Cxino Semi-Network Technology Inc (Canada)



# **Business Plan**

Project: Atphon Travelwear

Business slogan:

- With the applicable smartphone-like composite clothing to assist those who need intellectual assistance
- With the convenient backpack-like composite clothing to help those who need to supplement and strengthen their carrying capacity
- With the reliable device-like composite clothing to help those who need to carry complex smart items
- With the sincere and caring alarm-like composite clothing to help those who need to protect themselves by self-protection approaches

Website: https://cxino.com

Produced By

Yin Sheng Zhang

CEO of Cxino Semi-Network Technology Inc

807-8171 Saba Rd Richmond B.C V6Y 4B3 Canada

Phone: 778-840-6518 (Canada)

E-mail: walterz862@hotmail.com cxino@outlook.com

Effective Executive Summary	. 3
Chapter 1: About Company	. 5
Sect. 1: Brief of Company	. 5
Sect. 2: Current Basic Financial Backers	. 6
Sect.3: Strategies of Project Deepening and Advancing	. 7
Sect. 4: Future of Project	. 8
Sect. 5: Founder Profile	. 8
Chapter 2: Products	11
Sect.1: Brief of Atphon Travelwear	11
Sect.2: Advantages of being a kind of composite wearables	12
Sect.3: Advantages of being a smart tool	13
Sect.4: Novelty	13
Sect.5: Highlights	14
Chapter 3: Technology	15
Sect.1: Patent	16
Sect.2: Copyright	19
Sect.3: Demand of Users	20
Sect.4: Adaptability	21
Sect.5: Copyrighted Prototype and Tech-pack	22
Chapter 4: Cxino Cloud	22
Sect.1: Brief of Cxino Cloud	23
Sect.2: Helpful cloud	23
Sect.3: Backup and supplementary Cloud	24
Sect.4: Worry-free Cloud	24
Chapter 5: Story of project	25
Sect.1: Story of the birth of project	25
Sect.2: Stories told by Walterz's dad	25
Sect.3: Stories told by Walterz	27
Sect.4: Story told by the first user of prototype	30
Chapter 6: Letter to Investors	35

# Table of contents

#### **Effective Executive Summary**

• 1) What is your business?

Our business is to make and promote the project of smart composite clothing that focuses on technologies of communication and sensing; the "composite" here refers to the "composite" of clothes and backpacks, and the "composite" of clothes and smart elements; the product we want to make is named as Atphon Travelwear, which has been granted patent by US Patent Office.

• 2) What is your business model (primary source of revenue)?

We are making a smart device that acts as a terminal of the Internet of Things, but it is also a fashion and special clothing, so the first step we have to do is to create a brand of fashion clothing that can be transformed into a backpack, and earn income from it to support the development of subsequent smart technologies; in the future, a unique brand of smart composite clothing will become our main source of income.

• 3) What need are you fulfilling or what problem are you solving?

Our business is to meet the needs of people, especially travelers, to use smart devices and Internet of Things services during travel; clothes and backpacks are the most basic travel necessities, and if they are combined and transformed into smart terminal devices, which is bound to be one of the best benefits for travelers.

The most immediate and urgent problem our project has to solve is the inconvenience and trouble caused by people carrying mobile phones during travel, especially in the era of the Internet of Things, it is very likely that smart composite clothes will replace mobile phones in some respect and become a new trend, after all, existing smart phones have some shortcomings, such as carrying risks, etc.

By the way, during the patent application process, the US patent examiner said "cool" on the phone when discussing the project with us, and offered to grant patent to our application right away.

• 4) Who are your competitors?

Our project is an innovated one, its prototype product is still in the stage of continuous improvement, and there is no similar product on the market at present, so competitors have not yet emerged; as a fashion and smart clothing, if the products of other clothing companies are technically close to our products, then these companies may all become our competitors, but we are smart clothing company specialized in IT technology, which

will be superior to other ordinary clothing companies; in addition, our technology is protected by patents, and we will continue to innovate our products, so we are confident in maintaining our competitive advantage for a long time in the future.

• 5) Who are your customers?

Our products are still in the development stage and have not yet been introduced to the market, so our prototype products are only tried out among some our relatives and friends, and being constantly improved according to the trial results of them; our future potential customers are clothing wholesalers, and ultimately, all wearers of Atphon Travelwear.

• 6) What is the status of your development?

Our business is currently in the stage of business development, there are already prototypes of the first generation of products; products have not yet been introduced to the market, so there is no product (Atphon Travelwear) revenue so far, but as long as we can obtain a certain amount of capital investment, we are confident that we will be able to generate revenue soon.

• 7) How much money are you looking to raise?

Because the cost of technologies development and product marketing is high, we hope that the starting point of financing is 5 million US dollars, and the more financing, the shorter the time for our project going to market, and the higher the probability of success.

We hope to open up the market in a relatively short period of time and achieve a surge in value to reward investors; to be more specific, as long as we have 5 million US dollars as a start-up, we will be able to produce the first batch of exquisite first-generation product of Atphon Travelwear, and the first wave of advertisements and other online and traditional media publicity campaigns, and won the first batch of large orders, and using the 5 million US dollars to create a ten-fold return.

If investors give us 5 million US dollars, we will return investors more than tens of millions of US dollars in the near future, and the basis of this estimate is that smart clothes similar to smartphones will also become a kind of rigid demand in the future.

• 8) What is your target valuation?

Our target evaluation value will definitely be calculated in billions of dollars, because this is a kind of smart clothing similar to smart phones, if our products are made into brands, the future evaluation value of our project will be on par with other existing branded smartphone manufacturers.

• 9) Who are your current investors?

Our current investor is Lotto Center of Aberdeen Center of Richmond BC (Canada), and we are currently relying on the support of this investor to maintain the company's technology development and daily operations.

• 10) Where are you headquartered?

Our company's headquarters is currently in Vancouver, Canada.

• 11) Management Team Introduction

The CEO of our company is Yin Sheng Zhang, who is a Ph.D. in electrical and computer engineering (UBC, Canada)

## **Chapter 1: About Company**

#### Sect. 1: Brief of Company

Cxino Semi-Network Technology Inc. was registered in the Province of British Columbia, Canada in 2017, and the company's focus is on the development and promotion of IoT products with Wearables as the carrier of smart element.

The company is trying to create an international brand of smart multi-functional clothing: Atphon Travelwear ("Atphon" has been applied for trademark registration in Canada), and it is currently working on three key tasks, which are:

- 1<sup>st</sup>: The design and production of fashion clothing applicable to the Internet of Things.
- 2<sup>nd</sup>: Design and production of the network platform dedicated to the Internet of Things.
- 3<sup>rd</sup>: The development of smart chips (hubware) dedicated to Atphon Travelwear.

The founders of the company are Walterz & Charliez.



Walterz (Yin Sheng Zhang), as one of the main founders and Chief Executive Officer of company, is a doctor candidate of electrical and computer engineering (University of British Columbia, Canada).

He is very interested in the research of data security and computer systems, and is good at for the development of IoT software and hardware; he is the Chief engineer of our company and has a number of patents or software copyrights about IT technology.

Atphon variable jacket, the company's first-generation product of Atphon Travelwear, is a convenient and safe travelwear that can be transformed into a backpack, suitable for different seasons, day and night, and it is also a kind of fashion clothing with smart elements.

