which is designed and developed by Fontrip independently.

Features:

- Support Multi-level platform to concatenate tourism suppliers (attractions and transport partners), product design and e-packaging (travel agency/agent), and multi-channels distribution (domestic and oversea sales channels).
- Provide real-time information, service, redemption, logistics, and cash flow with distribution channels.
- Speed up horizontal and vertical cross-domain system integration.
- Reduce operation cost and time of the complex information transmitting, and clearing and settlement.

Commentary▼

- The fixed-point automatic ticket vending machine, a derivative device of cloud multi-level destination travel service platforms, continues to undergo development. It can be placed in hotels and scenic spots. The fixed-point automatic ticket vending machine updates travelers with surrounding journeys while in the hotel lobby or at a scenic spot. Travelers can directly make purchases via the device as visitors, without having to use their personal phones and the Internet. This will enhance travelers' purchase intention, frequency and satisfaction. The overall service model is innovative and well-intended.
- There are currently over 3,000 travel cooperation suppliers on the platform and 2.5 million sets of travel package products, with sales reaching \$17 million. The multi-level e-ticket issuance, clearing, and settling mechanisms are integrated through the system framework. The cash flow end is connected to more than 10 financial service providers.



醫百科技股份有限公司

EPED Inc.

"雷帝納"手術導航系統及其附件
Retina-Surgical
Computerized Navigation
and Simulation System
and Accessories

黃大可

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簡介▼

『“雷帝納”手術導航系統及其附件』為應用本公司核心技術『光學定位與導航技術』研發而成的外科手術用導航系統，主要適應症範圍涵蓋神經外科、整形外科以及耳鼻喉科，輔助醫師於手術時進行導航；系統特色為結合 3D 電腦斷層 (CT) 與核磁共振造影 (MRI) 等醫學影像，進行影像判讀與 3D 模型資料重組，搭配光學立體定位技術，以及軟體介面的開發、器械資料庫的建立、手術器械的定位器轉接設計，完成全套手術導航系統的整合。協助醫師用於臨床手術，使醫師在術中利用更多臨床資訊以精準的定位導航，利用微創減少臨床手術風險，提高手術安全性。

評語▼

- 本標的為應用「光學定位導航系統」研發而成的外科手術用導航系統，主要應用於微創手術，範圍涵蓋腦、耳鼻喉、顱顏部外科手術，輔助醫師於手術時進行導航。
- 本標的特色及競爭力為：精準定位、微創手術、相容性高、性價比高。已獲 8 項發明專利，另有多件專利申請中。
- 已獲 TFDA 及歐盟 CE 認證、馬來西亞 MDA 認證。開始行銷國內外。

Introduction▼

The RETINA Stereotactic Surgery Navigation System is a surgical navigation system developed by EPED's. It applies the core technology of the company based on "Optical Positioning and Navigation Technology". The system applications include Neurosurgery, E.N.T., Oral and Maxillofacial surgery, Plastic Surgery and more minimally invasive procedures related to the cranium. While operating, the physician conducts navigation in real time; the system features the combination of 3D computer tomography (CT) and magnetic resonance imaging (MRI). The system then performs the image interpretation and 3D model data reorganization and optical stereo positioning. The establishment of the database and the design of the locator adapter of surgical instruments complete the integration of the complete surgical navigation system. RETINA assists physicians during clinical operations, enabling them to use more clinical information to accurately locate and navigate, eliminating targetable abnormalities while reducing time at OR and allowing patients to recover faster and better.

Commentary▼

- The subject matter is a surgical navigation system developed through the application of the "optical positioning and navigation system." Its main applications include minimally invasive surgeries, covering the brain, ear, nose, throat, and cranial facial surgeries. It is intended to assist physicians in navigating during surgery.
- The features and competitiveness of the subject matter lie in precision positioning, minimally invasive surgeries, high compatibility, and a high cost-price ratio. It has obtained eight invention patents, and many patent application files are currently being processed.
- It has received certification from TFDA, European Union CE, and MDA certification from Malaysia. The product sales at home and abroad have commenced.

