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(54) **Monobloc colour electronic billboard, utilizable by oneself or by network, for the transmission of changeable advertising messages and public interest messages sent by electric line and/or GSM line and/or telephonic line and/or via satellite**

(57) The utility pattern having for title "monobloc colour electronic billboard, utilizable by oneself or by network, for the transmission of variable advertising and public interest messages sent by electric line and/or GSM line and/or telephonic and/or via satellite," is made of a single container for led luminous billboard (p. 1), full of electronic elements, characterized from the utilization of colours till a maximum of 16 millions.

Dimensions of monobloc colour electronic billboard change according to reference pixels to warrant an highest resolution.

It has also a special command unit, able to manage animated images, also tridimensional, receiving in real time transmissions through electric line and/or GSM line and/or telephonic line and/or via satellite.

Thanks to it, the electronic billboard can be used also by network, that is together with an illimited number of electronic billboards, managing in the same time equal or different messages.

Finally, this utility pattern allows the immediate repairing at distance and the substitution of advertising messages within 3 minutes, allowing a reduction of costs of about 96%.



FIG. 1

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Description

[0001] The utility pattern having for title " Monobloc colour electronic billboard, utilisable by oneself or by network, for the transmission of changeable advertising messages and public interest messages sent by electric line and/or GSM line and/or telephonic line and/or via satellite " is made of a single container for led luminous billboards (p. 1), complete of electronic elements, characterized from the utilization of colours till a maximum of 16 millions. Dimensions of monobloc colour electronic billboard change according to reference pixels to warrant an highest resolution; in particular, for each pixel will be necessary 2 led (RG) of mm 5, or 3 led (RGB) of mm 5.

So, by way of example, we say that for a monobloc colour electronic billboard with n. 48x64 pixel, will be necessary a dimension of cm. 74 of width and cm. 100 of height to guarantee the optimization of images. The monobloc colour electronic billboard has also a special command unit, that can manage animated images and visualize every kind of character, for advertising and public interest purposes, receiving, in real time, electric line and/or GSM line (by antenna) telephonic line and/or via satellite transmissions. Thanks to its special command unit, the electronic billboard can be used by network, that is, with an unlimited number of electronic billboards, managing in the same time equal or different messages. Moreover it is possible to transmit informations in brief time as well as it is possible to realize immediate reparings at distance.

PRIOR ART PORTION DURING THE REGISTRATION

[0002] Till this moment, the technical state uses only electronic billboards made up of serigraphic and illuminated to the back panels; so the changing of the advertising messages or other messages need an intervention directly in the place where the billboard is installed with long times and with elevated costs for labour, the waste of materials and for the particular maintenance of systems. Besides, because of the necessity to substitute the serigraphical part, to change an advertising or public interest message is necessary to make use of a group of technicians and of movable means (crane, stairs, lift trucks, etc.) to use for each system with highest costs. At this point, we have to consider that in case of a need for simultaneous interventions on several systems it is necessary to have an elevated number of specialised technicians and means suitable to the need of intervention, to give an efficient service in a sector as advertising and public interest's informations where the time and the quickness of the intervention are fundamental elements. Finally, more recent technologies have created electronic billboards which management can be by fixed telephonic transmission and/or via satellite.

ADVANTAGE

[0003] The utility pattern which we ask the patent, allows the management by network, of single electronic billboard and the reception of an enormous quantity of informations and advertising messages realized in animated tridimensionanl computer graphic not only by telephone and/or via satellite, but also through GSM communication and/or electric line. This utility pattern makes possible the reduction of time for the replacement of advertising and public interest informations in only 3 minutes, and not only on a single billboard but also, at the same time, on an infinite number of electronic billboards. Moreover, this alllows, a reduction of costs for substitution till approximately 96% , since it is possible to escape the intervention at place of a group of specialized technicians with adequate operative means, and also the removal of the old serigraphy and the assembling of the new one. Finnally, all the components of the above-mentioned colour electronic billboard, are in accordance with the rules on the subject of noise, chemical and electromagnetic pollution.