The QR code marked on the clothing is not only the company logo, but also a smart tool that provides users with convenience in life and travel safety.

Atphon Travelwear is protected by a patent.

The patent title:

• Convertible combination of attire and backpack with network communication and intelligent sensing features

Patent number: US-11470948-B2

#### https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/11470948

The product will be launched to the market in the form of IoT clothing, which is multifunctional mixture of clothing and backpacks, but its future use will be similar to or even surpasses modern smart mobile devices in some respects, and it is expected to open up a new way for the application of wearable items in the Internet of Things.

#### Sect. 2: Current Basic Financial Backers

Cxino Semi-network Technology Inc is a start-up IT Company mainly engaged in the research and production of IoT Travelwear; its work focuses on innovation, so it needs to gradually realize its goals in stages, and needs a lot of resources, including financial resources, to be invested during its growth period.

In this regard, Lotto Center of Aberdeen Center of Richmond BC (Canada) as the main financial backer is most worthy of thanks. As a subsidiary department and important partner of the company, out of trust and confidence in the company's development plan, Lotto Center of Aberdeen has been signing a business agreement with the BC Lotto authority in the name of Cxino Semi-network Technology Inc for many years, so that Cxino company can have a continuous business performance record and maintain an active state in terms of finance and taxation. It is precisely because it provides financial assistance to the company's projects of Internet of Thing consistently and at all costs, that the development of the company's projects can continue to move forward and achieve today's results.

## Sect.3: Strategies of Project Deepening and Advancing

The project of Atphon Travelwear is planned to be implemented in three stages:

• Stage 1: Design and making of the Atphon Clothing that suitable for smart element installation and protection, with wire channels, concealed pockets and oversized side pockets on it, while the first-generation products launched to market is a variable jacket, which is further divided into simple variable jackets and composite variable jackets that can be transformed into backpacks.

The smart element on the first-generation jacket is only the QR code Logo, and the QR code Loge is connected to Cxino Cloud, which is an IoT network platform designed by us, it is also the only cloud connection for our current and future IoT products.

• Stage 2: Design and making of the initial version of data processor chip (Hubware) of Atphon Travelwear, and the initial Hubware chip was placed on the jacket to form a second-generation product and launched to market.

The Hubware chip equipped on the second-generation product can realize the function of clothing positioning, and its unique feature is that the hubware chip has the function of group positioning rather than just individual positioning like traditional methods, and users can directly view the positioning results through Cxino Cloud without downloading any application software.

• Stage 3: Atphon Travelwear will be expanded the applicability by highlighting some key functions such as remote control, remote communication, scanner, sensor, or by simplifying operation steps and links of devices, to improve the targeting and efficiency of it.

Then, Atphon Travelwear will be realized the full functions, which comprise the development of the full version of the hubware chip, and then combine the chip and clothing into one and form a comprehensive IoT smart tool.

At last, Atphon Travelwear will be combined the existing technology and the latest technology, then some attributes of clothes are fully utilized, such as large carrying capacity, and soft and easy to be folded, to create the function and economic effect that traditional intelligent device cannot achieve.

#### Sect. 4: Future of Project

The design of Atphon Travelwear originated from a true story.

The original intention of the design was to use modern intelligent technology to provide safety guarantee for the travel of aging people with elderly dementia, but now, the ideas and goals of the product has been broader and deeper.

Our team is composed of a number of experienced members, including PhDs of computers, and our team is making every effort to transform the combination of clothing and backpack launched here into unique fashion wearables and intelligent tools.

What we are launching now is our first-generation product, we hope to raise funds through this product to develop and bring the second and third-generation products to the market as soon as possible, and we firmly believe that this kind of refreshing products that combine fashion and intelligence will be welcomed by consumers.

Our products are started with a sense of mission and responsibility, "Caring" will always be the foothold and starting point of our products, we need everyone's support, we are eager to make breakthrough progress in our product development, because we strongly feel that this is also the desire of many people who need intelligent help.

#### Sect. 5: Founder Profile

Yin Sheng Zhang (Walterz), PhD Candidate of Electrical and Computer Engineering (From UBC), is CEO of company, and also a young scholar with strong innovation ability and practical spirit. Over the years, with great mission and business sense, he has been working hard to transform his academic research achievements into actual products, and serve the public.

During his studies at UBC, he devoted himself to research on flexible operating systems, network data storage systems and network data security. He also pioneered the concept of semi-network OS architecture.

As one of the main founders, since Cxino semi-network technology company was established in Province of British Columbia, Canada in 2017, he has been following the trend of technology and market development and focusing on the research of internet of things, and also, as the main initiator and creator of the Atphon Travelwear project, he worked hard to apply his research achievements (including semi-network OS architecture and AIR Storage) to the product development, and has achieved initial success: the first generation Atphon Travelwear will be launched soon.

The academic papers he published have attracted the attention of the academic circle, and some of his patented technologies have entered into concrete implementation.

His specific academic achievements are as follows.

#### • List of published papers

His published papers so far are as follows:

Analysis of OSPU security effect and data assembly verification under semi-network OS architecture (2023)

International Journal of Information Security (Springer Nature)

https://doi.org/10.1007/s10207-023-00702-1

https://link.springer.com/article/10.1007/s10207-023-00702-1

A Fat Client OS Architecture Supported by Semi-network Resources (2022)

International Journal of Computing Sciences Research , Vol. 6, pp. 857-876, January 2022,

doi: 10.25147/ijcsr.2017.001.1.78

https://stepacademic.net/ijcsr/article/view/280/110

Semi-network OS and Embedded OS for Co-mobile Computing (2019)

International Journal of Computing Sciences Research, Vol. 3, No. 2, pp. 189-198.

doi: 10.25147/ijcsr.2017.001.1.32.

https://www.stepacademic.net/ijcsr/article/view/105/54

Data Management System for Ubiquitous Multi-Task Mobile Devices on Semi-Network OS Architecture (2020.8)

EJECE, European Journal of Electrical Engineering and Computer Science Vol. 4, No. 4, August 2020,

DOI: http://dx.doi.org/10.24018/ejece.2020.4.4.236

Applicability analysis of semi-network operating system. (2019)

Computer and Information Science, 12(1), 93-97.

doi: 10.5539/cis. v12n1p93. https://ccsenet.org/journal/index.php/cis/article/view/0/38344

Semi-network OS and new mode of application software sharing. (2019)

Journal of Multidisciplinary Engineering Science and Technology (JMEST), 6(5), 10083-10088.

http://www.jmest.org/wp-content/uploads/JMESTN42352949.pdf

# • (2) List of patents and copyrights

His main patent publicity documents and software copyrights include:

Patent (Co-inventor):

Convertible combination of attire and backpack with network communication and intelligent sensing features

Patent number: US-11470948-B2

Publication date: 2022-10-18

https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/11470948

Patent (Individual inventor):

Computer with flexible operating system

Patent number: US9606809B2

Publication date: U2017-03-28

https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/9606809

Patent (Individual inventor), granted by China:

Assembling of isolated remote data

Patent publication number:

CN ZL201380063564.3

US 20150244778

https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/20150244778

Patent (Individual inventor):

Server Based Split Data for Network Verification and Encrypted File Transfer

Patent application number:

Patent publication number: CA 2915186

## https://www.ic.gc.ca/opiccipo/cpd/eng/patent/2915186/summary.html?query=2915186&type=basic\_search

Copyright:

Network Server Base Assembling of Isolated Remote Data (Server Base AIR Storage)

Registration Number: 1132464

Registered: 2016-08-02

Date Published: 2015-12-06

https://www.ic.gc.ca/app/opiccipo/cpyrghts/dtls.do?fileNum=1132464&type=1&lang=eng

Copyright:

Using File as User Authentication (File Print)

Registration Number: 1132465

Registered: 2016-08-02

Date Published: 2016-02-04

https://www.ic.gc.ca/app/opiccipo/cpyrghts/dtls.do?fileNum=1132465&type=1&lang=eng

## **Chapter 2: Products**

## Sect.1: Brief of Atphon Travelwear

The first-generation of Atphon travelwear is a smart jacket that is able to transform into a backpack, and it is equivalent to putting a mouth on the clothes so that the clothes can speak to people, putting the eyes on clothes so that the clothes can see any corner, putting the magic hands on clothes so that the clothes can remotely control objects.