申請須知

一、目的

為鼓勵中小企業從事創新研究發展、提升技術與服務水準、增強競爭力，經濟部依據「創新研究獎－中小企業發展基金獎助中小企業創新研究作業要點」針對持續以有組織、有系統之方法，自行從事創新研究而有具體成效之中小企業，甄選傑出者予以適當之獎勵，以期技術生根，進而達到產業升級與健全發展之目的。

二、申請資格

(一) 獎勵對象

合於行政院核定「中小企業認定標準」且目前仍在營運中之中小企業。

(二) 獎勵範圍

自行研發之創新性產品、技術、製程、流程、服務(包含技術服務、知識服務、商業服務)等項，於民國 108 年完成，並已商業化運用或量產者。

三、獎勵方式

- (一) 申請企業前一屆未曾獲本獎項獎助金，經評審通過者獲頒證書及獎助金新臺幣 15 萬元正，以 30 名為限。其中以員工數認定之中小企業得獎名額以不超過 15 名為原則，實際得獎名額視申請審查情況核定(獎助金須依稅法相關規定辦理扣繳)。
- (二) 申請企業前一屆如已獲本獎獎助金，經評審通過者僅頒證書，不提供獎助金，以不超過 10 名為原則。
- (三) 申請獎勵之標的已(曾)獲得政府機關補助，經評審通過者僅頒證書，不提供獎助金，以不超過 10 名為原則。但其獲得補助並執行完畢後，再自行創新及研發程度高者，不在此限。
- (四) 同一企業當年度同時有兩項(含)以上之標的獲獎，僅頒發獎助金新臺幣 15 萬元正，不得累加獲獎金額。

四、申請作業

- (一) 申請時間：即日起至 109 年 6 月 1 日 23:59 止(系統於 6 月 2 日 00:00 自動關閉)
- (二) 線上申請：創新研究獎專屬網站 <http://tsia.moeasmea.gov.tw>
- (三) 申請資料上傳
 - 1. 申請書
 - 2. 公司登記資料影本(註 1)、製造業請加附工廠登記(或臨時工廠登記)證明文件影本(註 2)
 - 註 1：可逕行至全國商工行政服務入口網 <http://gcis.nat.gov.tw> 查詢列印。
 - 註 2：製造業之廠房面積及電力容量、熱能未達「工廠從事物品製造加工範圍及面積電力容量熱能規模認定標準」第 3 條規定之規模者免附工廠登記證明文件，惟需檢附切結書。
 - 3. 申請獎勵標的之商業化或量產之相關證明文件(於 108 年申請標的研發完成後至 109 年 5 月 31 日前銷售之發票、合約書、訂單等，若為醫療或食品需檢附相關主管機關核可之證明文件)

4. 其他申請獎勵標的之相關證明文件(如：專利、獲獎記錄、標準、認證、著作權、相片及型錄等〔請參選企業儘量提供〕)
 5. 以員工人數認定之中小企業，請上傳 108 年 1~12 月勞保局核發之「勞工保險局保險費繳款單及明細表」。
註：以資本額或營業額認定之中小企業免附。
 6. 108 年度營利事業所得稅結算申報書。(包含資產負債表及損益表；此項資料最遲應於 109 年 6 月 15 日前上傳補件)
 7. 個人資料提供同意書(須加蓋公司大、小章)
- (四) 洽詢電話
(02)23660812 分機 213 創新研究獎工作小組 茆小姐

五、評審

(一) 評審方式

分為資格審、初審與決審 3 階段：

1. 資格審：由創新研究獎工作小組進行基本資料審查，缺件者應於期限內完成補件。
2. 初 審：由初審委員會進行申請書審查，依審查結果進行實地訪審，並推薦入圍決審名單。
3. 決 審：由決審委員會進行審查，並決定得獎名單。

(二) 評審標準

基本評審項目及權重：

- | | |
|-----------------------------|------|
| 1. 申請獎勵標的之創新性 | 35 % |
| 2. 申請獎勵標的之實用性 | 35 % |
| 3. 申請獎勵標的之國內外競爭力 | 20 % |
| 4. 申請企業之目前及中長期研發構想及營運 | 10 % |

100 %

(三) 評選原則

當申請標的之評審積分相若時，以未曾獲本創新研究獎之企業優先考慮，惟仍由評審委員會議決之。

六、得獎企業之責任與義務

得獎企業有配合蒐編專輯、提供相關資訊及參加頒獎典禮、成果展示會與中小企業創新研究獎聯誼會等相關活動之義務，並有建立與傳承本獎項之精神與樹立學習典範之責任，得獎企業若經查證有違反本須知規定、不實陳述或違反環保與工安衛、智慧財產權等相關法規情節重大者，或其他爭議事件致影響社會大眾及本獎項形象者，主辦單位得撤銷得獎資格，其證書及獎助金應繳回，並自負法律責任。

