(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 1 768 086 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
28.03.2007 Bulletin 2007/13

(51) Int Cl.:
G09F 27/00 *(2006.01)* ***G09F 15/00*** *(2006.01)*

(21) Application number: **05394025.0**

(22) Date of filing: **27.09.2005**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR MK YU

(71) Applicant: **Noontek Limited**
Country Mayo (IE)

(72) Inventor: **Noone, Sean**
Belmullet,
County Mayo (IE)

(74) Representative: **Schütte, Gearoid**
Cruickshank & Company
8A Sandyford Business Centre
Sandyford
Dublin 18 (IE)

(54) **A street lamp assembly**

(57) This invention relates to a street lamp assembly (1) comprising a lamp column (3), a luminaire (5) housing a lamp (7) therein mounted on the lamp column and a control and monitoring unit (9) for supervising the operation of the lamp. The control and monitoring unit has means to communicate with a remote control centre (31). The lamp column further comprises a visual display unit (13) formed integrally with the lamp column. Information such as broadcast data and public information services may be broadcasted to the general public via the visual display unit. Information may be transmitted to the visual display unit from the control centre in a simple manner using existing communications equipment if desired.

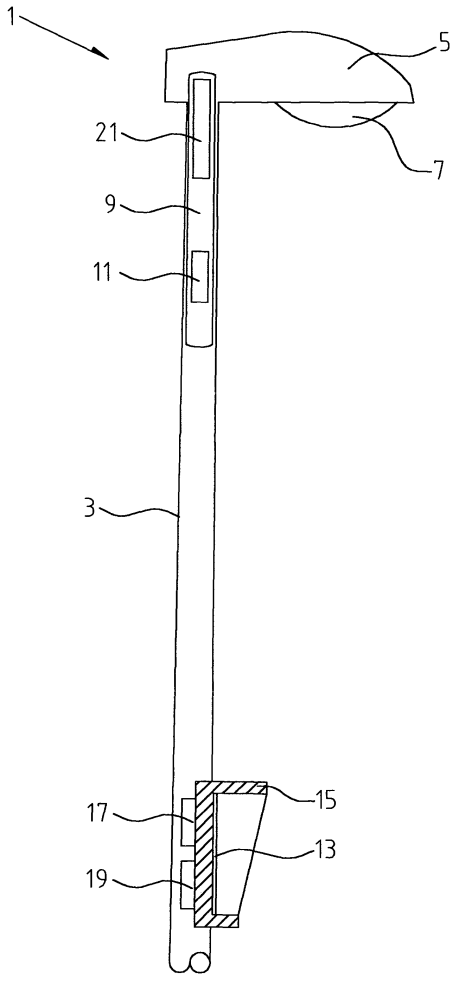


Fig. 1

EP 1 768 086 A1

Description

Introduction

[0001] This invention relates to a street lamp assembly comprising a lamp column, a luminaire housing a lamp therein mounted on the lamp column and a control and monitoring unit for supervising the operation of the lamp, the control and monitoring unit having means to communicate with a remote control centre.

[0002] Over the last number of years, goods manufacturers and service providers alike have been looking for new and innovative ways of advertising their goods and services to the public. In an increasingly competitive market place it has become vitally important to increase public awareness of ones products and services in order to build sales and increase ones market share. In order to increase public awareness of their goods or services, these goods manufacturers and service providers have sought to expand their advertising coverage beyond the established methods of advertising such as through the print media, television and radio advertising.

[0003] Although relatively effective in the past, there are numerous problems associated with the more traditional methods of conveying the advertising message. For example, it is generally accepted that the most advantageous time to advertise a product to a potential customer is when that potential customer has relatively immediate access to those goods or services. However, advertisements placed in the print media are often seen by potential customers when they are in their office or at home and not in the vicinity of a retail outlet where they are able to purchase the goods. Similarly, with television and radio advertising in particular, the potential customer may be at home or driving their car, respectively, and they are not in a position to make an immediate purchase. This results in a delay between the time that the potential customer is subjected to the advertisement and the opportunity for the potential customer to make a purchase. Once this period of time has elapsed, the advertising becomes less and less effective and due to the passage of time, imperfect recollection and/or further consideration by the potential customer, the sale is often lost.

[0004] Another issue which has become increasingly important is the provision of public service information in a simple and efficient manner to members of the public. Heretofore, there have been significant obstacles and difficulties in conveying public service information to large numbers of members of the public in a quick and efficient manner. This was recently highlighted in a number of terrorism acts perpetrated in London. One of the greatest difficulties encountered by the police and emergency services in general was the efficient and timely evacuation of members of the public from areas in which they were considered to be in danger. This was mainly attributable to the fact that information could not be relayed in an effective manner to sufficiently large numbers of the general public in the vicinity of the danger areas. In those cases where information was being relayed to members of the public, it had to be carried out by members of the emergency services whose skills could have been put to better use elsewhere.

[0005] Therefore, it is an object of the present invention to provide a street lamp assembly that helps to overcome at least some of these difficulties in a simple and relatively inexpensive manner.

Statements of Invention

[0006] According to the invention there is provided a street lamp assembly comprising a lamp column, a luminaire housing a lamp therein mounted on the lamp column and a control and monitoring unit for supervising the operation of the lamp, the control and monitoring unit having means to communicate with a remote control centre, characterised in that there is further provided an electronic visual display unit mounted in a housing formed integrally with the lamp column, the electronic visual display unit having means to receive and subsequently display content thereon.