Atphon Travelwear is a kind of IoT clothing, its trademark is "Atphon", which means "Attire Phone".

The company intends to create an international brand that is popular with consumers, and this smart product based on wearables (including clothing, backpacks, and the combination of the two), and its role should be the same as, or complement, or have more advantages in some respects than traditional smart phones.

For example, compared with traditional smart phones, clothes are capable of carrying more batteries to support power endurance, carrying larger chips to provide more smart functions, and being easier to maintain than smaller smart phones to reduce the risk of loss.

## Atphon Travelwear has two technical pillars:

• The variable jacket.

This is a jacket that can be transformed into a backpack; moreover, this jacket is a combination of two styles of jackets: ordinary clothing and functional clothing, which is suitable for wearing in different occasions or situations, and also it is suitable for different seasons.

For example, we often wore thick clothes to keep out the cold when we went out in the morning of spring, but by noon it was hot enough to force us to took off the thick clothes, and then the clothes that we took off became a great burden. However we have Atphon jacket, so we no longer fear the problem of undressing like this, as long as we take off our Atphon jacket and turn it into a backpack, the backpack would be enough to hold several thick coats, and then we can carry the backpack on our back.

• (2) The smart elements.

These smart elements that attached to or serve Atphon jackets include QR code Logo, hutware, group positioning, AIR storage, etc., as well as the Cxino Cloud that provides IoT services for Atphon jackets.

This smart wearable will assist those who need intellectual assistance, to assist those who need to strengthen their carrying capacity in various seasons and complex situations, to assist those who need the most sincere and caring intelligent wearables to protect themselves.

## Sect.2: Advantages of being a kind of composite wearables

As long as you stand on the street, you can always see, Jackets and backpacks are like twin brothers:

- The elderly in jackets and backpacks take a leisurely stroll along the sidewalk to enjoy the sun and fresh air.
- Workers in jacket and backpack are going to work.
- Students in jackets and backpacks are going to school;
- Housewives in jackets and backpacks are going shopping;
- Some others carry thick clothes with their hands and carry backpacks with their shoulders on the way due to the hot weather.

Now, jacket and a backpack are combined to form a Atphon Travelwear, then:

- Elderly people no longer need to carry a spare empty backpack when walking in the outdoor air, because their jackets can easily be converted into backpacks when needed temporarily.
- Employees no longer need to worry about the placement of the backpack after the items in backpack are emptied in the workplace, because the backpack can be worn on the body after it becomes a jacket.
- Students take out the textbooks from their backpack in class, the empty backpack will not become a burden, because it can be turned into a jacket used for dressing, and some small utensils are still stored in the pocket of jacket.
- Housewives no longer need to bring extra spare backpacks when they go shopping, because they can get an extra large-capacity backpack anytime, anywhere after taking off their jackets.

Once travellers have a worry-free variable jacket, the clothes that they take off during outdoor walks no longer need to be carried by their hands or tied on their waists, because their jackets are also backpacks, which are enough to hold thick clothes and other sundries.

## Sect.3: Advantages of being a smart tool

Atphon Travelwear combines intelligent wearing technologies, network communication technologies and intelligent sensing technologies to form an composite and convertible combination of clothing and backpack, then partly and also capable of totally replacing the function of traditional smart devices, or acting as a supplementary device of traditional smart devices.

Easy storage, large carrying capacity and less restriction on carried items, these properties of clothing allow smart hardware and other intelligent elements, such as QR code, to be distributed in different parts of the clothing, this makes the integration of smart functions on clothing easier to implement, which including phone communication, physical sensitivity, data transmission and data storage, and also improves the safety of products and facilitates the use of consumers.

Convertible attributes of clothing can also protect and enhance intelligent elements.

#### Sect.4: Novelty

People always praise the "magic" of intelligent products, but often inadvertently neglect the help of carrying ways to intelligent products; in order to carry intelligent products conveniently, people always wear clothing with enough pockets or carry bags with large volume, but when talking about the use of intelligent goods, they often underestimate the role of clothing and bags. Indeed, even if there are clothing and bags in hand, intelligent products may not be able to play their due role as expected.

Many tragic stories directly gave birth to this clothing design; as a result, a new type of intelligent travel wear came into being.

At this point, if there is an intelligent tool like Atphon Travelwear that can meet the preferences of the people with elderly dementia, many people with elderly dementia will not lose their way or even lose their life; unfortunately such suitable clothing is extremely rare on the market so far.

Imagine that many elderly dementia people fall down on the roadside because of hunger and physical overdraft, and even fall into the mud pond, from then on, no one knows the origin of their lives.

Sadly, future generations will follow their predecessor's trajectory to the same tragedy.

Perhaps their lives will be saved as long as they carry with some kind of information or intelligent items that can help them return home.

Everyone needs to wear clothing, and people always have to wear clothing, clothing is the most commonly used daily necessities, should also be the most reliable carrier of intelligence or information.

## Sect.5: Highlights

• It is a mixture of ordinary clothing and function clothing.

The "two-layer fabric" is clearly defined as a combination of two separate pieces of clothing, one of which is mainly used for carrying mobile devices, components and scannable codes, and the other is mainly used for ordinary fashion clothing; this "two-layer fabric" can be used to convert into backpacks, or can also be used to transform into different types of clothing for wearers to change, this feature is not available in a variety of similar technologies.

• (2) It is a mixture of clothing and backpack.

A backpack is assembled with two pieces of clothing, and its volume of the interlayer will greatly exceed the ordinary backpack.

When a clothing is converted into backpack, the interlayer space on back of clothing is converted into main backpack, the interlayer space on left and right front chest part of clothing are converted into two separate sub-backpacks, one is on left side, another is on right side of main backpack.

the opening of the two sub-backpacks capable of be closed with tightening cords or similar devices, or they are kept open for loading commonly used and less important items.

## • (3) It is a mixture of wearables and smart element.

The fabric cord pipes in Atphon Travelwear is not only used for cords of devices, but also used for sharing pocket pressure, which comprises acting as load-bearing cords.

The Atphon Travelwear not only carries mobile hardware, but also carries fabric intelligent elements such as scanable codes on scanable decorative fabric.

The scanable decorative fabric described here belongs to "fabric" to be carried by clothing, and it is easy to be detached by wearer, so which facilitate wearer timely updating scanning code on his clothing.

