



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
19.09.2007 Bulletin 2007/38

(51) Int Cl.:
G06Q 30/00 (2006.01)

(21) Application number: **06005378.2**

(22) Date of filing: **16.03.2006**

(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

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(54) **Method and device for enabling and controlling product information indications**

(57) "Product Placement" is known as placing a certain product in the content of a media production, e.g. showing it in the scene of a movie, thereby making the product known or advertising the product in a less obvious way than common advertisement clips. Since this is an unobtrusive but effective kind of advertisement, it may be necessary to indicate product placement explicitly, to warn the viewers from being affected by hidden influence,

The invention provides a method for enabling product placement indications by adding metadata containing product placement information to AV content, and at the receiver extracting the product information data and presenting a product information indication based on the product information data superposed to the audio and/or video program information and a user or device profile.

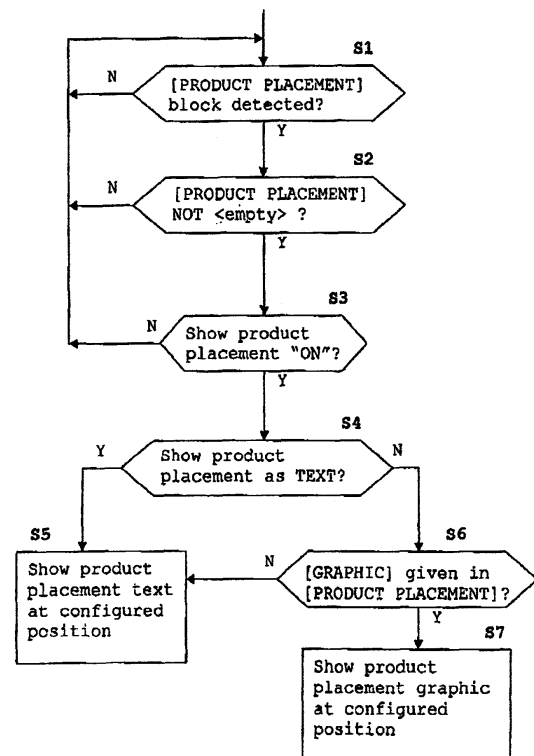


Fig. 6

Description

Field of the invention

[0001] This invention relates to a method and a device for enabling and controlling product information indications, particularly in broadcast multimedia data.

Background

[0002] "Product Placement" is known as placing a certain product in the content of a media production, e.g. showing it in the scene of a movie, thereby making the product known or advertising the product in a less obvious way than common advertisement clips. Product placement may be initiated by the content, e.g. it is part of the storyline, but it may also be initiated by a product manufacturer. At least in the latter case the product manufacturer pays a fee to the producer or provider, e.g. a movie producer, for promoting the product.

[0003] As an example, in a movie the storyline could require that a person uses a certain item, e.g. the leading actor drives a car. The producer of such an item, in this case the car manufacturer, wants his product to be used for this scene, so that the viewer sees the product used by the actor. It is also possible to place a product in the movie although it is not necessary for the storyline. E.g. the leading actor should originally take the bus, but then he takes a particular car because the car manufacturer pays a fee. The product or brand label may also be shown in the background, e.g. if a conversation scene takes place before a certain hotel entrance or shop, whose logo is glaringly visible.

[0004] Since this is an unobtrusive but effective kind of advertisement, it may be necessary for legal reasons to indicate the "Product Placement" explicitly, to warn the viewers from being affected by hidden influence.

[0005] This can be solved in broadcasts or replay media such as optical discs, e.g. DVDs, by blending in a respective hint. However, this may bother the audience. Thus the audience, and therefore also the broadcaster or producer - and the product placer - may dislike such indications. However, to indicate to a viewer that his consumer behaviour is tried be influenced, the legislation may prescribe that product placement must be indicated as such to the viewer.

[0006] Moreover, a media provider usually intends to sell the same medium in different countries, which usually have different legal restrictions to product placement. In this case, the media provider may have to produce a medium that matches all possible restrictions, which reduces the attractiveness of this medium in countries with less regulation.

Summary of the Invention

[0007] A problem to be solved by the present invention is to allow flexibility with respect to product placement

indications.

[0008] According to the invention, a method for enabling the indication of products in broadcast or replayed multimedia content data includes on the content provider side adding metadata containing product placement information to the multimedia content data. Further, the method includes on the content consumer side exploiting these metadata during content reproduction for activating a product placement indication, e.g. superposing a product placement indication to the content, whereby it is determined during the reproduction how such indication is implemented, The determining is done according to control data, e.g. user profile data, which are available at the reproducing device during reproduction.