七、其他

得獎名單預計於 109 年 11 月底前公佈，並以專函通知所有申請企業。

附錄 1：行政院核定之中小企業認定標準相關規定

- ◆ 中小企業係指依法辦理公司或商業登記，並合於下列標準之認定：
 - 一、製造業、營造業、礦業及土石採取業實收資本額在新臺幣八千萬元以下者。
 - 二、除前款規定外之其他行業前一年營業額在新臺幣一億元以下者。
- ◆ 另就經常僱用員工數為中小企業認定標準，則不受前項規定之限制：
 - 一、製造業、營造業、礦業及土石採取業經常僱用員工數未滿二百人者。
 - 二、除前款規定外之其他行業經常僱用員工數未滿一百人者。
- ◆ 具有下列情形之一者，視同中小企業：
 - 一、中小企業經輔導擴充後，其規模超過第二條所定基準者，自擴充之日起，二年內視同中小企業。
 - 二、中小企業經輔導合併後，其規模超過第二條所定基準者，自合併之日起，三年內視同中小企業。
 - 三、輔導機關、輔導體系或相關機構辦理中小企業行業集中輔導，其中部分企業超過第二條所定基準者，輔導機關、輔導體系或相關機構認為有併同輔導之必要時，在集中輔導期間內，視同中小企業。

附錄 2：申請標的分類定義標準

類 別	定 義
資訊與電子類	含通訊設備、電腦通信、資訊軟體、資訊硬體、消費性電子、半導體製造、電子機械器材製造修配、視訊產品、視聽電子製造、電子零組件製造、光電器材、積體電路設計、其他電子資訊製造等資訊與電子相關之標的。
機械與自動化類	含機械設備製造、運輸工具製造，模組開發製造、航太製造、自動化機械、物流 / 倉儲設備、動力傳動 / 制動設備及零組件等機械與自動化相關之標的。
材料與生技類	含生物化學、纖維材料、工程塑膠材料、金屬材料合金、鑄造材料、化學品製成、生化技術、藥品製造、食品加工製造、醫療器材等材料結構製造及生化科技等材料與製程相關之標的。
服務類	含知識服務、技術服務與商業服務模式等，其成功經營模式、服務方式或行銷方法具有前瞻性、示範性及可提昇工作效率之標的 (例如：環保服務類、能源服務類、檢測服務類等)。
綜合類	含一般民生用品、消費性產品、創意設計及非前述類別之申請標的物皆納入綜合類之範圍。

註：請企業先依上列分類定義填寫申請之標的所屬類別，審議過程中評審委員會得依標的內容與性質確認或更動申請類別。

決審委員名單

決審委員召集人：何晉滄 委員 經濟部中小企業處處長

何晉滄 經濟部中小企業處處長

王錫福 國立臺北科技大學校長

吳秀梅 衛生福利部食品藥物管理署署長

呂正華 經濟部工業局局長

李育家 社團法人中華民國全國中小企業總會理事長

林德生 經濟部技術處代理處長

邱求慧 科技部產業及園區業務司司長

洪淑敏 經濟部智慧財產局局長

唐彥博 中國科技大學校長

張建一 財團法人台灣經濟研究院院長

陳振遠 義守大學校長

馮展華 國立中正大學校長

黃文谷 經濟部加工出口區管理處處長

(上述名單除召集人外，依姓氏筆畫排列)

初審委員名單

初審委員總召集人：官政能 委員

類別	姓名	服務單位 / 職稱
資訊 與 電子類	詹文男 (分組召集人)	財團法人資訊工業策進會產業情報研究所所長
	洪新原	中正大學資訊管理學系暨研究所教授
	徐永珍	清華大學電機工程學系暨電子工程研究所教授
	陳培殷	成功大學資訊工程系暨研究所教授兼電資學院副院長
機械 與 自動化類	蔡新源 (分組召集人)	創智智權管理顧問股份有限公司董事長
	林孟儒	逢甲大學機械與電腦輔助工程學系專任副教授
	洪坤璋	冠德國際專利商標事務所智財策略部經理
	賴永祥	財團法人精密機械研究發展中心總經理
材料 與 生技類	廖啓成 (分組召集人)	財團法人食品工業發展研究所所長
	丁志明	成功大學材料科學及工程學系教授
	彭裕民	財團法人工業技術研究院副院長
	賴志煌	清華大學材料工程科學學系教授兼工學院院長
服務類	方至民 (分組召集人)	中山大學企業管理學系教授
	張文龍	中華民國工業協進會秘書長
	陳 曦	文化大學財務金融系助理教授
	趙義隆	臺灣大學國際企業學系教授
綜合類	官政能 (分組召集人)	實踐大學工業產品設計學系教授
	李建國	德國 iF 國際論壇設計有限公司亞太分公司總經理
	林鑫保	臺灣設計研究院副院長
	張碩毅	中正大學管理學院院長