## • (4) It is a mixture of carrier of personal hardware and personal data in cloud

The Atphon Travelwear is stitched into three spaces for carrying special smart hardware: one is on back of clothing, another one is on left front chest part of clothing, and the third is on right front chest part of clothing, these three interlayer spaces capable of be placed into an inner pocket detachably, and the inner pocket is capable of being filled with soft filler to keep warm for wearer and as a cushion for hardware on clothing.

In addition, the QR codes and smart hardware on clothing directly connect to Cxino Cloud, it's like a person wearing Atphon Travelwear can carry his personal cloud databases anywhere anytime through the QR Code on clothing.

## **Chapter 3: Technology**

The project introduces the technology of Internet of Things into field of attire design, and creates a communicative and sensitive device: the composite and convertible attire with network communication and intelligent sensitive features, referred to as Atphon Travelwear, its purpose is to liberate mobile devices from "hand-held" mode, and use the convertibility of attire to protect and enhance intelligent elements. Attire is big in size, large in capacity, deformable in shape, attachable and detachable in structure, and its carried items can be exposed and concealed at will.

Attire is a daily necessity in people's lives, and the most suitable place for development of new generation of mobile intelligent device to replace the miniaturized traditional mobile one; the technical achievements of hardware "miniaturization" make Atphon Travelwear more intelligent, more fashionable and popular with users; Atphon Travelwear increases the choice of chip types, and expands the installation space of intelligent components.

#### Sect.1: Patent

Atphon Travelwear is a patented project of Internet of Things under development.

• Patent title :Convertible combination of attire and backpack with network communication and intelligent sensing features

(US Patent No. US-11470948-B2)

https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/11470948

The first-generation product of Atphon Travelwear has been produced and will soon be launched Market.

## This patented technology has the following four items that are under development or have been applied to the first-generation of Atphon products, they are:

• Smart attire transformable to backpack

Protected by claim2 of Patent US-11470948-B2:

COMS attire comprising detachable hat, neck bag, waistband, intelligent decorative fabrics.

The COMS attire composed of main body of article of clothing and matching body of article of clothing.

The main body of article of clothing equipped with intelligent hardware and software and decorative fabric cover as functional attire with intelligent features.

The matching body of article of clothing not equipped with intelligent hardware and software.

The main body of article of clothing and the matching body of article of clothing is made into complete attire with a interlayer in the middle.

The main body of article of clothing worn outward acts as a functional attire, the matching body of article of clothing worn outward acts as an ordinary attire, and both the interlayer of main body and the interlayer of matching body turned from inside out together to form a backpack

Article of clothing changeable to backpack and back apron.

The backpack formed by turning the inner layer of interlayer of article of clothing to outer layer of backpack and turning the top of article of clothing to bottom of backpack.

The detachable hat on COMS attire capable of be used as neck bag and a shoulder bag after it be detached from attire, and be stored in a pocket in the interlayer of COMS attire during it be left unused.

• (2) The data processor (Hubware) installed on attire.

Protected by Claim3 of Patent US-11470948-B2:

The independent components of COMS attire comprise intelligent decorative fabrics and special chips.

The chipset of hubware comes with remote network connectors comprising Wi-Fi, and short-range network connectors comprising Bluetooth.

the components of hubware chipset comprise chips of system data storage, chips of user data storage, chips of application software storage, chips of fragmented data processor, and chips of temporary data processing (RAM).

The hubware chipset has a SIM card slot to make SIM card freely installed, replaced and removed by user.

The hubware chipset communicates by using a dedicated network account as one of the credentials.

The network account used to manage the information of hubware chipset and overall COMS attire by the attire owner.

The hardware identity information of hubware chipset is a key credential to be used when verifying the dedicated network account.

The hardware identity information of hubware chipset comprises serial number and internal code, the said hardware identify information acts as a communication verification credentials in network activity of COMS attire.

• (3) AIR Storage

Protected by Claim7 of Patent US-11470948-B2:

When hubware acts as a fragmented data processor on COMS attire, the fragmented data processor and local fragmented data are selectively and separately stored in hubware, and capable of be set to reject other type of data to store in storage chips dedicated to fragmented data;

The working steps of fragmented data processor on COMS attire comprise: the full data transmitted from mobile devices to COMS attire be split into local fragmented data and remote fragmented data, then local fragmented data be stored in storage chips of

hubware on COMS attire, remote fragmented data be transferred to remote server for storage by COMS attire;

The fragmented data destroyed the informative meaning by adding interfering code, disrupting code sorting by processor, and never restored to original full data with only a piece of separate fragmented data;

The local fragmented data capable of be made into decorative graphics on attire comprising QR code graphics used for login verification credentials for a particular COMS attire account, and directly used for COMS attire account login verification credentials;

When local fragmented data as verification credential detected by account system, the local fragmented data and related remote fragmented data enter the process of assembling and restoring to original full data file on server side; assembly and restoration succeeds, account login verification succeeds, otherwise, login verification failed.

Protected by Copyright (Canada Registration Number 1132464):

Network Server Base Assembling of Isolated Remote Data (Server Base AIR Storage)

• (4) Semi-network OS architecture.

Protected by Claim8 of Patent US-11470948-B2:

The system support provided by hubware comprises the system support to COMS attire and the system support to other desktops and laptops.

The hubware acts as a center chip on COMS attire programmed to provide system support to various mobile intelligent devices, auxiliary devices and independent intelligent components on COMS attire.

The hubware also provides basic operating system support for desktops and laptops other than COMS attire, in this case, the system data stored in hubware input into the RAM of desktops and laptops to support the operation comprising keyboard, mini-screen, mouse, external storage device and RAM, then the desktop and laptop is dominated by hubware, and its original operating system stop working.

In hubware dominated desktops and laptop, the operating system is composed of two parts, one part provided by hubware, the other part be downloaded from network server, and the network part be complementary to the part provided by hubware.

The network part of operating system guided and detected by hubware, and downloaded to desktops and laptops as needed.

The hubware part and the network part of operating system combined into one and run in the RAM of desktops and laptops.

## Sect.2: Copyright

Atphon Travelwear is also protected by a number of technical copyrights (Canadian copyright registration) for composite clothing design and IoT-related application software, which are:

• A design of double-side attire changeable to backpack with backpack straps hidden in interlayer of two matching body of attire then backpack formed by turning interlayer of attire to outer layer of backpack and turning top of attire to bottom of backpack

Registration Number:1195999

Registered: 2022-09-06

Date Published: 2021-02-20

<u>https://www.ic.gc.ca/app/opic-</u> cipo/cpyrghts/dtls.do?fileNum=1195999&type=1&lang=eng

• (2) A clothing design for installing rearview mirror on side of head of wearer to observe the rear scenes of body that a foldable holder of mirror is mounted near shoulder of front chest of clothing and be hidden by decorative cover or pocket when not in use.

