PENPOWER

Innovate Technologies for Your Needs

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Mission and Vision

Make history by a core value

Penpower Technology Ltd., founded in 1991, develops products based on various in-house developed core technologies, including Handwriting Recognition, Voice Recognition, Optical Character Recognition (OCR), Business Card Recognition Business Card Recognition (BCR), and Security.

Our Mission

Our mission is to establish Penpower as the most attractive and innovative global brand in the sectors dealing with these core technologies. Adhering to our brand conception of delivering enjoyment and quality to life, Penpower is committed to designing and developing networked digital lifestyle devices that allow consumers to think less about the technology they are using so they can spend more time enjoying life.

Our Vision

"Innovative Technology for Your Needs" is at the core of Penpower's vision. We implement this vision across all Penpower products. In realizing this vision, we have committed ourselves as a core technology provider whose innovations are the best solution to your needs.

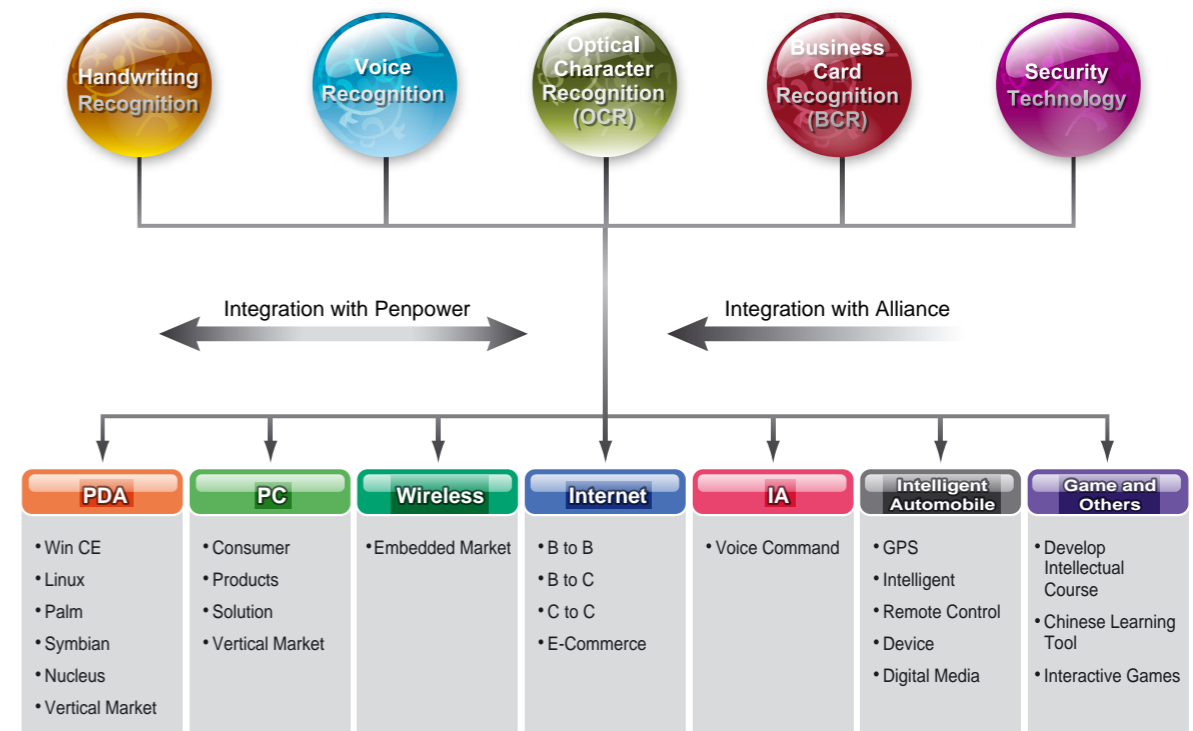PENPOWER

Core Technologies

Foresee the demand for Core Technology Solutions

Foresee the demand for Core Technology Solutions

Penpower Technology Ltd., as a leading company in developing recognition technologies and focusing on Intelligent Human-Computer Interface, has been integrating and applying its five core technologies: Handwriting Recognition, Voice Recognition, Optical Character Recognition (OCR), Business Card Recognition (BCR), and Security to many emerging commercial products, such as PDA, wireless communications, Internets, and smart home appliances. The commercial applications have provided smart embedded solutions on various platforms. We strongly believe that Intelligent Human-Computer Interface technologies can optimize the contributions of computers to the daily lives of people.