[0007] By having such a street lamp assembly it is possible to provide visual information to the public on the lamp post itself. This is seen as particularly advantageous as the lamp posts are numerous and are ideally situated in a position on footpaths for conveying information to large numbers of members of the public. In particular, the electronic visual display unit may receive content from a remote source and display that content. The content can be specified to target particular members of the public or to convey general messages to members of the public in the vicinity of the lamp post. For example, in the event of a natural disaster or terrorised alert, the electronic visual display unit may receive content from a remote source to indicate the route to safety for the public to take them away from the danger area. Furthermore, in the instance of an advertising campaign, the goods manufacturer may display advertising material on the electronic visual display units advertising the release of an upcoming product, a special offer or a particular deal on offer in their stores. This advertising material will be delivered in a highly innovative way that will be brought to the attention of potential customers when they are out on the streets in the vicinity of the shops in which they may purchase the goods. Furthermore, by having the electronic visual display unit mounted in a housing formed integrally with the lamp column, there will be no need for additional planning permission for the electronic visual display unit and the street lamp assembly will be robust and will not be prone to vandalism.

[0008] In one embodiment of the invention there is provided a street lamp assembly in which the control and monitoring unit further comprises means to communicate with the electronic visual display unit. This is seen as particularly advantageous as it will be possible to use the existing communication network operated by the control and monitoring unit to communicate with the electronic

visual display unit. In this way, content can be transmitted to the electronic visual display unit housed in the lamp column in a simple manner. Additional communication systems are not required and therefore the problem and expense associated with additional communication equipment is avoided. Furthermore, additional control equipment will not be required thereby further simplifying the street lamp assembly.

[0009] In another embodiment of the invention there is provided a street lamp assembly in which the control and monitoring unit further comprises means to monitor the performance and scheduling of the content displayed on the electronic visual display unit. Furthermore, it is envisaged that the control and monitoring unit further comprises an accounting and billing function for content displayed on the electronic visual display unit. It is further envisaged that the control and monitoring unit could further comprise means for monitoring the power consumed by the electronic visual display unit. In this way, control of the electronic visual display unit and the content displayed thereon is possible through the existing network. The individuals posting the content to the electronic visual display units may be billed accordingly and will also be able to receive reports of when their content is posted as well as whether there are any issues with the posting of that content.

[0010] In a further embodiment of the invention there is provided a street lamp assembly in which the control and monitoring unit further comprises means to activate the electronic visual display units means to receive content for a predetermined period of time and thereafter deactivate the electronic visual display units means to receive content. By operating the street lamp assembly in this fashion, the minimum amount of power required by the system will be used in order to download content from a content provider. This has significant benefits regarding the type of power supply and the components that must be used in both the electronic visual display unit and the control and monitoring equipment.

[0011] In one embodiment of the invention there is provided a street lamp assembly in which the electronic visual display unit further comprises a pc card for storage of content to be displayed on the electronic visual display unit. This is seen as particularly simple way to implement the invention and a pc card can store a substantial amount of information as well as being relatively inexpensive to manufacture.

[0012] In another embodiment of the invention there is provided street lamp assembly in which the electronic visual display unit further comprises a Digital Video Broadcast Terrestrial (DVBT) module to receive content.

[0013] In a further embodiment of the invention there is provided a street lamp assembly in which the lamp assembly further comprises a global positioning system (GPS) unit to indicate the location of the street lamp assembly. This is seen as particularly useful as by having a global positioning system (GPS) unit it will be possible to determine the exact location of the street lamp assembly. Therefore, it will be possible for manufacturers to post advertisements on specified street lamps adjacent their stores. Similarly, it will possible for information particular to a specific location to be posted such as giving directions of a road diversion route or directions away from a disaster area.

[0014] In one embodiment of the invention there is provided a street lamp assembly in which content is delivered to the electronic visual display unit via the control and monitoring unit. This is particularly useful as the control and monitoring unit may then monitor all content that passes through to the electronic visual display unit. It is envisaged that the content may be delivered to the electronic visual display unit over one or more of a GSM channel, a GPRS channel, a wireless network, a 3G wireless network, a Wi-Fi network and the mains power supply cable feeding the lamp assembly. In particular, the mains power supply cable feeding the lamp assembly is seen as a particularly cost efficient way of transmitting data to the lamp assembly.

[0015] In another embodiment of the invention there is provided a street lamp assembly in which the electronic visual display unit is further provided with a screen constructed from a tamper proof ruggedised material. This is seen as particularly useful as the screen area will be the only area of the visual display unit which will be accessible to the public. The remainder of the equipment for the electronic visual display unit will be contained within the street lamp column itself and therefore will be inaccessible. By having the ruggedised material, the street lamp assembly will be more robust and less prone to vandalism.

[0016] In a further embodiment the invention there is provided a street lamp assembly in which the electronic visual display unit is further provided with an interactive screen to allow users to select information to be displayed by the electronic visual display unit from a menu on the electronic visual display unit. It is envisaged that the interactive screen may be provided by way of a touch screen. This is seen as particularly useful as the street lamp assembly may be positioned adjacent a bus stop for example, and may be used to display times of buses stopping at that bus stop on receipt of an information request by the user. Similarly, it is envisaged that the street lamp assembly may be used to give directions to particular tourist attractions and act as an information service.

[0017] In one embodiment of the invention there is provided a street lamp assembly in which the electronic visual display unit is further provided with a connector to allow plug and play operability with existing control and monitoring unit equipment.

[0018] In another embodiment of the invention there is provided a street lamp assembly in which the housing for the electronic visual display unit is constructed from a cast metal material.