Registration Number: 1157979

Registered: 2019-03-21

https://www.ic.gc.ca/app/opiccipo/cpyrghts/dtls.do?fileNum=1157979&type=1&lang=eng

• (3) Network Server Base Assembling of Isolated Remote Data (Server Base AIR Storage)

Registration Number: 1132464

Registered: 2016-08-02

Date Published: 2015-12-06

https://www.ic.gc.ca/app/opiccipo/cpyrghts/dtls.do?fileNum=1132464&type=1&lang=eng • (4) Using File as User Authentication (File Print)

Registration Number: 1132465

Registered: 2016-08-02

Date Published: 2016-02-04

https://www.ic.gc.ca/app/opiccipo/cpyrghts/dtls.do?fileNum=1132465&type=1&lang=eng

#### Sect.3: Demand of Users

Generally speaking, most of similar technologies are single-oriented, and they are not combined into a compound-oriented, moreover, even as single-oriented technologies, the Atphon Travelwear have also greatly improved the technical structure and application of those similar technologies.

Many people, especially the elderly, schoolchildren, sick and disabled, will take mobile phones as a burden, but nobody regard attire he wearing as a burden. Unfortunately, although the mobile phone is inconvenient to carry, people have to carry it with them everywhere because there is no other choice, Atphon Travelwear is precisely the project for such users.

Compared to existing mobile devices, Atphon Travelwear can better meet the needs of users:

People have long relied on attire and "hands" to carry mobile devices, comprising mobile phones, even if it is inconvenient, this can only be the case; the application Atphon Travelwear here turns the attire itself into mobile device, which improves the traditional mode of carrying.

People's attire is different in the four seasons, especially in hot summer, the attire that act as Atphon Travelwear will still become the burden of user in travel.

The attire invented here can be easily converted into a backpack, or back apron, or shoulder bag, or a pair of sub-suit of COMS attire anytime, anywhere, as long as these designs can add fashion elements and consider the needs of men, women and children, the trouble of using Atphon Travelwear in summer or in different scenarios can be solved, thus forming the novelty and originality of this invention.

Atphon Travelwear is much larger than existing mobile phones, it is easy to get into sight of people, and easy to be found when it is lost, which is also an obvious advantage of one.

## Sect.4: Adaptability

This is mainly manifested in the following points:

• Accompanying tightness

Atphon Travelwear is a wearable product, it should follow wearer to go everywhere, but mobile phone is carried, it is easy to be separated from wearer in different places, which brings the risk of losing or forgetting. Besides, the main support of existing mobile phone in operation is "hand holding", while the main support for Atphon Travelwear is attire, so Atphon Travelwear liberates the user's hand to a certain extent.

• Carrying capacity

The ability of Atphon Travelwear to carry hardware components and related software far exceeds that of existing mobile phones, which has broken through the "miniaturization" frame that plagued mobile phones for a long time, and Atphon Travelwear has more room for expansion than the existing mobile phones.

• Ease of operation

Atphon Travelwear's dial and function keys are made into attire buttons, then the design of its size and shape have more choices than existing mobile phones; attire buttons are easy to be accurately positioned by wearer, and buttons made into different shapes are easy to be touched by wearer in dark, which makes the dial and function key or buttons of Atphon Travelwear more convenient for operating.

In particular, it is more suitable for people with visual impairment who can only choose dial and function key or buttons of different shapes by hand feeling; in addition, the dial range of Atphon Travelwear is pre-set, the number of keys is reduced, and the rate of operational errors will be greatly reduced.

• Data security

Atphon Travelwear uses special data fragment processor to fragment and process the transmitted and stored data, which is not yet seen in existing mobile phones.

Compared to the existing attire-backpack combination technologies:

The present application creates a complete different type of backpacks with different structures, with the addition of intelligent functions, with the attributes of backpack straps converted into intelligent components, and backpack becomes an important measure to protect intelligent devices and independent components.

## Sect.5: Copyrighted Prototype and Tech-pack

This is a copyrighted prototype sample and tech-pack of combination of clothing and backpack, and the prototype sample was completed in 2019.





#### **Chapter 4: Cxino Cloud**

As a brand powered by innovation, we are using the Internet of Clothing to challenge the status quo, walking alongside modern-day travelers in complete harmony, towards a more responsible future.

The first-generation product:

• The clothing is a backpack

- The clothing is a data source
- The clothing is a smart jacket transformable into backpack.

It is designed for safe travel of the elderly, for easy travel of the young, for mutual assistance of the passers-by, and for peace of mind of all people.

One of its remarkable originality is: install a mouth on clothing, and let the clothing speak for people.

#### The second-generation products (under development):

- The clothing is a backpack
- The clothing is an information platform
- The clothing is a smart phone
- The clothing is a smart tool with comprehensive functions

All this depends on Cxino Cloud as a backup

## Sect.1: Brief of Cxino Cloud

- The road of mobile smart clothing begins with Atphon Travelwear.
- The road of worry-free Internet of clothing begins with Cxino Cloud.

First product of the Atphon Travelwear we are launching now is an IoT Jacket, which opens up a relationship between the Jacket and the Internet; here, the Cxino Cloud and IoT Jacket can only depend on each other and cannot be separated from each other.

Cxino Cloud is the service platform of IoT Jacket, which requires the participation of software and hardware information on Jacket, and needs to have a direct interaction with the software and hardware on Atphon Travelwear, such as the QR code and hubware on Jacket.

Once Atphon Travelwear loses Cxino Cloud, it will become an ordinary wearable item, and will lose all attributes and values of IoT clothing.

## Sect.2: Helpful cloud

- If you are an overseas immigrant who frequently travels between two places
- If you are a travel enthusiast
- If you are a person who travels around the world for various reasons

You will inevitably encounter the embarrassing things I encountered during my trip more or less, this kind of worry-free Cxino Cloud that Atphon Travelwear connected has helped me, and will definitely help you." Said Dr. Walterz (CEO of Cxino Semi-network Technology Inc) while he introducing this project to the public; "it is basically a fashion jacket transformable into a backpack, a network information source, and an intelligent tool." Walterz added

#### Sect.3: Backup and supplementary Cloud

Several pieces of Atphon Travelwear capable of be formed into a communication group through the settings in Cxino Cloud, and hardware identity information of their hubware on attire is used by group members to identify each other during group communication.

When Cxino Cloud serves as a backup and supplementary platform for existing smart devices comprising mobile phones, the Atphon Travelwear provides scannable codes, images, and physiological and physical information for existing smart devices to make wearer quickly contact the remote target and perform communication.

The scannable physiological information is set in advance in Cxino Cloud by wearer or by a third party, and scannable items attached to Atphon Travelwear, such as QR codes, are generated in Cxino Cloud.

## Sect.4: Worry-free Cloud

The process of travel is always full of hardships, and this hardship comes from the wearing of clothes, or from the carrying of items, or from the support of mobile devices carried, etc.

The Cxino Cloud that clothing connected to is the worry-free one that can make people's journey much easier.

"Worry-free" means that the Cxino Cloud via attire will respond quickly to travelers during the trip for:

- Meet the needs of tour group to check the identity of group members and count the number of people.
- Meet the needs of smart components on attire to obtain stable network resource support.
- Meet the urgent and fast communication needs of travelers on the way.
- Meet the sudden needs of personal identification documents and personnel tracking.
- Meet the needs of emergency security alarm.
- Meet the needs of preventive remote control.

### **Chapter 5: Story of project**

## Sect.1: Story of the birth of project

I want to go home eagerly, but I forgot my address

I'm looking for you anxiously, but I don't know where you are

Now with Atphon travelwear

No more lost

No longer wandering

• This is a true historical story of the birth of project that Walterz and his family experienced, and it inspired them to create multifunctional clothing with intelligent features.