(除分組召集人外，依姓氏筆畫順序排列)

第27屆

中小企業創新研究獎

The 27th Taiwan SMEs Innovation Award

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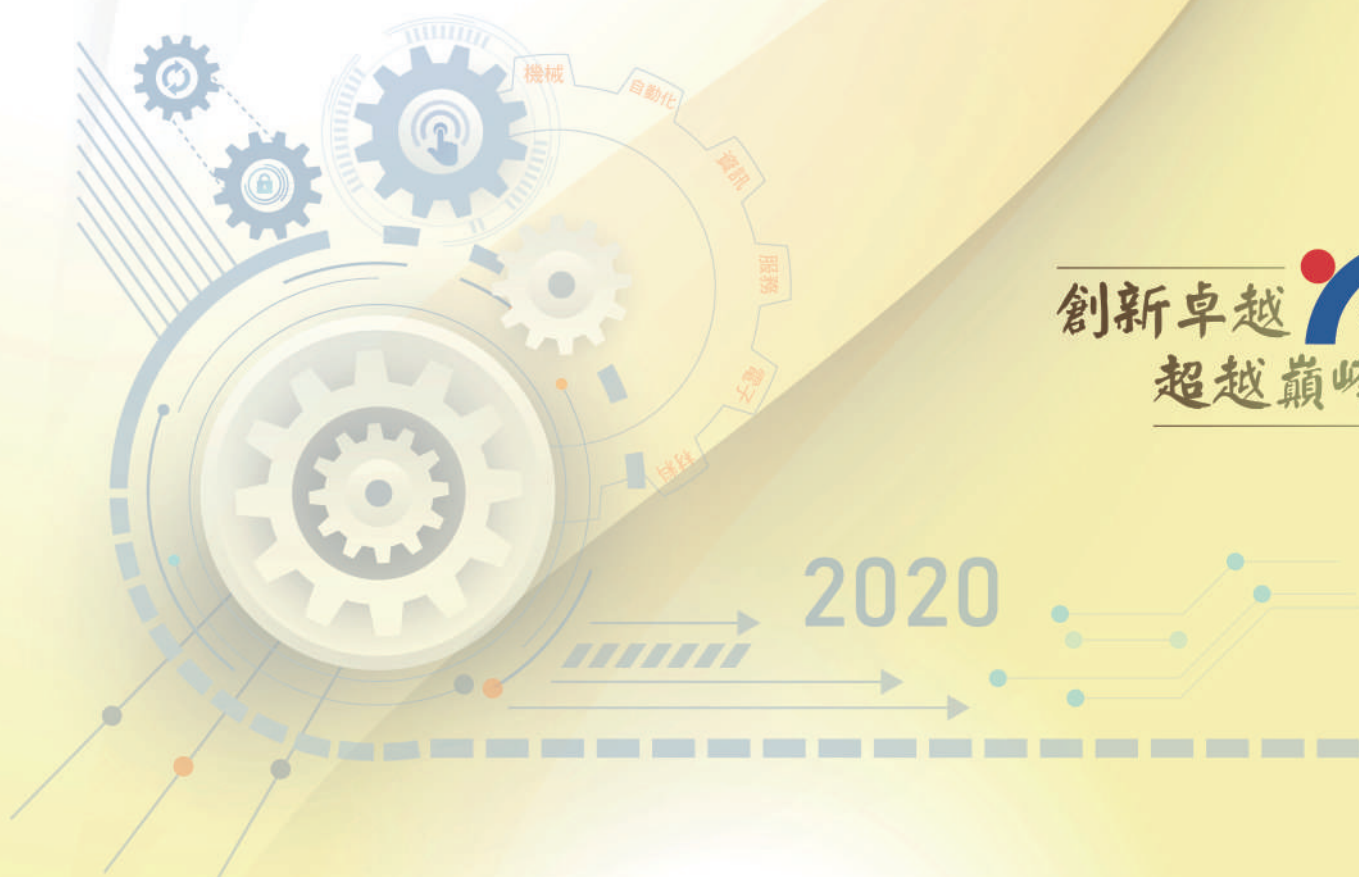
編輯群：游雅涵、胡劍銘、陳博鍊、周毓玲、茆晉維

出版日期：中華民國 109 年 11 月

得獎專輯

創新卓越 
超越巔峰

2020





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The 27th Taiwan SMEs Innovation Award



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廣告



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