[0009] In one embodiment of the invention, a method for enabling indication of products in broadcast or replayed multimedia data includes the steps of receiving unidirectional broadcast or replay information, extracting from the received broadcast or replay information video program information, presenting the program information, wherein the video program information is displayed and the audio program information is reproduced as sound, extracting metadata from the received broadcast or replay information, extracting from the metadata product information data, and presenting a product information indication based on the product information data superposed to the audio and/or video program information.

[0010] The method can be further specified in extracting time information from the received broadcast or replay information, comparing current program time information and extracted time information, and performing said presenting the product information when the current program time information matches the extracted time information.

[0011] If the product information data comprises product video information, e.g. a still image, the method can be further specified in the steps of extracting location information from the received broadcast or replay information, and superposing the product video information comprised in the product information data to the video program information. Preferably, said superposing covers only a part of the display and the position where to superpose the product video information is determined by the extracted location information. The product video information may also be a short video clip.

[0012] The method can be further specified in that different kinds of superposing the product information data to the audio and/or video program information are possible, and individual profile data determine how the product information is superposed to the audio and/or video program information, wherein the individual profile data is stored in the receiving device or in the presentation device.

[0013] The method can be further specified in that the product information can be superposed to the video in-

formation as text if specified by the individual profile data. In this case the text may be transmitted within the metadata, or it may be pre-defined at the receiving side, e.g. stored, and called up upon detecting a respective command within the metadata. The latter is usable for standard texts, such as general warnings.

[0014] The method can be further specified in that the product information can be superposed to the video information as a graphic element (picture, logo) if specified by individual profile data.

[0015] The method can be further specified in that the superposing of product information can be individually switched on or off by the consumer, e.g. at the receiving or presenting device, a corresponding remote control or the like.

[0016] According to one aspect of the invention, a broadcast multimedia signal includes audio and/or video program information and has associated metadata, wherein the metadata comprises product information to be superposed to the audio and/or video program information.

[0017] In one embodiment, the broadcast multimedia signal or the associated metadata further comprises time information indicating when to superpose the product information to the audio and/or video program information of the broadcast multimedia signal.

[0018] Preferably, the metadata is included in the broadcast multimedia signal. However, it may be received via a separate channel if it can be adjusted to the timeline of a defined multimedia content, e.g. by the described timing information and a content/program identifier if necessary.

[0019] In one embodiment, the metadata associated to the broadcast multimedia signal comprises product video information, and the broadcast multimedia signal or the metadata further comprises location information indicating where on display to superpose the product video information to the video program information of the broadcast multimedia signal. The location information can be relative or absolute, to enable adjustment to different display sizes.

[0020] According to one aspect of the invention, a device for enabling indication of products in broadcast or replay multimedia data includes
 means for receiving unidirectional broadcast or replay information,
 means for extracting from the received broadcast or replay information video program information,
 means for presenting the program information, wherein the video program information is displayed and the audio program information is reproduced as sound,
 means for extracting metadata from the received broadcast or replay information,
 means for extracting from the metadata product information data, and
 means for generating a product information indication based on the product information data superposed to the audio and/or video program information.

[0021] In one embodiment of the invention the device comprises means for extracting time information from the received broadcast or replay information,
 means for comparing current program time information and extracted time information, and
 means for performing said presenting the product information when the current program time information matches the extracted time information.

[0022] In a further embodiment of the invention the device comprises
 means for extracting location information from the received broadcast or replay information, and
 means for superposing product video information comprised in the product information data to the video program information, wherein said superposing covers only a part of the display and the position where to superpose the product video information is determined by the extracted location information. This may include means for detecting that location information is available, and means for detecting that the product information comprises product video information.

[0023] In one embodiment, the device further comprises means for detecting that different kinds of superposing the product information data to the audio and/or video program information are possible, and means for determining according to individual profile data how to superpose the product information to the audio and/or video program information.

[0024] Advantageous embodiments of the invention are disclosed in the dependent claims, the following description and the figures.

Brief description of the drawings

[0025] Exemplary embodiments of the invention are described with reference to the accompanying drawings, which show in

Fig.1 a display showing a product due to product placement;

Fig.2 the display showing a product and a product placement indication;

Fig.3 the display showing a product, a product indication and a product placement indication; and

Fig.4 the display showing a product and a product indication, where the product placement indication is suppressed;

Fig.5 a media stream with a product placement data area within metadata; and

Fig.6 a flow-chart of the evaluation process for product placement indications at the receiving side.