[0019] In a further embodiment of the invention there is provided a method of providing content to the public

in a network comprising a control centre and at least one street lamp assembly, the street lamp assembly further comprising a lamp column mounting a luminaire and an electronic visual display unit mounted in a housing formed integrally with the lamp column, the electronic visual display unit having means to receive content for subsequent display thereon, the lamp assembly further comprising a control and monitoring unit for supervision of the operation of the lamp assembly in communication with the control centre, the method comprising the steps of the control centre transmitting content to the street lamp assembly for display on the electronic visual display unit and the lamp assembly thereafter displaying the content on the electronic visual display unit.

[0020] By having such a method information may be distributed to the public in a simple and efficient manner at a relatively low cost. Furthermore, that information may be targeted to the public at a time and in a position in which they most need it or when the information will be most effective. Finally, the data may be delivered by the content providers, that may be the service providers or manufacturers of goods, at specific locations at predetermined times to more carefully target their markets.

[0021] In one embodiment of the invention there is provided a method of providing content to the public in which the method further comprises the step of the control centre transmitting content to the electronic visual display unit via the control and monitoring unit. In this way, content may be monitored by the control and monitoring unit of the lamp assembly which is particularly advantageous.

[0022] In another embodiment of the invention there is provided method of providing content to the public in which the content is transmitted to the electronic visual display unit over one or more of a GSM channel, a GPRS channel, a wireless network, a 3G wireless network and a Wi-Fi network. Alternatively content may be delivered to the electronic visual display unit over the mains power supply cable feeding the lamp assembly.

[0023] In a further embodiment of the invention there is a method of delivering content to the public in which the content delivered for display on the electronic visual display unit is one or more of advertising material, public service information, broadcast television or maintenance instructions for the lamp assembly.

[0024] In one embodiment of the invention there is a method of delivering content to the public in which the method further comprises the control and monitoring unit activating the electronic visual display units means to receive content for a predetermined period of time.

[0025] In another embodiment of the invention there is provided a method of delivering content to the public in which the system comprises a plurality of lamp assemblies and the method further comprises the step of transmitting data to each lamp assembly according to the physical location of that lamp.

[0026] In a further embodiment of the invention there is provided a method of delivering content to the public in which the method further comprises the steps of a user inputting an information request through an interactive screen of the electronic visual display unit and the electronic visual display unit thereafter displaying an information response to the information request.

[0027] In one embodiment of the invention there is provided a method of delivering content to the public in which the information request is forwarded on to the control centre and the control centre thereafter transmits a content response to the lamp assembly for subsequent display as the information response on the electronic visual display unit.

[0028] In another embodiment of the invention there is provided a method of delivering content to the public in which the method further comprises the step of the control and monitoring unit monitoring the scheduling and performance of the content displayed on the electronic visual display unit and transmitting a usage report to the control centre.

[0029] In a further embodiment of the invention there is provided a method of delivering content to the public in which the step of transmitting a usage report to the control centre further comprises transmitting a billing report to the control centre for the content providers.

Brief Description of the Drawings

[0030] The invention will be now more clearly understood from the following description of some embodiments thereof given by way of example only with reference to the accompanying drawings in which:-

Fig. 1 is a sectional, part diagrammatic view of a street lamp assembly according to the invention;

Fig. 2 is a diagrammatic view of a system in which the method according to the invention may be performed;

Fig. 3 is a front view of an electronic visual display unit forming part of the street lamp assembly according to the invention; and

Fig. 4 is a perspective view of an electronic visual display unit forming part of the street lamp assembly.

Detailed Description of the Invention

[0031] Referring to the drawings and initially to Fig. 1 thereof, there is shown a street lamp assembly, indicated generally by the reference numeral 1, comprising a lamp column 3, a luminaire 5 housing a lamp 7 therein mounted on the lamp column 3 and a control and monitoring unit 9 for supervising the operation of the lamp 7. The control and monitoring unit 9 has means to communicate 11 with a remote control centre (not shown). The street lamp assembly 1 further comprises an electronic visual display unit 13 mounted in a housing 15 formed integrally with the lamp column 3, the electronic visual display unit 13

having means to receive 17 and subsequently display content thereon. The means to receive 17 is provided by way of digital video broadcast terrestrial (DVBT) module. The electronic visual display unit further comprises a pc card 19 for storage of content to be displayed on the electronic visual display unit. The control and monitoring unit 9 additionally comprises a global positioning system (GPS) unit 21.

[0032] In use, content is sent from the remote control centre (not shown) to a control monitoring unit 9. The content is then forwarded from the control and monitoring unit 9 to the electronic visual display unit 13 where it is stored in the pc card 19. When desired, the content may be shown on the electronic visual display unit 13. It is envisaged that the electronic visual display unit will also have an audio feature which will optionally allow sound to accompany any visual message shown on the electronic visual display unit. For the purpose of interpretation in the specification, an electronic visual display unit is also deemed to optionally include an audio feature and is not solely limited to only visual display means.

[0033] By having the global positioning system (GPS) unit 21, the exact location of the street lamp assembly will be known and therefore it is possible to target particular messages to specific street lamp assemblies. For example, if McDonalds (Registered Trade Mark) were holding a promotion in one of their restaurants for two burgers for the price of one during lunchtime, they may arrange to provide advertising content in support of the offer on lamp posts adjacent their restaurants. Similarly, they may decide to provide the advertising content at a particular time of day such as lunchtime between the hours of 12.00 and 14.00 outside large office buildings in the vicinity of the restaurant in order to advertise the offer to office workers exiting the buildings on their lunch break. Similarly, if there is an emergency such as a terrorist alert the rescue services may organise to transmit warnings to the public through the network of street lamp assemblies. These warnings could include the directions to safe places away from danger areas. By having the electronic visual display units mounted on the lamp post they will be in a highly visible place and will catch the attention of all pedestrians walking on the footpath. Therefore, maximum exposure of the content to the public is guaranteed.