Handwriting Recognition · Voice Recognition · Optical Character Recognition (OCR) · Business Card Recognition (BCR) · Security Technology

Integration with Penpower

Integration with Alliance

PDA	PC	Wireless	Internet	IA	Intelligent Automobile	Game and Others
• Win CE	• Consumer	• Embedded Market	• B to B	• Voice Command	• GPS	• Develop Intellectual Course
• Linux	• Products		• B to C		• Intelligent	• Chinese Learning Tool
• Palm	• Solution		• C to C		• Remote Control	• Interactive Games
• Symbian	• Vertical Market		• E-Commerce		• Device	
• Nucleus					• Digital Media	
• Vertical Market						

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Applications of Core Technologies

Handwriting Recognition

The adoption of handwriting recognition technology on PC has become more and more popular. Furthermore, with the rapid development of mobile devices, emergence of new handwriting hardware, and the application of System-on-a-Chip [SOC] technology embedded with handwriting recognition in various fields, handwriting recognition technology plays a central role propelling the market growth.

The Intelligent Handwriting Recognition Technology, developed by Penpower from 1991, can convert a user's personal handwriting into typed text by using the most advanced technology on word recognition. It utilizes Artificial Intelligent Technology to learn personal handwriting traces and habits enabling users to communicate with PC through the most natural way with minimal learning efforts. It can increase the degree of writing freedom and display or print the most elegant personal inking in the shortest learning time.

Penpower is providing cross-platform handwriting recognition software solutions, ranging from Windows, Macintosh operating systems, and extending to PDA, Mobile phone, E-Book, Tablet PC, Web Pad and IA. It offers a more effective way to input from small panel of the present portable electrical devices.

Moreover, the Penpower Intelligent Handwriting signature kernel can record the attributes of the user's unique signature, including the sequence of strokes in the process of signing, writing track, pressure and timing. The recognition of Chinese approaches 96% accuracy, making signature verification the best security solution. It can be stored into various image file formats to retain the inking image, and hence can be used to identify whether a signature is genuine or not.

Penpower Chinese Handwriter Series

Voice Recognition

Using natural voice commands with a computer was not possible in the past due to insufficient computing power. The computer's computing power has been enormously increased, making it possible to adopt Intelligent Human-Computer Interface Technology extensively, especially in voice recognition-related applications in various information technology products.

Penpower Technology Ltd. started to develop Voice Recognition from 1997. By using Intelligent Voice Commands and TTS (Text-to-Speech) Technology, users can easily control their PC, all sorts of handheld equipments, and even information appliances (IA). All these technological products are no longer just cold machines. They can understand users' natural conversations and communicate with human beings in a more natural way. For instance, users can dial mobile phone number by voice, use voice to control PDAs or perform real-time information searches, and issue voice commands to control IA products or toys. Market potential of voice recognition-related applications is estimated to be very promising.

One application of voice recognition is to help corporations reduce the cost of manpower and increase the service quality, bringing tangible benefits. For example, voice recognition and TTS (Text-to-Speech) technology can make it possible for investors to purchase stocks by speaking to their mobile phones and hear the real-time stock quotes and current financial information from the phones as well.

Penpower Chinese VoiceWriter Series

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Applications of Core Technologies

Optical Character Recognition (OCR)

Often we get a lot of information from books, newspapers, and magazines. If we want to extract some paragraphs from an article or some important keynotes from newspapers, magazines or books, we can either use a pen to mark it, or photocopy and file it. To digitize that text, you have to key it in to the computer, which is a tedious and time-consuming task.