Claims

1. Monobloc colour electronic billboard, characterized from a command unit able to receive through electric line and/or GSM line and/or telephonic line and/or via satellite changeable advertising and public interest messages to transmit on the electronic billboard.
2. Monobloc colour electronic billboard, as in previous claim, characterized of changeable dimensions according to reference pixel to guarantee the highest resolution, that can be achieved using two leds(RG) or three leds (RGB) for each pixel.
3. Monobloc colour electronic billboard, as in previous claims, characterized of electronic elements and components, incapable of causing noise, chemical and electromagnetic pollution.
4. Monobloc colour electronic billboard, as in previous claims, characterized of a single container for led luminous billboards able to transmit bidimensional and tridimensional images at high resolution.
5. Monobloc colour electronic billboard, as in previous claims, characterized of a single container for led luminous billboards, which allows the utilization till a maximum of 16 millions of colours
6. Monobloc colour electronic billboard, as in previous claims, characterized of a command unit which allows to use the electronic billboard not only individually, but also together with a network of other elec-

tronic billboards on which can stand equal or different changeable messages.

7. Monobloc colour electronic billboard, as in previous claims, characterized of a special command unit which allows the immediate substitution at distance (by electric line and/or GSM line and/or telephone and/or via satellite) of variable messages for advertising and public interest purpose. 5
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8. Monobloc colour electronic billboard, as in previous claims, characterized of a command unit which allows the control at distance in case of breakdown and the possibility to receive, always at distance, orders for repairing by electric line and/or GSM line and/or telephone and/or via satellite. 15

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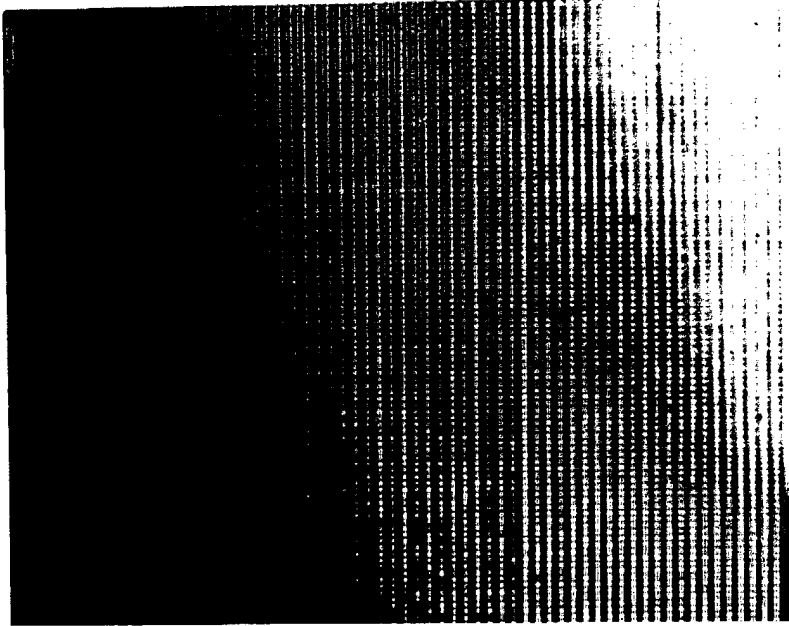


FIG. 1



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EUROPEAN SEARCH REPORT

Application Number
EP 00 83 0701

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Y	EP 0 784 303 A (KISHISHITA RYUTARO) 16 July 1997 (1997-07-16) * column 2, line 42 - line 57; figures *	1-8	
Y	WO 97 24706 A (CREE RESEARCH INC ;SWOBODA CHARLES M (US); VEN ANTONY P VAN DE (US)) 10 July 1997 (1997-07-10) * page 16, line 7 - line 21 * * page 21, line 12 - line 16; figure 1 *	1-8	
Y	DE 298 15 263 U (ABB DAIMLER BENZ TRANSP) 23 September 1999 (1999-09-23) * page 2, paragraph 1; figures *	1-8	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 5 February 2001	Examiner Gallo, G
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			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 00 83 0701

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
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