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(54) **INTERACTIVE MULTIMEDIA DEVICE**

(57) The present invention refers to an interactive multimedia kiosk with a touch-sensitive (touch-screen) system to be integrated as urban furniture, specially outdoors, with online interactive contents about the latest news and promoting the economy, culture and tourism of the region where the device is installed, characterized by disclosing a structure comprising:

- a physical structure in lacquered steel with paint finish in black lacquer with anti-graffiti treatment;
- glass coating (front and rear), laminated and tempered with 3+3 mm;
- 46" screen with light sensors and an integrated PC;
- Foiltouch 46 "Projected capacitive film, placed between the glass coating;
- digital cameras;
- which also includes an activated alarm system;
- and a cooling system.

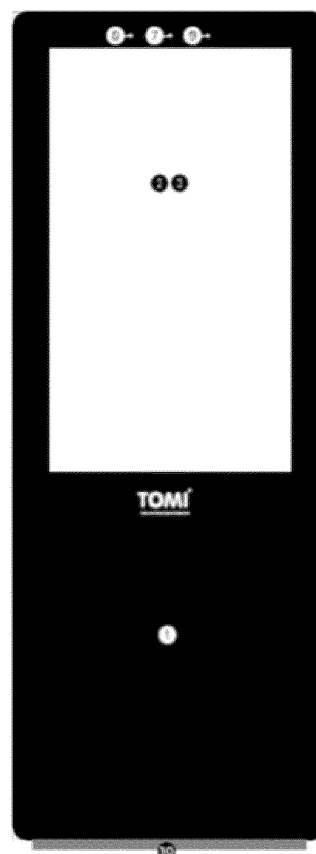


FIG. 01

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Description**Summary of the invention**

[0001] The present invention refers to an urban mobility device with the latest news and which promotes the economy, culture and tourism of the location where it is installed. It can be defined as an online interactive kiosk that supports all users who attend or visit the City, or geographically defined locations or regions. With the device described by the present invention, it is intended to create a solution that values the kiosk element for being an effective means of communication with added value to the citizen/visitor, where there are many points of interest available, like Museums, Pharmacies, Restaurants, Coffee Shops, locations of day/night entertainment, allowing return of the investment with the inclusion of advertisement content.

[0002] The structure of the kiosk described by the present invention is prepared for its installation and operation to endure in public outdoors environment. Therefore the structure should include a cooling system (air conditioning or ventilation) to control temperature inside the equipment, as well as a light sensor to adjust screen brightness adapted to the recorded light intensity. The equipment paint job is prepared for several situations of vandalism, thus including anti-graffiti paint.

[0003] The device is based on a hardware solution that enables one to provide, on an outdoors environment, a kiosk with a 46" screen with an integrated PC, the same device being permanently connected to a network with internet access. The various kiosks should be managed and updated through a centralized server with a fixed IP and should still be based on technology.

[0004] The management platform adapted to the operation of the device allows the user to manage the entire network of kiosks in a centralized manner, thus allowing

- to monitor the status of each kiosk (online, offline, error, etc.).
- to restart an offline kiosk or a kiosk with error by an IP communications independent switch;
- to schedule the shutdown and the beginning of the kiosk;
- to schedule synchronizations with the kiosks;
- to emit usage reports per kiosk, group or network;
- to customize permissions per user.

[0005] The Device/Kiosk presents a set of functionalities that fall within the scope of its applicability. The application interface of the kiosks presents, however not being restricted to, the following main areas:

- Advertising Channel, which allows the addition of various formats (video and image);
- Directory - Allows the user to find several points of interest and calculate trajectories; to book hotels or restaurants, in this case the user being asked to insert some data (name + phone number + date + time) and an email being sent to the entity that will confirm the reservation by telephone contact with the user;
- News;
- Schedule;
- Information - Especially suited to public transport in the city.

[0006] Any one of the menus is activated/controlled by the user through the pan & scroll system, whenever the user wishes to do so. The device user can also select the language in which he wants to consult.

Brief Description of the Drawings**[0007]**

Figure 1 - Represents the front view of the Device/Kiosk.

Figure 2 - Represents the side view, corresponding to the real thickness of the device/kiosk

Figure 3 - Represents the rear view of the device/kiosk.

Detailed Description

[0008] The present invention refers to an interactive multimedia Device/Kiosk, multi-touch because of its *pan & scroll* system, to be integrated as furniture, especially outdoors, characterized by being composed of:

- a physical structure in lacquered steel with paint finish in black lacquer with anti-graffiti treatment;

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- glass coating (1) (front and rear), laminated and tempered with 3+3 mm;
- 46" screen (2) with light sensors and an integrated PC;
- Foiltouch 46 "Projected capacitive film (3), placed between the glass coating;
- digital cameras - three of them located in the front region (7, 8 and 9) of the device and one in the rear region (9) which corresponds to the activated video surveillance alarm system, there being a total of four cameras;
- and a cooling system.