The Intelligent Optical Character Recognition Technology developed by Penpower from 1994 provides effective, efficient, and complete solutions for personal users or enterprise employees who need to save a lot of clippings from documents, newspapers and magazines. Users can save the document on their computer immediately in an editable format and retrieve it in the same original layout. Automatic translation and TTS (Text-to-Speech) functions are also provided in Penpower's OCR complete solutions.

There is a broad range of OCR applications. Libraries need to digitize large amounts of documents and newspapers. Corporations need to keep and control internal documents which need to be digitized as well. In addition, the automatic recognition of electronic forms, computer cards and customs ID cards are possible applications of Intelligent Optical Character Recognition Technology. This technology can not only perform recognition accurately,but also save plenty of manpower and time on data verification.

WorldPenScan Series

Business Card Recognition (BCR)

In this era of knowledge management, applying technological products to improve efficiency and productivity is important. Time must be well spent, not wasted on routine chores like business card management. Leave those tasks to technology.

Penpower Technology Ltd. develops Business Character Recognition (BCR) technology that helps users who exchange business cards to manage business card information efficiently. Users can scan or digitize a snapshot of the business card into the computer. Penpower WorldCard management software will automatically recognize the company name, person name, address, mobile phone number, email address and other information on the business card and sort it onto their respective fields.

Designed in accordance with user behavior, WordCard management software allows users to synchronize recognized business card information with third party applications such as Microsoft Outlook and Outlook Express, IBM Lotus Notes, ACT! By Sage, FrontRange Solutions Goldmine, Salesforce, and Windows Mobile, saving time to keep contact information in sync. It also supports various mobile platforms, e.g. WinCE, Palm, Pocket PC, and Windows Mobile, with Symbian to come.

The deep integration of Penpower BCR technology with third-party applications makes it very easy for enterprise users to manage their contact databases. Users can still use their current applications without any changes while they use Penpower WorldCard products as the front end to transfer contact info automatically and efficiently from physical business cards into their applications. WorldCard products streamline the whole process. With the emerging popularity of personal mobile 3C products, Penpower has applied its business card recognition technology to mobile phones and successfully developed a WorldCard business card recognition system for Windows Mobile platform, which has been licensed to major Windows Mobile phone manufacturers.

In addition, Penpower has been developing an Identity Card Recognition System which can read and recognize identity cards with 0.1 cm thickness. It offers a solution for automatic ID card verification in the processing of new account applications commonly required in financial and telecommunication sectors (in current case, verifications on identity cards and health cards). The solution not only scans and recognizes identity cards but also saves them as image files. It recognizes information such as name, date of birth, ID card number, address and so on with 97% accuracy, not only saving time but also serving as the best recognition-based solution for the applications of digitized operations in the future.

WorldCard Series

Applications of Core Technologies

Chinese Learning Application

Chinese is quickly becoming a popular choice when it comes to learning a foreign language but it can still be difficult to find resources and tools to support a Chinese learning environment. Penpower Chinese Expert uses revolutionary intelligent software built with Penpower's latest award-winning technologies in phrase segmentation, speech recognition, Text-to-speech(TTS), Optical Character Recognition(OCR), handwriting recognition and even machine translation. It's the kind of software you will keep for years to come.

There is no limit to how much you can learn when using this Penpower Chinese Expert. It trains your listening comprehension with clearly pronounced text; your speech ability with instant speech recognition correction feedback and oral exams; your reading comprehension with an onscreen phrase dictionary and online dictionary; your handwriting skills with handwriting recognition technology. Penpower Chinese Expert also encourages and facilitates a user community, where you can share with others your learning materials by packing your recording, your translation and any notes you take in a convenient file. Just download these fun and dynamic learning materials. You're guaranteed that learning Mandarin will be an enjoyable and rewarding journey. On top of that, we also guarantee your satisfaction by offering lifetime software upgrades free of charge; you will always have the latest and the greatest software. Penpower Chinese Expert is truly a lifetime learning companion!