[0034] Referring now to Fig. 2 of the drawings there is shown a diagrammatic representation of a system in which the method according to the invention may be carried out in which like parts have been given the same reference numerals as before. The system, indicated generally by the reference numeral 30, comprises a plurality of street lamp assemblies, 1, all of which are connected to a remote control centre computer 31 by way of communication channel 33, in this case the mains supply power cable feeding each of the lamp assemblies. Additional content providers 35a, 35b are shown and are in communication with the control centre computer via separate communication channels 37, 39 respectively.

[0035] In use, the control centre computer transmits content to one or more of the street lamp assemblies 1 which then display the content on their electronic visual display units. The control centre computer 31 can identify each of the street lamp assemblies 1 by the global positioning system (GPS) unit 21 contained therein and may send different material to one or more of the street lamp assemblies 1 in order to provide a more targeted service as described above.

[0036] In the embodiment shown, transmission of content is carried out over the mains power supply cable 33 feeding the lamp assemblies 1, however, it is envisaged that the content may be transmitted to the electronic visual display units over one or more of a GSM channel, a GPRS channel, a Wireless network, a 3G wireless network and a Wi-Fi network. In order to achieve this, either the monitoring and control unit or the electronic visual display unit will be provided with suitable means to receive such a signal. In the embodiments shown, the control and monitoring unit of each of the street lamp assemblies has a suitable communication means for communication with the control centre computer and thereafter can communicate with the electronic visual display unit. In this way content may be transmitted to the electronic visual display unit in a simple manner using the existing communication equipment already provided in the street lamp assembly. Furthermore, this obviates the problems and difficulties associated with transmitting content to the electronic visual display unit housed substantially within the lamp column.

[0037] It is envisaged that the material content delivered for display on the electronic visual display unit could be one or more of advertisement material, public service information, broadcast television or maintenance instructions for the street lamp assembly itself. The content providers 35a, 35b can deliver electronic content for display on the street lamp assemblies. This content is transmitted first of all through the control centre where it is edited and put into a suitable format if necessary and thereafter transmitted from the control centre to the individual lamp assemblies. This ensures that access to lamp assemblies can be restricted to particular individuals and sources. Typically, it is envisaged that it will be advantageous to have a number of control centres and the content providers themselves could in fact operate as control centres for various specific street lamp assemblies whereby they may control the content delivered to those assemblies whereas otherwise they would have to use a control centre computer as an intermediary for communication with other street lamp assemblies.

[0038] Referring now to Figures 3 and 4 of the drawings there is shown different views of the electronic visual display unit according to the invention. The electronic visual display units are mounted in a housing 15 which is formed integrally with the street lamp column. The housing 15 is formed from cast metal material. The screen 41 of the electronic visual display unit is constructed from a tamper proof ruggedised material which prevents interference

from vandals. This is the only portion of the electronic visual display unit which is accessible to members of the public. The remaining material is contained within the lamp column itself and therefore is not prone to damage by vandals. It is envisaged that the screen 41 may be a touch screen pad to provide an interactive experience to the user of the electronic visual display unit. For example, if the electronic visual display unit were mounted adjacent to a bus stop (not shown) the individual using the electronic visual display unit may be provided with a number of options on the screen 41. By touching the appropriate portion of the screen, information such as the expected arrival time of the next bus due at the adjacent bus stop, cinema listings, directions to a particular tourist attraction and the like may be provided on the screen. In order to do this, by touching the screen the user can access the information stored on the pc card (not shown) or alternatively a communication may be sent from the electronic visual display unit via the control and monitoring unit (not shown) to the control centre computer (not shown) whereupon the information is received and transmitted back to the appropriate electronic display unit for displaying to the user. A number of menus to allow proper selection may be displayed sequentially on the screen for the user.

[0039] It will be seen from the embodiments described that the content displayed on the electronic visual display unit is first of all transmitted via the control and monitoring unit. In this way the control and monitoring unit may be used to monitor the performance and schedule of the content displayed on the electronic visual display unit as well as provide an accounting and billing function for the content displayed and also monitor the power consumed by the electronic visual display unit. Therefore, a comprehensive analysis of the expense and benefits of the electronic visual display unit and the street lamp assembly may be determined. It is envisaged that the control and monitoring unit may not be used to receive the information for the electronic visual display unit itself but may instead be used to turn on a separate communication means of the electronic visual display unit for a predetermined period of time so that content may be downloaded directly to the electronic visual display unit for display. The electronic visual display unit will preferably be provided with a plug in connector for connection to an existing control and monitoring unit so that it will attach simply to the unit in which it is placed. It will still be possible for the control and monitoring unit to provide full billing information as well as operability information to a control centre or to a content provider.

[0040] In this specification, the terms "comprise", "comprises", "comprised" and "comprising" and the terms "include", "includes", "included" and "including", are used interchangeably and are to be afforded the widest possible interpretation.

[0041] The invention is not limited to the embodiments hereinbefore described but may be varied in both construction and detail within the scope of the claims.