Detailed description of the invention

[0026] Product Placement is understood as placing or presenting a certain product in the content of a media production that is obviously no advertisement clip, e.g. in the scene of a movie. The product is usually shown in a very conspicuous way, so that the viewers must recognize it, either consciously or unconsciously. The product may be necessary for the plot, but this needs not always be the case. The same advertising method is also used with brand names.

[0027] In Fig.1 a display D is depicted that shows a product P due to product placement. In this example the display D shows further elements, such as persons, but often the product P is shown in large detail.

[0028] Fig.2 shows a situation where the product P is shown on the display D, but also a product placement indication PPI is displayed. The product placement indication PPI is in this case the logo of the manufacturer of the product P, so that the viewer recognizes that the product placement indication PPI is not part of the content. In another example however the product placement indication PPI is a general text, a warning or a symbol, e.g. a "!" sign or the like, which indicates not the currently shown product but only the fact that a product is shown in a praising way. In one embodiment of the invention, a command for displaying the product placement indication PPI is received within metadata associated to the presented media content. In another embodiment however also the product placement indication PPI itself is received within such metadata.

[0029] The product placement indication PPI may generally be at any position on the display D. In particular, it may be at a fixed location defined at the receiving end, or it may be near the actual, currently shown product, so that its position is variable. This has the following advantage: It may happen that viewers react on the product placement indication PPI in an undeliberate reflex in such a way that they start searching for the product. This reflex will be perceived as annoying. In this case it is advantageous to position the product placement indication PPI near the actual product, so that the product can immediately be found. This is possible with the invention by including location information in the metadata, and evaluating the location information at the receiving side so that the indication PPI can be located near the actual product. Also in this case it is possible to indicate the product placement by a general symbol. The general symbol may be stored in the receiver, TV set or the like and the received metadata contain only location information that defines where to position the product placement indication and that may also serve as an identifier for product placement indication, i.e. it defines a time when to display the indication.

[0030] Depending on the user or device configuration, the device may show the information on the screen in different ways. Configuration abilities may be:

Show product placement: ON / OFF

Show product placement as: GRAPHIC / TEXT / GEN_SYMBOL

Show product placement on received position: ON / OFF

Show product placement on position: X, Y

[0031] The device may be pre-programmed, or provide a respective menu and store a user profile. Thus, the user may select among the mentioned options according to individual preferences.

[0032] The customer may configure the receiving, playing or displaying device e.g. in the configure menu of a TV set, or with a button on the remote control, as described before. The device may act in different ways when metadata containing product information data were received, depending on this configuration.

[0033] In one example, where "Show product placement" was switched off, a product placement indication is suppressed. In this case, the display appears as in Fig. 1.

[0034] In another example, where "Show product placement" was switched on (or cannot be switched off) and for "Show product placement as" the option "Text" was selected, a text PPI_t without image is displayed, as shown in Fig.3. The text may be standard text such as "Warning" that is stored within the device, or it may be contained in the metadata, e.g. when the manufactures name, brand name or product name is contained.

[0035] In another example, where "Show product placement" was switched on (or cannot be switched off) and for "Show product placement as" the option "Graphic" was selected, an image such as a logo, large-scale product image PI or similar is displayed, as shown in Fig. 2 and Fig.4.

[0036] Large-scale product images as in Fig. 4 may not be useful when the product is already shown in large scale. However, if the product is rather small but for legal reasons the product placement indication is necessary, then the manufacturer may want the product to be emphasized. Advantageously, the invention allows transmission of a product image and superposition of the product image to the multimedia content at display time. Thus, if such legal regulations apply also to older films, the invention can also be used. Particularly, the invention can also be used for adding product placement information to audio-visual (AV) content that is stored on media, e.g. optical discs. In this case, a separate metadata stream that contains product placement information can be provided, so that product placement indications can be added at display time.

[0037] In yet another example however, the product placement indication may include both, graphics and text, and may only be switched on or off.

[0038] In one embodiment the metadata are a separate stream, while in another the metadata are included in the multimedia data stream.

[0039] Fig.5 shows a media stream with a product

placement data area in the form of metadata that are multiplexed into the stream. In scene A where no products are explicitly shown, the product placement data area is empty. In another scene B, where a product is placed in an obvious manner, the product placement data area contains textual and graphical data. A device that receives these data detects that they are product placement data and handles them according to its configuration.

[0040] The product placement data may be displayed immediately and contain a duration parameter defining how long the display should last. The duration may however also be predefined (e.g. 1 second) independent from how long the product is visible. As a third possibility, the metadata stream may contain timing information defining when to display the product placement indication.