In the process of creation, Walterz is one of the main initiators and contributors, but he works together with all his family, so that the process can be smooth and continuous improvement.

At that time, Walterz was studying PhD program of computer engineering at university and his dad is working in a certain career, they were in Canada all the year round, and his dad's elderly parents (also Walterz's grandparents) live in China, and they cannot spend much time with their elderly because of their study and work.

A few years ago, suddenly, made them great panic, Walterz's grandma, a nearly 90-yearold lady disappeared, that is to say, something terrible has finally happened in their family that the tragedy of many people who are elderly dementia has happened.

#### Sect.2: Stories told by Walterz's dad

A haggard and tired elderly lady hovered around a food booth, and when the owner of the booth asked the elderly lady what she wanted, the elderly lady could hardly hide her shame and said that her wallet had been lost, and she was just passing by.

As the elderly lady speaks, her eyes longed for the food in the booth. The owner of the booth is a kind-hearted person. She mistook the elderly lady in front of her for a poor beggar suffering from hunger, so she persuaded the poor elderly lady to have some fried sticks and soy milk. When the owner of the booth promised to give more free food, the elderly lady declined gently.

That elderly lady mentioned above is my mother, who was suffering from dementia caused by aging brain malfunctioning when the incident described above occurred.

In fact, my mother was an accomplished professional woman before her retirement, her income after retirement was still abundant, abundant enough for her to donate money to charity on a regular basis without affecting her living quality at all. Her helpful deeds have also once been published in a local newspaper.

My mother was living a wonderful life, she had a husband who loved her so much, and had all the respect from all her offspring. But things changed.

A few years ago, to our great panic, my mother had gone missing suddenly, when she was almost 90 years old.

Our family searched for her 3 days non-stop, every single one of the family members was looking for her anxiously. We turned to public authorities, television stations and network resources, but there was no any news until the third day, that my elderly mother came home by herself with mud covering all over her, and she could not remember anything happened in these 3 days and had lost all of her belongings. We were all just grateful that she came back home alive.

Not long after my mother's first time gone missing, she took off in the middle of a night while all family members were asleep and her shadow merged into darkness.

In the early morning of the day, we noticed that she had gone missing again. Just like the first time, we utilized all the resources we could, but very little information was returned. The GPS tracking device we bought for her right after the first time incident, was disappointingly been disposed of on a random street with some of her belongings lying around.

We searched for her again and again, but with no sign of direction left for us to track, the hope of rescue soon became very slim.

Just as we were faffing around searching for my mother, hundreds of miles away, there was an owner of a food booth handing out free food and drinks to a haggard and tired elderly lady hovered around. The owner of the booth suddenly noticed that the appearance of this elderly lady in front of her looked very much like a photo of missing person that announced by a network platform.

Soon communication was established, my mother finally was found and came home after curled a freezing cold night in a deserted construction site.

• Due to her dementia, my elderly mother had repeatedly gone missing several times before her final passed away in 2019.

We as a family did all we could to prevent the situation from getting any worse. After going through searching processes again and again, the frustrations that I encountered

really motivated me and my family to seek solutions for my mother and many others alike my mother.

- Atphon Travelwear is my family's answer to dementia caused by aging brain malfunctioning.
- Every little design details of the project are after long and hard thinking, the purpose is only to provide a real-world solution to release some of the burdens when accidents happen.
- The special design elements embedded in Atphon Travelwear means that the project can also be used in fields other than its original purpose.

My son, who used to be a PhD student of computer engineering at the University of British Columbia in Canada, once participated in the search for his grandma, and from the technology perspective view, he contributed greatly to the design of the project.

## Sect.3: Stories told by Walterz

I am the "son" mentioned by my dad in the part of "Stories my dad told". The story is the real memory of my dad.

I was studying for PhD in computer engineering at the University of British Columbia at the time my grandma started showing early syndrome of dementia. Like all of my family members, I too participated in the searches of my grandma several times in the missing events.

The frustration I encountered during the searches was "real" but also "unreal". I am a person works in the technology field, have access and knowledge to most modem technologies, and would never think that tracking down a gone missing dementia person could be this challenging if I didn't experience the entire process by myself.

• During the searches, the most frequent question popping in my mind was "We have so much modern technology at our disposal, but so little was implemented in this sector, why didn't we utilize more technologies at consumer-grade to help those in need?"

One day, my dad proposed the idea of using clothes as a carrier of intelligence elements to me for solving the problem of those families like my grandma's frequent disappearances, and I jumped at it immediately.

According to numbers from Alzheimer Society, there are currently over 500,000 Canadian living with dementia, and the number going to reach 912,000 in 2030, 1 in 5 Canadians have experience caring for someone living with dementia.

# By the numbers

#### The urgency

Over 500,000 The number of Canadians living with dementia today.<sup>1</sup>

912,000 The number of Canadians living with dementia in 2030.1

25,000 The number of Canadians diagnosed with dementia every year.<sup>1</sup>

65% Of those diagnosed with dementia over the age of 65 are women.<sup>2</sup>

1 in 5 Canadians have experience caring for someone living with dementia.<sup>3</sup>

# **Alzheimer**Society

If those numbers weren't shocking enough, here are more numbers posted from World Health Organization (WHO), showing there are currently 50 million people who have dementia, and this number is going to reach 82 million in 2030 and 152 million in 2050 worldwide. That is on average 3.35 million new dementia cases increase per year until 2050. Take "The estimated proportion of the general population age 60 and over with dementia at the given time is between 5-8%" into consideration, that is currently we have 2.5 million to 4 million elderly people suffering dementia worldwide, and this number can potentially reach 6.56 million in 2030 and 12.16 million in 2050.

#### **Rates of dementia**

Worldwide, around 50 million people have dementia, with nearly 60% living in low- and middle-income countries. Every year, there are nearly 10 million new cases.

The estimated proportion of the general population aged 60 and over with dementia at a given time is between 5-8%.

The total number of people with dementia is projected to reach 82 million in 2030 and 152 in 2050. Much of this increase is attributable to the rising numbers of people with dementia living in low- and middle-income countries.



The tortuous and anxious experiences also gave me a lot of enlightenment.

• People always praise the "magic" of intelligent products, but often inadvertently neglect the help of carrying ways to intelligent products; in order to carry intelligent products conveniently, people always wear attire with enough pockets or carry bags with large volume, but when talking about the use of intelligent products, they often underestimate the role of attire and bags.

Indeed, even if there are attire and bags in hand, intelligent products may not be able to play their due role as expected, and my grandma's painful experience is a living example.

As a result, a new type of intelligent object came into being, and the above story directly gave birth to the design of Atphon travelwear.

To be exact, it was born from my family's experience, tortuous and full of bitterness.

Imagine that many elderly dementia people fall down on the roadside because of hunger and physical overdraft, and even fall into the mud pond, from then on, no one knows the origin of their lives, and sadly, future generations will follow their predecessor's trajectory to the same tragedy.

Perhaps their lives will be saved as long as they carry with them a kind of information or intelligent items to help them return home.

• We are seeing this huge amount of people in need, they may have lost some of their intelligence due to natural causes, but through modern technology, we are giving intelligence back to those who may be needed.

This first-generation product comes from our first-hand real-world experience. Although it is still far from the technical requirements of the Internet of Things, but because it combines attire and intelligent elements such as smart communication into one, so since, it has take a very critical step on the road of Internet of Clothes.