Claims

1. A street lamp assembly (1) comprising a lamp column (3), a luminaire (5) housing a lamp (7) therein mounted on the lamp column and a control and monitoring unit (9) for supervising the operation of the lamp, the control and monitoring unit having means to communicate with a remote control centre, **characterised in that** there is further provided an electronic visual display unit (13) mounted in a housing (15) formed integrally with the lamp column (3), the electronic visual display unit having means to receive (17) and subsequently display content thereon.

2. A street lamp assembly (1) as claimed in claim 1 in which the control and monitoring unit (9) further comprises means to communicate with the electronic visual display unit.

3. A street lamp assembly (1) as claimed in claim 2 in which the control and monitoring unit (9) further comprises means to monitor the performance and scheduling of the content displayed on the electronic visual display unit (13).

4. A street lamp assembly (1) as claimed in any of claims 2 or 3 in which the control and monitoring unit (9) further comprises an accounting and billing function for content displayed on the electronic visual display unit (13).

5. A street lamp assembly (1) as claimed in claim 2 to 4 in which the control and monitoring unit (9) further comprises means to monitor the power consumed by the electronic visual display unit (13).

6. A street lamp assembly (1) as claimed in any of claims 2 to 5 in which the control and monitoring unit (9) further comprises means to activate the electronic visual display units means to receive content for a predetermined period of time and thereafter deactivate the electronic visual display units means to receive content.

7. A street lamp assembly (1) as claimed in any preceding claim in which the electronic visual display unit (9) further comprises a pc card (19) for storage of content to be displayed on the electronic visual display unit.

8. A street lamp assembly (1) as claimed in any preceding claim in which the electronic visual display unit (9) further comprises a Digital Video Broadcast Terrestrial (DVBT) module to receive content.

9. A street lamp assembly (1) as claimed in any preceding claim in which the lamp assembly further comprises a global positioning system (GPS) unit

(21) to indicate the location of the lamp assembly.

10. A street lamp assembly (1) as claimed in any preceding claim in which content is delivered to the electronic visual display unit (13) via the control and monitoring unit.

11. A street lamp assembly (1) as claimed in any preceding claim in which content is delivered to the electronic visual display unit (13) over one or more of a GSM channel, a GPRS channel, a wireless network, a 3G wireless network and a Wi-Fi network.

12. A street lamp assembly (1) as claimed in any of claims 1 to 10 inclusive in which content is delivered to the electronic visual display unit (13) over the mains power supply cable (33) feeding the lamp assembly.

13. A street lamp assembly (1) as claimed in any preceding claim in which the electronic visual display unit (13) is further provided with a screen (41) constructed from a tamper proof ruggedised material.

14. A street lamp assembly (1) as claimed in any preceding claim in which the electronic visual display unit (13) is further provided with an interactive screen to allow users to select information to be displayed by the electronic visual display unit (13) from a menu on the electronic visual display unit.

15. A street lamp assembly (1) as claimed in any preceding claim in which the electronic visual display unit (13) is further provided with a connector to allow plug and play operability with existing control and monitoring unit equipment.

16. A street lamp assembly (1) as claimed in any preceding claim in which the housing (15) for the electronic visual display unit (13) is constructed from a cast metal material.

17. A method of providing content to the public in a system (30) comprising a control centre (31) and at least one street lamp assembly (1), the street lamp assembly (1) further comprising a lamp column (3) mounting a luminaire (5) and an electronic visual display unit (13) mounted in a housing (15) formed integrally with the lamp column (3), the electronic visual display unit (13) having means to receive content for subsequent display thereon, the lamp assembly (1) further comprising a control and monitoring unit (9) for supervision of the operation of the lamp assembly (1) in communication with the control centre (31), the method comprising the steps of the control centre (31) transmitting content to the street lamp assembly (1) for display on the electronic visual display unit (13) and the lamp assembly (1) thereafter displaying the content on the electronic visual display unit (13).

18. A method of providing content to the public as claimed in claim 17 in which the method further comprises the step of the control centre (31) transmitting content to the electronic visual display unit (13) via the control and monitoring unit (9).

19. A method of providing content to the public as claimed in claim 17 or 18 in which the content is transmitted to the electronic visual display unit (13) over one or more of a GSM channel, a GPRS channel, a wireless network, a 3G wireless network and a Wi-Fi network.

20. A method of delivering content to the public as claimed in any of claims 17 to 19 inclusive in which content is delivered to the electronic visual display unit (13) over the mains power supply cable (33) feeding the lamp assembly(1).

21. A method of delivering content to the public as claimed in any of claims 17 to 20 inclusive in which the content delivered for display on the electronic visual display unit (13) is one or more of advertising material, public service information, broadcast television or maintenance instructions for the lamp assembly.

22. A method of delivering content to the public as claimed in any of claims 17 to 21 in which the method further comprises the control and monitoring unit (9) activating the electronic visual display units (13) means to receive content for a predetermined period of time.

23. A method of delivering content to the public as claimed in any of claims 17 to 22 in which the system (30) comprises a plurality of lamp assemblies (1) and the method further comprises the step of transmitting data to each lamp assembly (1) according to the physical location of that lamp.

24. A method of delivering content to the public as claimed in any of claims 17 to 23 in which the method further comprises the steps of a user inputting an information request through an interactive screen (41) of the electronic visual display unit (13) and the electronic visual display unit thereafter displaying an information response to the information request.

25. A method of delivering content to the public as claimed in claim 24 in which the information request is forwarded on to the control centre (31) and the control centre thereafter transmits a content response to the lamp assembly (1) for subsequent display as the information response on the electronic

visual display unit (13).