Penpower Chinese Expert Series (PCE)

Security Technology

As awareness regarding security has risen, security systems have become more and more intelligent, not just restricted to security protection. The required higher security level can be achieved by using the recognition technologies relying on personal, unique bio-features for authentication such as the human face proportions, fingerprints, iris patterns or a handwritten signature, as these unique human attributes cannot be duplicated, forged, or stolen. Besides, full-range automatic surveillance, including speed search integration, real-time processing and automatic detection and response has become the development trend for the security surveillance industry.
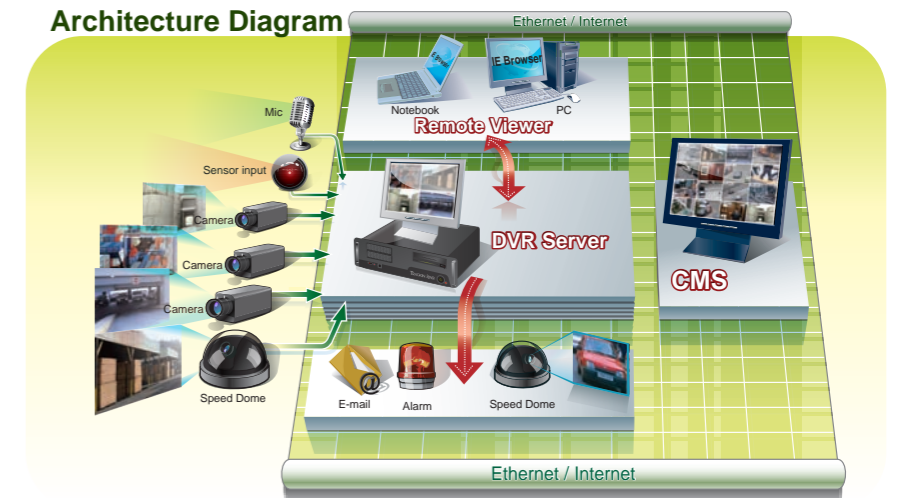
Penpower started the research and development on Bio-authentication related technologies in 2001 and has developed technologies like SSL encoding, decoding security technology and FaceMetrix technology. FaceMetrix provides a higher degree of security than password-based security measures. And users of FaceMetrix do not need to remember a password, which may need to be changed from time to time to avoid the password being compromised. Face recognition is more convenient and secure from the users' point of view. Facemetrix can be applied not only to access control but also to areas of confidentiality management, POS and fake ID prevention. With the rapid evolution on manufacturing technology and decreasing cost of IC chips, FaceMetrix is penetrating into consumer electronics products with the aim to increase the value to the products.

Based on the best of the breed computer vision technology, Penpower's TrackIN iDVR is designed to tackle the drawbacks of the traditional DVR, labor intensive, inefficient, and ineffective. It is almost impossible for security personnel to pay full attention to more than a couple monitors at all times, no matter how well trained or how dedicated they are. An important event can go unnoticed, which might cause an enormous security breach. On the contrary, TrackIN iDVR can remedy this by embedding video analytics into the system so that it can detect and highlight an on-going event right on the spot, and immediate actions can be taken to resolve the situation. TrackIN iDVR brings video surveillance technology to the cutting edge to provide real-time critical asset protection, perimeter monitoring and threat detection. Better yet, TrackIN iDVR can detect, track down, and zoom in on moving objects to get close-up videos when connected with an optional auto PTZ speed dome camera.

TrackIN iDVR system

- Line Crossing
- Object Counting
- Restricted Area
- Missing Object
- Auto PTZ Control

Architecture Diagram

Enterprise Commitment

Contribute to the community with a continuing commitment

Achieving consumer-oriented solutions is one of our prime motivations in advancing Penpower's innovative technology, especially advances in digital life. With the dream of bringing innovation-driven changes in people's lives, Penpower believes that practical software solutions and a commitment to customer service provides the key to success and the opportunity to excel.