I have a strong belief that we are only scratching the surface of the possibilities in this area right now, but it won't be long before much more technologies will be executed on our new products in the future generations to help those in need .

• The creation of Atphon Travelwear is divided into two design processes, one is the design of attire, another is the design of IT elements, and the design of attire has the full participation of my parents.

My parents gave me a lot of specific suggestions and help on the design of the combination of attire and backpack, such as how to design this new style of wearable as a new platform for installing and protecting intelligent elements, and make the attire meet the requirements of carrying intelligent elements.

Here, I would like to express my deep gratitude to my elderly grandma, for her painful experience opened the design process of this intelligent Atphon travelwear, although she failed to try this achievement herself, I always feel that she still longs for this achievement, and if she can know the achievement of today, she will feel gratified and satisfied, because I know my grandma very well, she has been "thinking of others" all her life, and moreover, she always cares more about others than about herself.

• This Atphon travelwear originated from the experience looking for my missing grandma, but as a gift, because it has both practical and fashionable advantages, anyone can use it to express a love and devotion to his family, to express a respect to seniors, and to express a concern to friends.

As a common daily necessity, because it meets the needs of modern intelligent life, it can bring unexpected convenience and surprise to those who devote themselves to their career and make a living in all walks of life.

A few years ago, shortly after my grandma had disease of elderly dementia, I had the vague idea of creating special attire for her safety.

Although my grandma has passed away and no longer had the opportunity to wear the attire launched here, although the design changed a lot later than the original idea, but the purpose has been consistent, that is, to protect people from accidents, to add convenience and reduce trouble for people.

## Sect.4: Story told by the first user of prototype

I was the first person to try out the prototype of Atphon Travelwear after it was produced. Although the prototype product at that time had only some simple functions, which could not be compared with the diversified functions of the current and future products, it really helped me get through many embarrassing encounters during my travels for my parents, and accompany me through a period of unforgettable time, and which made me deeply feel the project's technical potential and application prospects.

I will never forget what Atphon Travelwear has done to me, and I am sure that Atphon Travelwear will help you and those who travel around the world for various reasons.

• Two different styles of jackets merged into one.

In the past, jacket was only made for convenience of people wearing, but now, because of its advantages in carrying things, especially in carrying mobile devices, I have already relied on it, and what's more, it can be easily transformed into a backpack when there is a sudden need!

Fortunately, this variable jacket is equivalent to two sets of clothing, and I only need to change the way of wearing, it will be a fashionable jacket, and I can still go to work and go to parties while wearing it.

The variable jacket is a blend of two single-layer jackets with different design styles, one layer is an ordinary sub-jacket, which focuses on the fashion sense of wearing, and the other layer is the special sub-jacket, which focuses on carrying items and intelligence;

when the variable jacket is worn as an ordinary sub-jacket, the special sub-jacket and its carried items are hidden inside the variable jacket.

Another reason I rely on it is that this variable jacket is made of lightweight, hardwearing and waterproof fabric, suitable for wearing all seasons, whether it is summer or winter, so it is also very suitable as a fixed residence for my mobile devices.

# • (2) A backpack transformed from a jacket

At that time, I was working in Canada and my elderly parents lived in China, so I have to travel frequently between the two sides of the Pacific, that is, I had to travel frequently by plane, train, and car, and had to go through immigration security checks in different countries, go through the security check of airport and railway station, etc.

During the security check process, I always worry that some important personal items will be lost in a hurry, such as mobile phones, power cords, various smart cards and documents, which always gave me a headache, but since this variable jacket was successfully made and put on by me, everything has become so relaxed and orderly.

When traveling between two countries by plane, I need to take a few pieces of luggage and check it by plane. Once, thanks to the variable jacket I was wearing, I could turn it into a backpack, otherwise I would be completely helpless and embarrassed.

That made me so anxious that my checked luggage was overweight, but the time for the flight to take off was approaching, and the time was too short for me to find my family to retrieve the extra items. Moreover, I was really reluctant to discard any items.

At this time, I quickly took off the variable jacket and turned it into a backpack. In fact, it was very simple. In just a few minutes, many items in the luggage were transferred to my backpack.

Unexpectedly, my backpack can hold many items, and then my luggage was checked smoothly, and my variable jacket became a backpack and I carried it on board.

As my mother's elderly dementia got worse, I finally had to quit my job in Canada and return to China to stay with her.

The subsequent experience is really sad.

My elderly dementia mother always went to the street alone when her family was not paying attention, and no matter whether it was rain or shine, then she couldn't remember the way home, from this, day or night, I take the initiative to push my old mother to the street in a wheelchair. We often wear thick clothes to keep out the cold when we go out in the morning, but by noon it is hot enough to force me to take off the thick clothes, and the clothes that I take off then have become a great burden. Since I have this variable jacket, I no longer fear the problem of undressing like this, as long as I take off this variable jacket and turn it into a backpack, the backpack will be enough to hold a thick winter coat, and then I carry it on my back.

Sometimes I used my backpack to pack some water bottles and food when I went out, after water and food is consumed out on the way, I would turn my backpack into a jacket and put it on me.

Once on the way, it suddenly rained. Although I prepared an umbrella when I went out, but my old mother had a dementia attack and insisted on going on in the rain, as a result, we were all drenched. This incident also prompted me to use waterproof fabric in the variable jacket and add a detachable hat, so that it can be used as a raincoat when necessary.

While strolling on the street, my elderly dementia mother saw novel knick-knacks in the store and always wanted to buy something to go home, and even picked up some rubbish she was curious about on the road, in this case, my variable jacket can be used, because my variable jacket can be turned into a backpack, and the capacity is enough to bring back the items purchased and picked up by my old mother.

In order to take care of my sick old mother, I sometimes need to live in China for a longer period of time, so I have to bring my personal laptop.

When flying from Canada to China, my variable jacket was also used as a backpack to hold my Laptops and other items, because this is a temporary demand, at the destination, after the laptop is taken out, the backpack is turned back to my jacket for wearing, which saves the burden of keeping extra backpacks.

• (3) A concealable backpack strap.

I often use my variable jacket as a backpack during my travels; especially in the hot summer, the backpack has become my main tool for carrying personal belongings. At this time, the backpack strap of the variable jacket actually has a special purpose.

People need to reduce the clothes they wear when they feel too hot; at this time, the first problem they face is how to carry mobile phones and various ID documents and smart cards. The solution seems to be small bags, because those items need to be picked up at any time, and only the small bag can provide such convenience. However, the backpack strap hidden in the variable jacket is also a solution, because the backpack strap of the variable jacket is equipped with small pockets for storing mobile phones and smart cards,

etc., and there are wire channels to connect pockets of backpack strap and the main body of variable jacket, or lead to the outside of the backpack, which surpasses the ordinary backpack strap.

The backpack strap is usually hidden in the interlayer of variable jacket when not in use, and even becomes the safest and reliable storage place for precious or secret items. When used as a backpack, the small pockets on backpack strap can replace the pocket of a normal jacket, and provide backpack owners with the convenience of storing and accessing mobile phones, etc.