26. A method of delivering content to the public as claimed in any of claims 17 to 25 in which the method further comprises the step of the control and monitoring unit (9) monitoring the scheduling and performance of the content displayed on the electronic visual display unit (13) and transmitting a usage report to the control centre (31).

27. A method of delivering content to the public as claimed in claim 26 in which the step of transmitting a usage report to the control centre (31) further comprises transmitting a billing report to the control centre (31) for the content providers (35a, 35b).

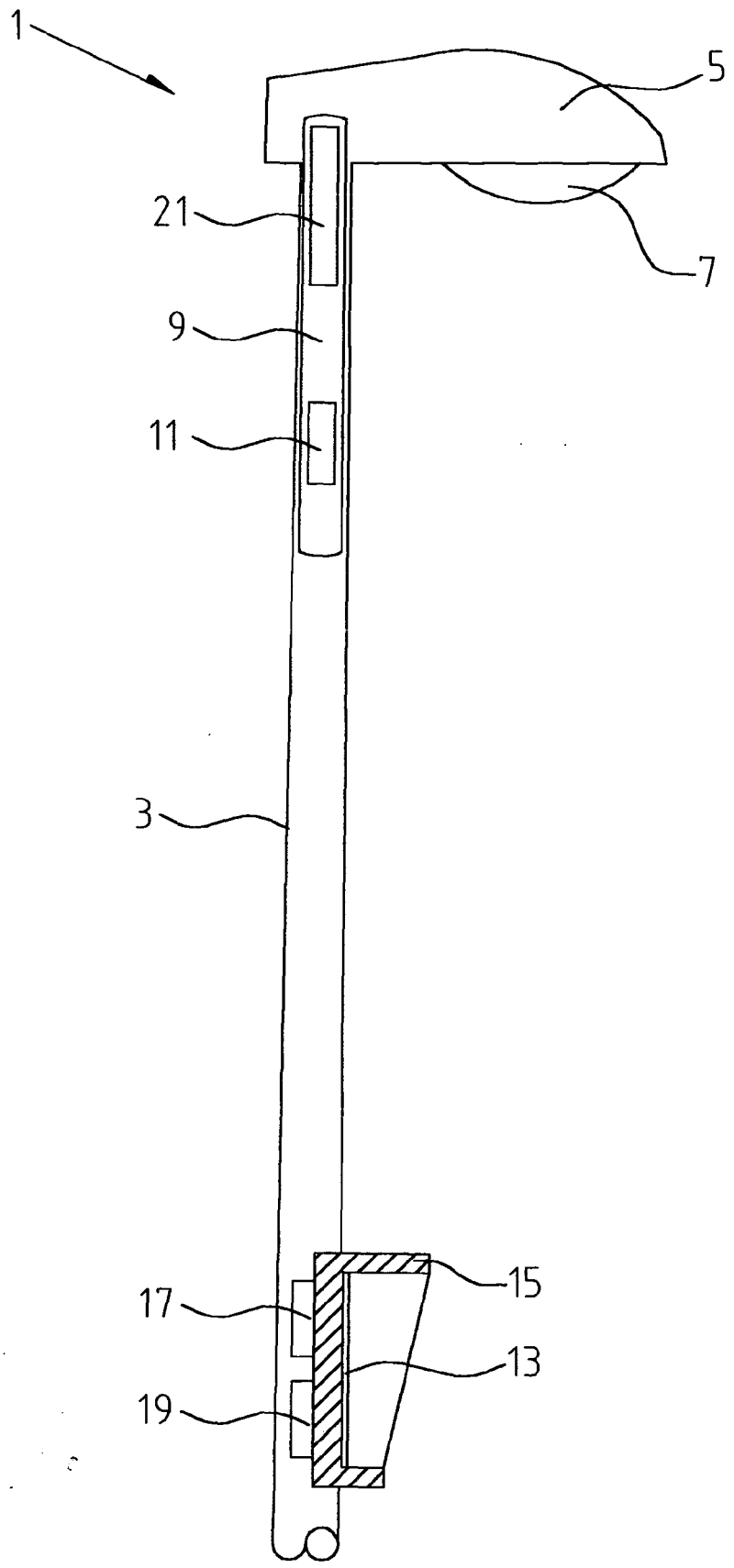


Fig. 1

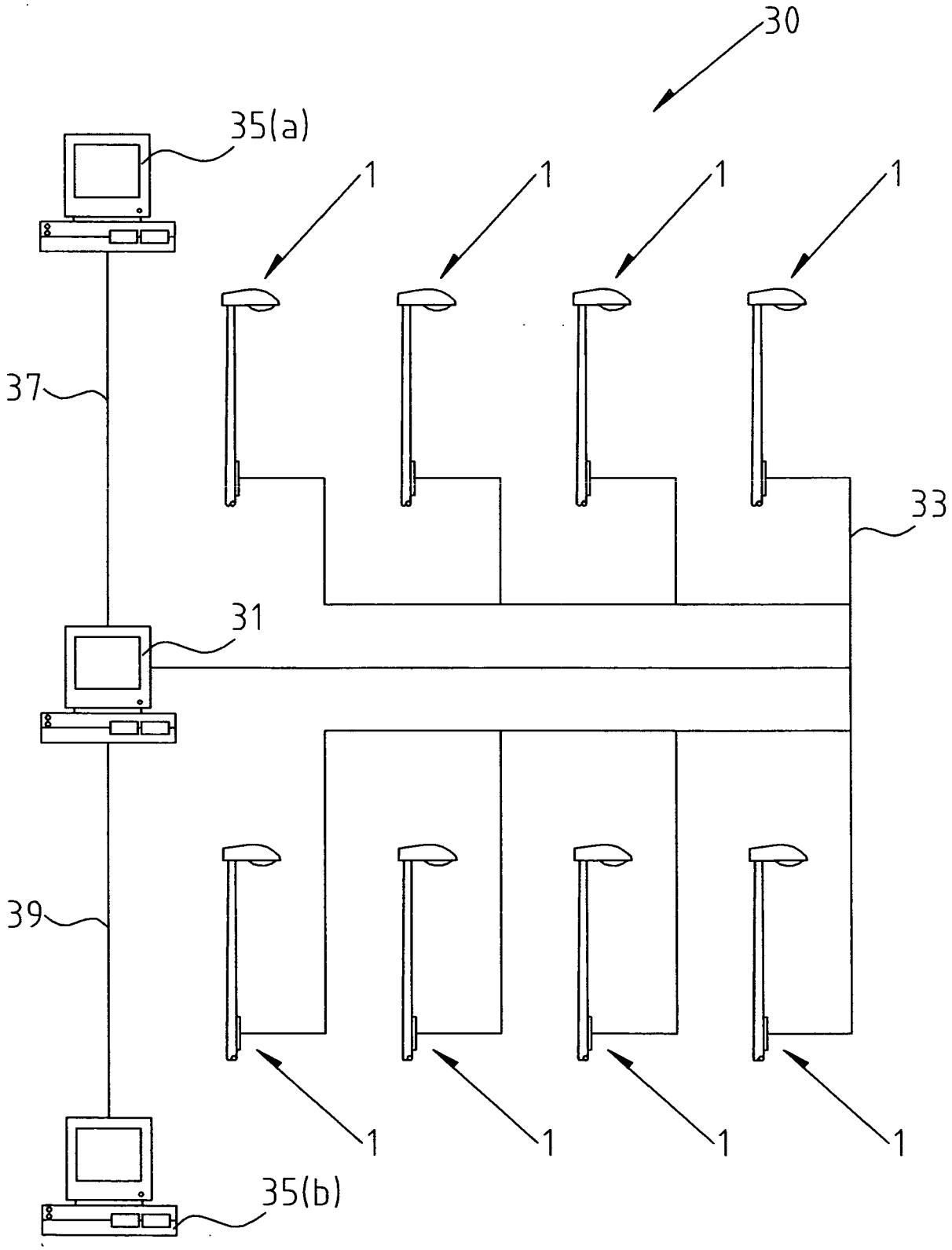


Fig. 2

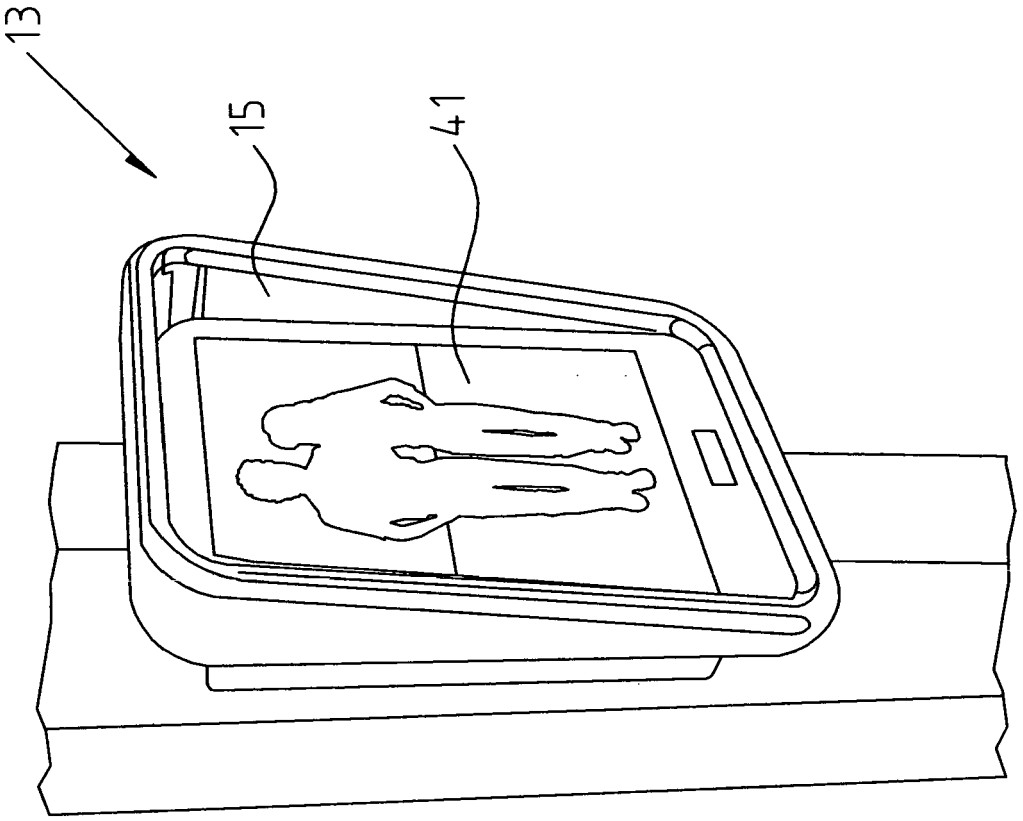


Fig. 4

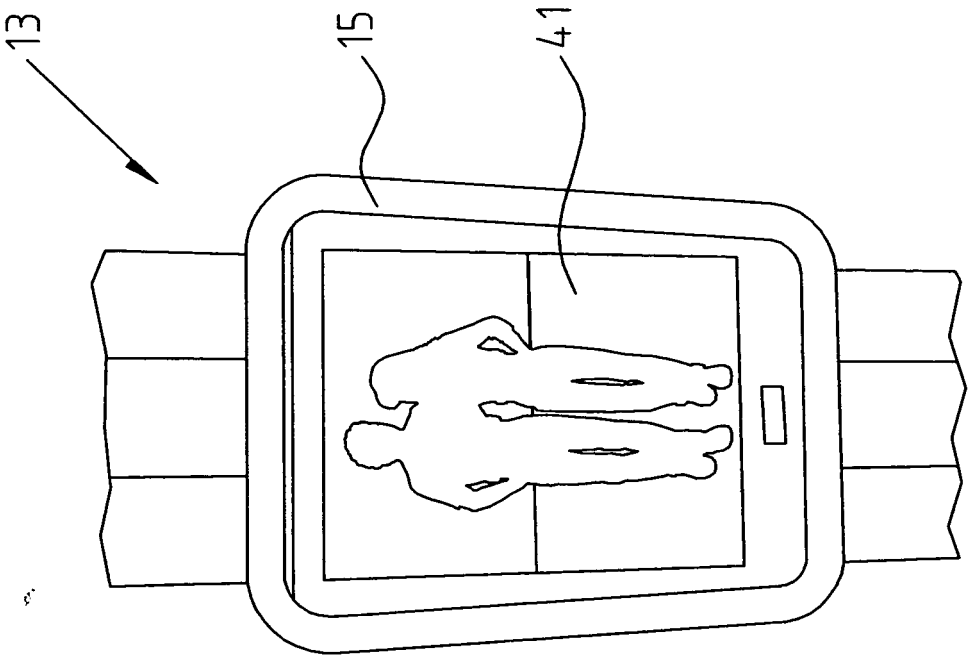


Fig. 3

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 39 4025

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	EP 1 465 463 A (NOONTEK LIMITED) 6 October 2004 (2004-10-06) * column 1, line 1 - line 11 * * column 1, line 45 - line 52 * * column 2, line 1 - line 4 * * column 3, line 47 - column 4, line 4 * * column 4, line 9 - line 11 * * column 4, line 17 - line 35 * * column 5, line 2 - line 15 * * column 5, line 52 - line 56 * * column 6, line 31 - line 38 * * column 6, line 45 - line 57 * * claims 1-4,6,8,10-12 * * figure 3 * -----	1,2, 5-11, 13-15, 17-19, 21-25	G09F27/00 G09F15/00