From human resources to business management and from prototyping to final product launch, innovations are strongly encouraged and supported throughout the entire corporation. We have continuously created new products ahead of competitors and filed new patents, satisfying the needs of customers and market trends. Our new technology keeps driving the growth of Penpower, benefiting the customers, and making positive impacts to the Intelligent Human-Computer Interface industry.

Drive the sales with a strong team

Penpower has established advanced research and manufacturing operations in strategic markets across the globe. We set up four worldwide subsidiaries located in U.S.A, China, Hong Kong and Singapore to provide immediate information and best solution for more and more requests around the world. The Penpower Group consists of three main business organizations—the Software Development, the Distribution section and the Technology & Solution section.

Immersed in Penpower's culture of efficient management and inspiring atmosphere, our staff is enthusiastic about developing advanced products and solutions for customers. This corporate-wide enthusiasm is a key factor in maintaining its leadership in the competitive world.

Penpower's growth is inextricably linked with the successful development and introduction of new and exclusive products, spearheaded by a sales-generating marketing approach. Over the years, Penpower has established a network of resellers as well as a diversified channel distribution network.

Contribute to the community with a continuing commitment

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History of Penpower

2009
- WorldCard Ultra wins Taiwan Excellence Gold Award 2009

2008
- WorldCard Ultra wins iF Product Design Award 2008
- WorldCard Ultra wins Red-dot Design Award 2008
- WorldCard Ultra wins Best Choice Product Design Award 2008
- WorldCard Ultra wins G-mark Award 2008

2007
- Alestron, Inc. becomes the full-capital subsidiary company of Penpower in January and renamed as Penpower Inc. in February
- Longrand Electronics Limited is renamed Penpower Technology (Hong Kong) Ltd.
- Penpower Wireless RF Junior, Penpower Diamond Junior, and WorldCard duet 2 products are introduced

2006
- Voice Command with WinCE [Voking] released
- Business Card Recognition with WorldCard Mobile released
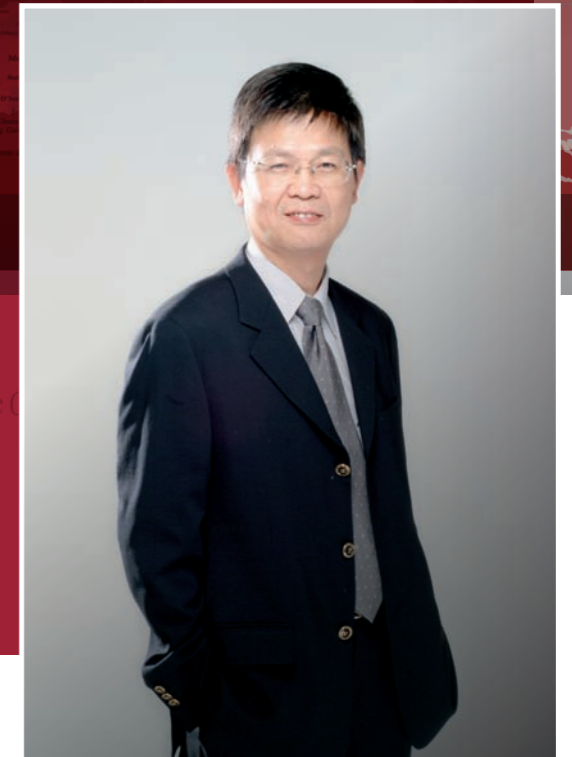- Recognition, input, and translation of Chinese / English / Japanese mini ScanEYE released

2005
- Penpower (China) Technology Ltd. Guangzhou office established
- FaceMertix PC Logon Suite V 2.0 and TrackIN V2.0 released
- Handwriting-specific MCU for Mobile Phone launched
- The world's first Bluetooth Handwriting Device Mobile Pen launched
- WorldCard duet, the latest generation in the WorldCard series, released

2004
- Merged Alestron, Inc. in U.S. to the subsidiary company
- Released the Biometrics products, including FaceMetrix Logon, FaceMetrix Access Control and TrackIN
- Research and development of MCU field