[0009] The front region of the device/kiosk is covered with glass (1) laminated and tempered with 3+3 mm, the rear glass being retro painted with black baking and with transparent areas adapted to the graphic areas, and wherein the cameras are installed (digital (7 and 8) and video surveillance and alarm (9)). The display (2) present in the front region is a 46" screen with light sensors, and, in the area of the screen, a Projected Capacitive Foiltouch 46" coating film (3) is placed between the glass (1).

[0010] The side region is covered with plate (4) painted in dark grey, wherein there are two holes (5) corresponding to the lock of the Device. The need to incorporate a cooling system causes two sets of fissures (6) to exist, one near the top and the other near the base, for ventilation of the aforementioned equipment.

[0011] The rear region of the device/kiosk is, just like the front region, covered by glass (1) laminated and tempered with 3+3 mm, the glass being retro painted with black baking with transparent areas wherein is installed the alarm camera (9) and a set of fissures (6) with an height of about 8mm near the base, for ventilation of the cooling equipment.

[0012] There is also a metallic base (10) to support the kiosk.

Preferred Application of the Invention

Example - Preferred Technical Requirements

[0013]

Panel	Diagonal Type Resolution Pixel Intensity (HxV) Brightness (Typ.) Contrast Ratio Dynamic C/R Visualization angle (H/V) Response Time (G-to-G) Color Space (CIE1931)	46" S-PVA (DID) 1366x768 minimum 0.7455×0.7455 1500 cd/m ² 3500:1 N/A 178°/178° 8 ms 50%
Connectivity	PC inputs Video Inputs Network	VGA/DVI/BNC CVBS/S-Video/Component/HDMI MagicInfo Pro
Power	Power Consumption (MAX) Power Consumption on Stand-By (MAX) Power Source	TBD TBD AC 100-240 V~(±10%), 50/60Hz
Mechanical Specifications	Dimensions (H×W×D) Bezel Width Protection Glass	78.0"×29.1"×17.1" 83 mm (Housing) Included (5t)

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(continued)

5	Operation	Operation Temperature Moisture MTBF Norms	TBD TBD 50,000 Hours Security: UL, CSA, NOM EMC: FCC Ergonomics & Environments (optional): TCO '95, TCO '98
10	Network Features	Special Features Operating System CPU Cache N/B S/B GPU FDM Memory Ethernet USB VGA Out Audio Codec MagicInfo Features	Built-in Cooling System Embedded Windows AMD Athlon64x2 3400 + (1.8Ghz, Dual Core) 256KB (L1), 1MB (L2) AMD RS690T AMD SB600 AMD RS690T 4 GB SEC DDR2 1GB (Single Channel) Marvell 88E8055 Gigabit LAN 3 USB 1 VGA Out Realtek ALC262 Diagnosis (Lamp, Temperature, Fan, etc.) - Network System Information - Asset Management-Global Network
35	Eco-Management	Standard Emission RoHS/Energy Star Product Recyclability Package's Recyclability	EMC N CCFL backlight contains quicksilver, dispose properly Recyclable package materials

Claims

1. Interactive multimedia Device/Kiosk with a touch-sensitive system **characterized by** being composed of:

- physical structure in lacquered steel with lacquered paint finish with anti-graffiti treatment;
- glass coating (front and rear), laminated and tempered with 3+3 mm;
- 46" screen with light sensors and an integrated PC;
- Foiltouch 46 "Projected capacitive film, placed between the glass coating;
- digital cameras;
- which also includes an alarm system activated by a video surveillance camera;
- and a cooling system.

2. Interactive multimedia Device/Kiosk with a touch-sensitive system, according to claim 1 **characterized by** being presented, preferably, in outdoor public environments.

3. Interactive multimedia Device/Kiosk with a touch-sensitive system according to claim 1 **characterized by** presenting

a built-in PC permanently connected to a network with access to the internet.

4. Interactive multimedia Device/Kiosk with a touch-sensitive system according to claims 1 and 3 **characterized by** making available a set of functionalities with the latest news and which promote the economy, culture and tourism of the location where it is installed.