Y	FR 2 738 931 A (MARCOZ BRUNO PAUL CLAUDE) 21 March 1997 (1997-03-21) * page 1, line 17 - page 2, line 2 * * page 2, line 27 - line 32 * * page 3, line 8 - line 14 * * page 3, line 21 - line 30 * * page 4, line 27 - line 34 * * page 5, line 1 - line 22 * * claims 1,4-6,8 * * figures 1,2 * -----	1,2, 5-11, 13-15, 17-19, 21-25	TECHNICAL FIELDS SEARCHED (IPC) G09F F21S H05B
A	WO 00/51101 A (DHJ MEDIA AB; JONASON, JOAKIM; DAHLGREN, MATS; HYLIN, MATS) 31 August 2000 (2000-08-31) * page 14, line 10 - line 18 * -----	1,3,4, 26,27	

-/--

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	10 February 2006	Lechanteux, A

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

2

EPO FORM 1503 03.82 (P04C01)

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 39 4025

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	EP 1 085 491 A (KMB CREATIONS LIMITED) 21 March 2001 (2001-03-21) * column 2, line 18 - line 29 * * figures 1,2 *	1,14	
A	US 2002/053153 A1 (NESBITT BRYCE C ET AL) 9 May 2002 (2002-05-09) * paragraph [0001] * * paragraph [0039] * * paragraph [0049] * * claim 36 *	1,9,13	