2003
- WorldCard had been advanced the oversea and joined in CES, Computex, SMAU, SIMO Expo Show

2002
- Released WorldCard with International version
- Joined in the International IT Expo, e.g. CeBIT, Computex and Comdex Fal..etc.
- The sales and marketing development of Grandpower be founded to the Granpower Technology Ltd.
- Research and development Wireless Communication and released WorldPhone
- Penpower became a public company and listed on Taiwan Stock Exchange (5211)

2001
- Listed company in Taiwan and ISO9001 certified
- Penpower (China) Technology Ltd. be founded to the subsidiary company
- Established Biometrics development
- Established the sales and marketing development of Grandpower in Taipei, Taiwan

- WorldPhone Scan, a business card scanner for mobile phones, announced
- Penpower miniCard, a handwriting accessory for the notebook, released

- Released Business Card Recognition System with Chinese and English【WorldCard】
- Released Handwriting Input System with Supersonic Wave
- Announced the 2nd generation of Chinese input scanning and translation pen【ScanEYE】
- Announced the 3rd generation of Handwriting Input System【Penpower Handwriter】

2000
- Compliant Palm、WinCE、Linux、@VIS、EPOC built-in PDA platform to SSL field
- Merged Longrand Electronics (S) Pte. in Hong Kong and Singapore to the subsidiary company.

1999
- Introduced the scanning pen with Chinese Input System
- Introduced the modification system with Chinese
- The scale of company had become more expansive, so site had moved to the new building
- Total capital increased to NT$80 million

1998
- 【Penpower VoiceWriter】had originated with the input system combined with Voice Recognition, Handwriting Recognition and OCR
- Penpower increased to NT$20 million capital

1997
- Research and development Text To Speech and Voice Command Technologies
- Announced touching-controled board with Handwriting system【Penpower Junior】

1996
- Originated the convert interface and OCR document and the form reproduction concept

- Announced the 1st generation of OCR product

1995
- Originated the full-screen continual writing and combine with artificial intelligence (AI) technology
- Announced Handwriting Recognition with Japanese Version
- Announced Handwriting Recognition for Macintosh operating system

1994
- Originated the multi-standards continual writing and full-screen character writing
- Launched research and development of Optics Characters Recognition

1993
- Introduced the 1st and 2nd generation of Chinese Handwriting Input System【Penpower Handwriting Environment V1.0 & V2.0】
- Originated the non-template Handwritten Input Environment first

1992
- Developed the second generation of Chinese Handwriting Input System

1991
- Penpower had founded with NT$5 million capital, and the company established as a specialist in the Intelligent Human Computer Interface.
- Launched the whole world first set of Chinese Handwriting Recognition Product 【Penpower Handwriter】

Awards of Penpower

2009
- WorldCard Ultra wins Taiwan Excellence Gold Award 2009

2008
- WorldCard Ultra wins iF Product Design Award 2008
- WorldCard Ultra wins Red-dot Design Award 2008
- WorldCard Ultra wins Best Choice Product Design Award 2008
- WorldCard Ultra wins G-mark Award 2008

2007
- Videx Video Content Analytic Server wins SecuTech Award

2006
- WorldCard duet wins Outstanding IT Application Award
- TrackIN wins SecuTech Award 2006
- WorldCard Office wins Star Product of the Year of 21st Frontier Awards

2005
- FaceMetrix Access Control System wins SecuTech Award
- Super ScanEYE and WorldCard Color were voted No. 1 and No. 2 for Product of the Year by PC Shopper

2004
- WorldCard Office wins Best Choice of Computex Taipei
- WorldPhone wins Best of Taiwan's Best Awards by Eurotrade Magazine

2003
- WorldCard wins the Symbol of Excellence
- Penpower Technology Ltd. wins the 12th National Award of Small and Medium Enterprises

