# adverpost Patent Primer

6 August 2019

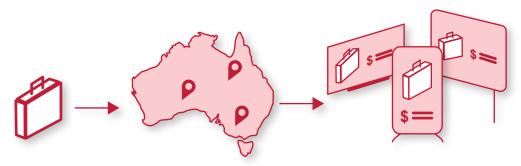




# **Adverpost** (Method and System for Data Transmitting and Displaying)

ZL 201110082382.3 (also patented as AU2016200472B2 & PCT/CN2011/075731 pending)

The Adverpost system connects advertisers directly with the owners of LED and LCD displays. It provides a simple and cost effective way to monetise new and existing displays, as well as an accessible platform to purchase advertising space. It utilises a data managing platform which connects data displayers and data providers (either individuals, organisations or E2V automated providers). The addition of a data manager compared with existing systems removes the requirement for manual arrangement and negotiation of advertising space, greatly improves accessability and reduces cost and administrative burden of display ownership. This allows business who are not primarily involved in advertising to utilise LED and LCD displays for the first time.



## **ARV** (Media Control Method and System)

AU2017204785A1 pending (also pending as CN201710559629 & US20180018699A1)

Ambient Responsive V-Commerce changes how advertisers schedule content on displays. Currently advertisers have to choose where to display content and hope that it engages with the target audience. ARV uses the combination of ambient sensors on the displays and parameters supplied by the advertisers to determine the optimum content to be displayed. In combination with Adverpost, it allows for content on a screen to adjust dynamically based on ambient factors, including weather, time, temperature, socioeconomic demographics, and even the buying patterns of local consumers.



### **E2V** (A Display Method and Device)

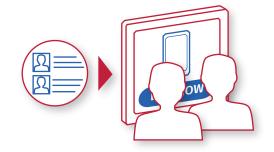
CN201510240289.9 pending (also pending as PCT/CN2016/081529 & AU2016260749A1)

E-Commerce to V-Commerce (E2V) is another patent that bridges E-Commerce with Virtual Commerce. E2V describes how one can take already existing content, such as products for sale, and convert that data into a format ready for advertising medium. E2V further allows for advertisements to sync with existing product catalogues, and allows for advertising to update in real time with product changes. As the advertising works and products sell, the advertising changes on the fly. Integration with Adverpost and ARV allows transformation of outdoor advertising to virtual storefront operations. Advertisers can take products and services to their desired markets and deliver them to the correct target audience rather than blind advertising.



# **Smart Display** (Data Processing Method, Device and System) ZL 201410219695.2 (also pending as PCT/CN2015/079555 & AU2015263573A)

Smart display enhances LED displays to better detect nearby viewers. Like ARV, it detects nearby people and adjusts its displayed contents and functions based on those around it. People can interact with the display and share their interests, allowing for tailored advertising. This in conjunction with ARV and other AI innovations can transform the LED displays into intelligent sales robots accessing customers' public social media to engage and interact on a personal level.



### **VCB** (Method and System for Accessing Data)

CN201310560958.1 pending (also pending as PCT/CN2014/090898 & AU2014101615A4)

The Virtual Commerce Bazaar (VCB) provides for more interactivity with advertisements. A degree of separation currently exists between an advertisement and the product or service it is trying to sell. VCB allows for each advertising screen to become a virtual storefront, and for end users to directly connect transact with. VCB can further, in conjunction with Softpanel, divide the advertising screen up and allow for multiple advertisers to present themselves on the same screen at the same time allowing screens to act as a virtual mall.



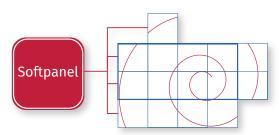
# **IPAM** (Controlling Method and Device of Advertising Display) ZL 201210015905.7

The Internet Periodic Advertising Matrix is an intelligent data structure that represents advertising information, as well as the associated scheduling and display information. To the end user it provides a simple two dimensional table which allows for quick booking of advertising on available displays. Internally the system is able to calculate advertising loop parameters without requiring any user intervention.



# Soft Panel (Method and Device for Setting Data Display) ZL 201410025236.0 (also pending as PCT/CN2015/071005 & AU2015207570A1)

Softpanel is our invention that lets managers better interact with the LED displays. Softpanel allows for direct and remote set up and modification of the LED screens. Authorised users and management programs can quickly reconfigure or swap the LED into performing different functions, thus a screen can provide advertising to users at certain times of the day, and then quickly and easily swap out into another virtual commerce purpose as required. Softpanel can be utilized with other patents to better enhance their functionality and use.



### **FMAS** (Flash Memory Array Device)

ZL200710171787.8 (also pending as PCT/CN2008/070135)

Flash Module Array Systems is a fundamental design patent used in many systems with distributed modular storage controllers. It teaches how to manage a large collection of flash memory based controllers. In our LEDs, each piece of storage is associated with a section of the LED display, usually in a 1:1 relation of cabinet to flash memory. Combined with this, FMAS provides the LEDs with means to display content and act as an advertising medium without the need for a permanent physical server at the screen. Combined with Softpanel, an LED is able to be remotely managed through the internet or other communication method.

### **FMAS** (Block Wearout Avoidance)

ZL200710171786.3

While flash based storage brings many benefits, including higher speeds and reliability, it also comes with a restricted life. Data can only be written to a storage block a certain number of times before that block cannot be used anymore. Block Wearout Avoidance teaches how to avoid this end limit by introducing additional space to quickly swap data. This results in very high read/write speeds while maintaining additional life, at the cost of storage space. This allows for the data storage behind the LEDs to live longer and require less maintenance.

# FMAS (Flash Array Hub, Cascading Flash Array and Interleaving Cascaded Flash Array) ZL201010274777.9

This invention teaches the modular design of the large LED Screens based on HUBs for interconnecting display modules and other control subsystems as multiple display parties. In particular, in connection with VCB, this function allows the division of large screens into smaller virtual show screens' real estate that can be leased or rented to users for various time slots or fractional advertising and virtual commerce transaction processing.

# **FMAS** (A Device and Method of Firmware Based Operating System Independent Flash Array Management)

ZL201010149051.2

This invention allows flash arrays to be utilised and managed irrespective of the operating system(s) used. This innovation allows modular construction of large FMAS based device such as large LED screens, 5G cell distribution system, and Flash Array Storage devices for cloud computing with multiple FMAS cards. This patent also teaches the OS-independent hardware platform management which is used in virtualization for cloud computing.

# **FMAS** (Flash Cluster Device and Configuration Method)

ZL201010234704.7

This invention provides the foundation for Smart Display integration of other key technologies for advanced V-Commerce implementation using multiple screens as data displaying parties in a multiparty multilink configuration for sharing contents in order to save communication bandwidth.

# Other Patents Owned by One World LED

- ZL200710132636.1 OS-Transparent Super OS Communication with Agent Method.
- ZL200810200121.5 A firmware based virtualization platform
- ZL200810204083.0 A switch method based on EFI
- US 7,356,677 B1 Computer system capable of fast switching between multiple operating systems and applications
- US 6,690,400 B1 Graphic user interface for resources management of super operating system based computer
- US 6,401,183 B1 System and method for operating system independent storage management



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