TECHNICAL FIELDS SEARCHED (IPC)

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	10 February 2006	Lechanteux, A

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 05 39 4025

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

10-02-2006

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1465463 A	06-10-2004	NONE	
FR 2738931 A	21-03-1997	NONE	
WO 0051101 A	31-08-2000	AT 250268 T	15-10-2003
		AU 765793 B2	02-10-2003
		AU 3203400 A	14-09-2000
		BR 0008253 A	30-10-2001
		CA 2362681 A1	31-08-2000
		CN 1341252 A	20-03-2002
		CZ 20012918 A3	13-03-2002
		DE 60005352 D1	23-10-2003
		DE 60005352 T2	01-07-2004
		DK 1194916 T3	02-02-2004
		EP 1194916 A1	10-04-2002
		ES 2207490 T3	01-06-2004
		HU 0200524 A2	29-06-2002
		JP 2002538500 A	12-11-2002
		MX PA01008504 A	06-06-2003
		NO 20014044 A	04-10-2001
		NZ 513601 A	29-04-2003
		PL 349851 A1	23-09-2002
		SE 514006 C2	11-12-2000
		SE 9900636 A	24-08-2000
		TR 200102439 T2	21-01-2002
		ZA 200105960 A	19-07-2002
EP 1085491 A	21-03-2001	AU 736184 B2	26-07-2001
		AU 1945000 A	22-03-2001
		CA 2298909 A1	20-03-2001
		HK 1020154 A2	25-02-2000
		JP 2001101589 A	13-04-2001
US 2002053153 A1	09-05-2002	NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82