2002
- Penpower Handwriter was voted No. 1 for Product of the Year and Editor's choice by PC Shopper
- WorldCard Platinum wins iF Product Design Award
- ScanEYE & WorldCard were voted PC Shopper Editor's choice
- WorldCard wins the National Silver Award of Excellence
- WorldCard wins the 9th Outstanding Innovation in Research
- Penpower Handwriter wins the 5th Little Giant Award 2002

2001
- WorldCard wins Outstanding IT Application Award
- Penpower wins Technology & Innovation Award of Excellence
- WorldCard and Penpower Handwriter are voted PC Shopper Editor's choice

2000
- VoiceWriter wins Outstanding IT Application Award
- Penpower Handwriter wins Best Utility on PDA by Sing-Tao Plaza
- Penpower Handwiter wins User's Best Choice by IT and Computer Magazine

1999
- Penpower Handwiter wins Best Handwriting System Award by Sing-Tao Daily
- Penpower Handwiter wins Taiwan Best Product Award

1998
- Penpower Off-line OCR System V 1.0 introduced
- VoiceWiter wins Best of Voice Recognition by PC World
- Asian Innovation Award by Far East Economic Review
- Outstanding Entrepreneur Leadership Award

1997
- Penpower Handwiter was voted Product of the Year by PC World
- Penpower Handwiter wins Best Chinese Handwriting System Award by Sing-Tao Daily

1996
- IT Export Product Award
- Outstanding IT Talent Award

1995
- Penpower Handwiter wins the Symbol of Excellence
- Penpower Handwiter was voted Product of the Year by PC World

1994
- Penpower Handwiter wins Outstanding Chinese IT Product Award
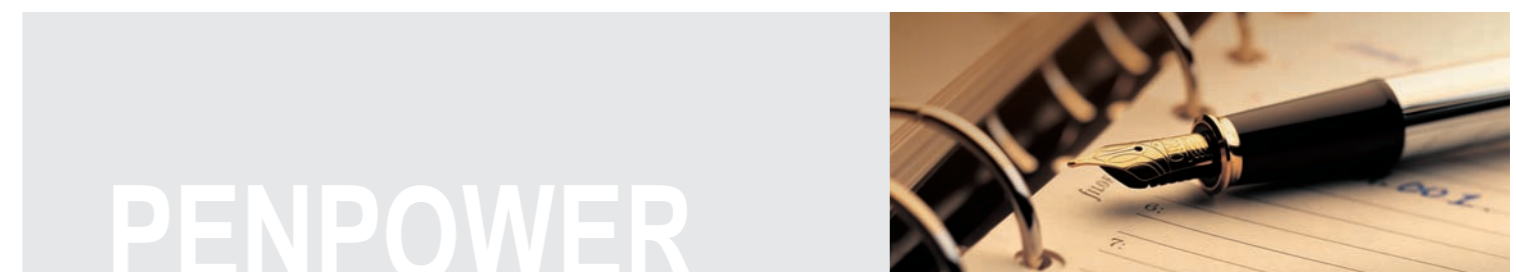- Penpower Handwiter wins Outstanding Innovation in IT Application

1993
- Penpower Handwiter wins Best Input Device by Byte
- Penpower Handwiter wins the Symbol of Excellence

Chief Executive Officer

Dr. Yih-Tay Tsay, Chief Executive Officer

Dr. Yih-Tay Tsay, the Father of Handwritten Chinese Recognition, founded Penpower Technology Corporation in 1991 with a unique vision to pioneer the development and commercialization of human intelligence recognition technology.

Building on his remarkable contribution to Handwritten Chinese Recognition, Dr. Tsay has led executive team to explore other recognition technologies, such as Optical Character Recognition (OCR), Voice Recognition, Wireless Communication and Security technology, resulting in various products to meet different markets' demands.

Demands inspire dreams, and dreams inspire innovations. Dr. Tsay has made dreams come true with innovations in line with consumers' needs.

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Global Operations

Global Operations

Penpower is a world leader and pioneer in providing integrated solutions for the Intelligent Human-Computer Interface Technologies. Penpower has operations in the following regions:

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