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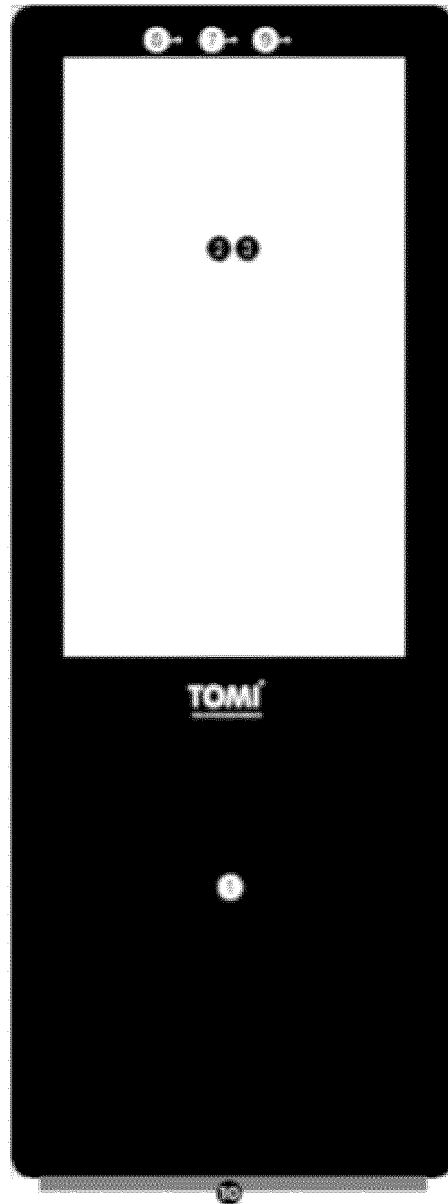