## • (4) Decorative cover

It is easy for people to forget to bring their smart cards when going out, but they will never forget to wear clothes when going out, and every time I get into the embarrassment of losing my smart card, I always complain about my clothes, why is there no pocket that can place my various smart cards in different categories? Various chores are mixed in one pocket, which will inevitably increase the difficulty of accurately picking up the smart card, and even increase the risk of smart card loss.

This kind of experience inspired me to transform the traditional decorative pocket cover on ordinary jackets into decorative cover for variable jackets with unique functions.

In fact, many smart cards, including personal ID cards, can be used without taking out their pockets. As long as the pocket is close to the authenticator provided by the other party, the identity can be verified immediately, or the door can be opened immediately.

Usually, the pocket cover is only an ornament of the clothes. On the variable jacket, it still has a decorative purpose, but now, it is also an important special pocket for storing smart cards. Its position on the clothes always make it easier to approach the signal identification device provided by the other party, so that it can complete the identification task without taking out the card from pocket.

In short, on the variable jacket, this is a decorative cover and a dedicated pocket for smart cards, but you might think that it's just an ornament and you can't notice that it's also a pocket.

## • (5) The wire channel

The wire channel here is deployed in the concealed part of the jacket, or made into decorative cloth strips, it will not make the jacket a fancy dress, and it can also add flashes to the jacket.

The wire channel can connect the various pockets of the jacket so that the wires in it connect various smart elements of the jacket, whether the variable jacket is used as a

jacket for wearing or as a backpack for placing items, whether it is a jacket with sleeves and a hat, or sleeveless and hatless jackets, their wire channels are connected as a whole.

It should be noted that the wires in the wire channel are installed and deployed by the wearer to deal with different smart devices on the variable jacket.

Carrying mobile devices such as mobile phones has become a normal function of clothes, and most of these mobile devices need the assistance of wires, such as the wires of earphones and the wires of power banks, but the wires are scattered and easy to lose and easy to be forgotten to carry.

Many people have suffered from the lack of wires that made mobile phones and other devices unusable during their travels, and I am no exception.

Laying a wire channel on the variable jacket, and using the jacket to prevent the wire from being lost or forgotten to carry, so as to overcome the shortcomings of the wire " scattered", this is also the most practical and reliable method I have learned from my travel practice.

• (6) The controllable QR code

During that extraordinary period of frequent flying across the Pacific, I once imagined how great it would be if the variable jacket could one day be used for remote communication or as an information source! Later, this task was carried out by my son.

Now the controllable QR code has been attached to the variable jacket, which is only the first step, and the comprehensive plan will be implemented step by step.

The so-called controllable QR code means that the QR code is usually inactive and cannot be scanned to display any key information, and this is to protect the owner's personal privacy. Only when the owner logs in to his personal account to activate, the QR code will be active and the scan will have a result.

After the QR code is activated, it can be closed and changed back to inactive at any time.

When the variable jacket is worn on you, you can ask the QR code for your pre-set private information, such as airline ticket information, identity information, address information, contact information, friend information, etc.

When the variable jacket is transformed into a backpack, you can use the QR code as a means to prevent items from being lost.

All in all, in terms of carrying items during the journey, backpacks and jacket pockets have their own advantages and disadvantages.

Travelers can think about it if you put too many or too large items in your jacket pocket and hinder your wearing or walking, you can turn your jacket into a backpack at the right time, is that the best choice for you? Then, the pockets of the jacket become several compartments inside the backpack, and the items can also be sorted and stored very clearly.

People wandering around the world are often unfamiliar and helpless wherever they go. Therefore, trivial matters will also make people extremely annoyed and deeply helpless. Now, the variable jacket may be able to help them.

#### **Chapter 6: Letter to Investors**

Hello investors:

This is a sincere invitation from Cxino Semi-network Technology Inc (Canada) for you to join our project.

What we have developed is an Internet of Things project based on wearable objects. The trademark of our product is Atphon Travelwear, which is subject to the protection of a number of patents and design copyrights.

The technical development of the project is in progress, and the first-generation product is a QR Code jacket that can be transformed into a backpack, which will be launched on the market soon.

This product is connected to the Cxino Cloud we made, and Cxino Cloud is a specialized platform for Internet of Things developed by us, and Cxino Cloud can also support the technical requirements of the Internet of Things for various other physical products.

For details about our project, including technical characteristics, market demand, business model, development strategy, current project progress and future outlook, please refer to our official website cxino.com

We solemnly recommend our project to you, first of all because of our confidence in the project, because our project is a " rigid needs " project in the market, with a very broad and solid public foundation, and the elements it contains, including fashion clothing, variable backpacks and smart mobile, are all essential things in people's modern life.

As long as you stand on the street, you can see people wearing jackets, backpacks, and holding mobile phones everywhere, and our project combines these three "market rigid needs" elements into one, which can provide people with unlimited convenience and an unprecedented sense of security and peace of mind, and which also indicates its far-reaching market potential, because it can realize a dream of many people.

In addition, our project originated from a real story, which contains a son's commitment to his parents, and a grandson's commitment to his grandparents, contains a kind of commemoration of the predecessors by sons and grandsons, and also contains a belief in the "social responsibility" of the founders of the project, therefore, no matter how difficult and tortuous the entrepreneurial process we face, we will never give up halfway, and we will definitely implement the project to the final success.

Furthermore, the initiators of the project are Walterz and Charliez.

Walterz has a doctoral background in computer engineering, has many years of experience in software and hardware development, has achieved fruitful technical achievements, and he also has a strong sense of business.

Charliez has a graduate (master) background in finance, has many years of business experience, and has certain commercial achievements.

So they each have their own strengths and can cooperate closely to learn from each other's strengths.

It is also very important that Charliez will support Walterz with all his strength.

This is not only because they have the closest human relationship, but also because they have jointly witnessed the suffering of their family members who suffers from intellectual disabilities, have jointly experienced the hardships of finding missing family members of intellectual disabilities, they initiated this project out of the same motivation, emotion and social responsibility, that is, using intellectual tools to help those who need to supplement their intelligence, which is far above ordinary business considerations, so they form the initial entrepreneurial team, the unity and cooperation of the team will be smooth and permanent, and the operation of the team is destined to be stable, precise and effective.

With the above points as the foundation, is there any reason why our project will not be successful?

Therefore, we hope that smart and discerning investors can appreciate our project, join our project, and work hand in hand with us to create a brilliant future.

All in all, the design of our product originated from a true story, and our team will make every effort to transform the combination of attire and backpack launched here into unique fashion wearables with intelligent features.

We hope to raise funds through the first-generation product to develop and bring our second- and third-generation products to the market, and we firmly believe that this kind

of refreshing products that combine fashion and intelligence will be welcomed by consumers.

Our products are started with a sense of mission and responsibility, "Caring" will always be the foothold and starting point of our products, we need everyone's support, we are eager to make breakthrough progress in our product development as soon as possible, because this is also the desire of many people who need the help of intelligent tools.

Unfortunately, this is a very big and complex project that requires a lot of capital investment and high-end technical talent support, and currently we do not have enough fund and technical strength to fully complete the future generations of new products.

I have full confidence that after you view our project information from our official website, you will be excited like me, because this technology really can bring IT career a new prospect, may also lead to a new market trend.

I hope our project can attract your attention, hope to hear your affirmative response, hope to explain our project in person to you one day, and hope to get your strong support.

Zhang, Yin Sheng (Walterz)

CEO of Cxino Semi-network Technology Inc (Canada)