FIG. 01

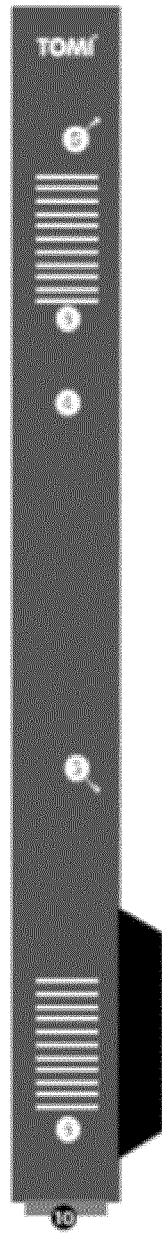


FIG. 2

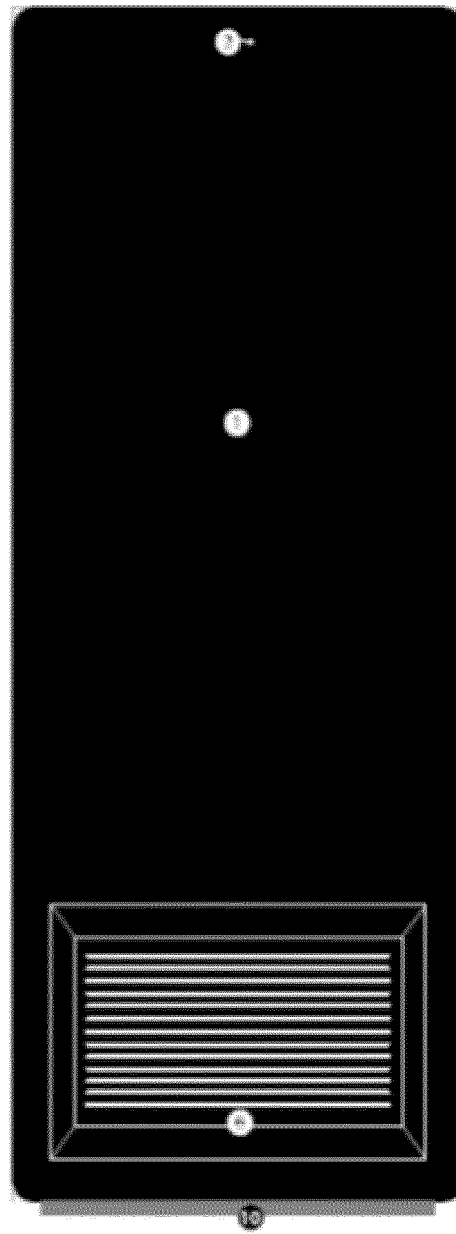


FIG. 03

INTERNATIONAL SEARCH REPORT

International application No
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5 A. CLASSIFICATION OF SUBJECT MATTER INV. G06Q10/00 B05D5/08 G09F27/00 H04M3/42 H04N7/18 ADD. According to International Patent Classification (IPC) or to both national classification and IPC																		
10 B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) G06Q B05D G09F H04M H04N Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched																		
15 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-Internal, WPI Data																		
20 C. DOCUMENTS CONSIDERED TO BE RELEVANT																		
<table border="1"> <thead> <tr> <th data-bbox="276 795 359 828">Category*</th> <th data-bbox="359 795 1125 828">Citation of document, with indication, where appropriate, of the relevant passages</th> <th data-bbox="1125 795 1356 828">Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td data-bbox="276 828 359 974">X</td> <td data-bbox="359 828 1125 974">US 2008/313193 A1 (MESTMAN JACOB [US] ET AL) 18 December 2008 (2008-12-18) paragraph [0016] - paragraph [0024]; figure 1</td> <td data-bbox="1125 828 1356 974">1-4</td> </tr> <tr> <td data-bbox="276 974 359 1086">X</td> <td data-bbox="359 974 1125 1086">WO 2008/044081 A2 (KARABEGOVIC ZLATAN [HR]) 17 April 2008 (2008-04-17) claims 1-12</td> <td data-bbox="1125 974 1356 1086">1-4</td> </tr> <tr> <td data-bbox="276 1086 359 1198">X</td> <td data-bbox="359 1086 1125 1198">GB 2 375 449 A (CONTRA VISION LTD [GB]) 13 November 2002 (2002-11-13) page 11 - page 15</td> <td data-bbox="1125 1086 1356 1198">1-4</td> </tr> <tr> <td data-bbox="276 1198 359 1400">X</td> <td data-bbox="359 1198 1125 1400">US 2008/228821 A1 (MICK COLIN K [US] ET AL SHEA RONALD RAYMOND [US]) 18 September 2008 (2008-09-18) paragraph [0063] - paragraph [0317]</td> <td data-bbox="1125 1198 1356 1400">1-4</td> </tr> <tr> <td data-bbox="276 1400 359 1433"></td> <td data-bbox="359 1400 1125 1433">----- -/-</td> <td data-bbox="1125 1400 1356 1433"></td> </tr> </tbody> </table>	Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US 2008/313193 A1 (MESTMAN JACOB [US] ET AL) 18 December 2008 (2008-12-18) paragraph [0016] - paragraph [0024]; figure 1	1-4	X	WO 2008/044081 A2 (KARABEGOVIC ZLATAN [HR]) 17 April 2008 (2008-04-17) claims 1-12	1-4	X	GB 2 375 449 A (CONTRA VISION LTD [GB]) 13 November 2002 (2002-11-13) page 11 - page 15	1-4	X	US 2008/228821 A1 (MICK COLIN K [US] ET AL SHEA RONALD RAYMOND [US]) 18 September 2008 (2008-09-18) paragraph [0063] - paragraph [0317]	1-4		----- -/-	
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X	GB 2 375 449 A (CONTRA VISION LTD [GB]) 13 November 2002 (2002-11-13) page 11 - page 15	1-4																
X	US 2008/228821 A1 (MICK COLIN K [US] ET AL SHEA RONALD RAYMOND [US]) 18 September 2008 (2008-09-18) paragraph [0063] - paragraph [0317]	1-4																
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40 ☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.																		
* Special categories of cited documents : "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family																		
50 Date of the actual completion of the international search 8 May 2012	Date of mailing of the international search report 18/05/2012																	
55 Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Lavin Liermo, Jesus																	

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2012/000200

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR 2 683 540 A1 (CASCO NOBEL FRANCE [FR]) 14 May 1993 (1993-05-14) abstract	1-4
A	US 2009/207152 A1 (NAKAMURA TAKAYA [JP]) 20 August 2009 (2009-08-20) paragraph [0026]; claim 1 paragraph [0035]	1-4
A	US 2011/175872 A1 (CHUANG KAI-CHENG [TW] ET AL) 21 July 2011 (2011-07-21) abstract	1-4
A	WO 2011/071504 A1 (HEWLETT PACKARD DEVELOPMENT CO [US]; POWELL JOHN P [US]; LEV JEFFREY A) 16 June 2011 (2011-06-16) abstract	1-4
A	WO 2011/059414 A1 (INNOVA BILISIM COEZUEMLERI A S [TR]; DINCER CELALETTIN [TR]; ATALAY ME) 19 May 2011 (2011-05-19) abstract	1-4

Form PCT/ISA/210 (continuation of second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2012/000200

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2008313193 A1	18-12-2008	NONE	
WO 2008044081 A2	17-04-2008	NONE	
GB 2375449 A	13-11-2002	NONE	
US 2008228821 A1	18-09-2008	EP 2130372 A2	09-12-2009
		US 2008228821 A1	18-09-2008
		US 2008229371 A1	18-09-2008
		US 2008229374 A1	18-09-2008
		US 2008247543 A1	09-10-2008
		US 2008250120 A1	09-10-2008
FR 2683540 A1	14-05-1993	NONE	
US 2009207152 A1	20-08-2009	JP 2009199729 A	03-09-2009
		US 2009207152 A1	20-08-2009
US 2011175872 A1	21-07-2011	TW 201126505 A	01-08-2011
		US 2011175872 A1	21-07-2011
WO 2011071504 A1	16-06-2011	US 2012013583 A1	19-01-2012
		WO 2011071504 A1	16-06-2011
WO 2011059414 A1	19-05-2011	NONE	