[0041] Fig.6 depicts a flow-chart of an exemplary evaluation process for product placement indications at the receiving side. In a first step S1, a respective software or hardware component detects whether metadata with product placement information were received. Upon such detection, it is determined in a second step S2 whether the metadata block is empty. If this is not the case, the user/device profile is evaluated in the next step S3. If displaying of product placement indications is enabled, a following step S4 determines whether only text S5 or also graphics S7 may be displayed. A further step S6 may switch to text mode if no graphics are received in graphics mode. Then display data are generated according to the text/graphical information, and superposed to the actual AV content as described above.

[0042] One advantage of the invention is that it allows addition of product placement indications to already finished and recorded multimedia data, because the metadata can be associated and aligned at any time with a movie, recorded TV show or the like, e.g. in a post-production step or even at display time. The invention requires no back-channel.

[0043] It is also possible to use the invention in a different way, depending on the legal situation: In cases where advertisement using product placement is allowed, the invention can be used to emphasize products or brands by explicitly showing them, which may increase the recognition of the respective product or brand.

[0044] It is also possible to activate, in response to receiving and evaluating the metadata, an alarm, e.g. a separate LED or tone, to indicate product placement.

[0045] In general, the present invention deals with how the information of product placement may be brought to the viewer, and how the viewer/displaying device may handle that information.

[0046] The invention can be used in studios for broadcasting or for authoring audio-visual media, and in TV sets, mobile or stationary broadcast receivers, set-top boxes, displays, disc players and the like.

Claims

1. Method for enabling indication of products in broadcast or replayed multimedia data, including the steps of

- receiving unidirectional broadcast or replay information;
- extracting from the received broadcast or replay information program information; and
- presenting the program information, wherein video program information is displayed and audio program information is reproduced as sound;

characterized in the further steps of

- extracting metadata from the received broadcast or replay information;
- extracting from the metadata product information data; and
- presenting a product information indication based on the product information data superposed to the audio and/or video program information.

2. Method according to claim 1, further comprising the steps of

- extracting time information from the received broadcast or replay information;
- comparing current program time information and extracted time information; and
- performing said presenting the product information when the current program time information matches the extracted time information.

3. Method according to claim 1 or 2, wherein the product information data comprises product video information, further comprising the steps of

- extracting location information from the received broadcast or replay information; and
- superposing the product video information comprised in the product information data to the video program information, wherein said superposing covers only a part of the display and the position where to superpose the product video information is determined by the extracted location information.

4. Method according to any of the claims 1-3, wherein different kinds of superposing the product information data to the audio and/or video program information are possible, and individual profile data determine how the product information is superposed to the audio and/or video program information, wherein the individual profile data is stored in the receiving

device or in the presentation device.

5. Method according to claim 4, wherein the product information can be superposed to the video information as text depending on said individual profile data. 5
6. Method according to claim 4 or 5, wherein the product information can be superposed to the video information as a graphic element (picture, logo) depending on said individual profile data. 10
7. Method according to any of the previous claims, wherein said superposing of product information can be switched on or off individually at the receiving or presenting device. 15
8. Broadcast multimedia signal, including audio and/or video program information and metadata, **characterized in that** the metadata comprises product information to be superposed to the audio and/or video program information. 20
9. Broadcast multimedia signal according to the previous claim, wherein the broadcast multimedia signal further comprises time information indicating when to superpose the product information to the audio and/or video program information. 25
10. Broadcast multimedia signal according to one of the two preceding claims, wherein the metadata comprises product video information and wherein the broadcast multimedia signal further comprises location information indicating where to superpose the product video information to the video program information. 30
35
11. Device for enabling indication of products in broadcast or replay multimedia data, including
 - means for receiving unidirectional broadcast or replay information; 40
 - means for extracting from the received broadcast or replay information video and/or audio program information; and
 - means for presenting the program information, wherein video program information is displayed and audio program information is reproduced as sound; 45

characterized in that the device further comprises 50

 - means for extracting metadata from the received broadcast or replay information;
 - means for extracting from the metadata product information data; and 55
 - means for generating a product information indication based on the product information data superposed to the audio and/or video program

information.

12. Device according to claim 11, further comprising
 - means for extracting time information from the received broadcast or replay information;
 - means for comparing current program time information and extracted time information, and
 - means for performing said presenting the product information when the current program time information matches the extracted time information.
13. Device according to claim 11 or 12, wherein the product information data comprises product video information, further comprising
 - means for extracting location information from the received broadcast or replay information; and
 - means for superposing the product video information comprised in the product information data to the video program information, wherein said superposing covers only a part of the display and the position where to superpose the product video information is determined by the extracted location information.
14. Device according to any of the claims 11-13, wherein different kinds of superposing the product information data to the audio and/or video program information are possible, and individual profile data determine how the product information is superposed to the audio and/or video program information.

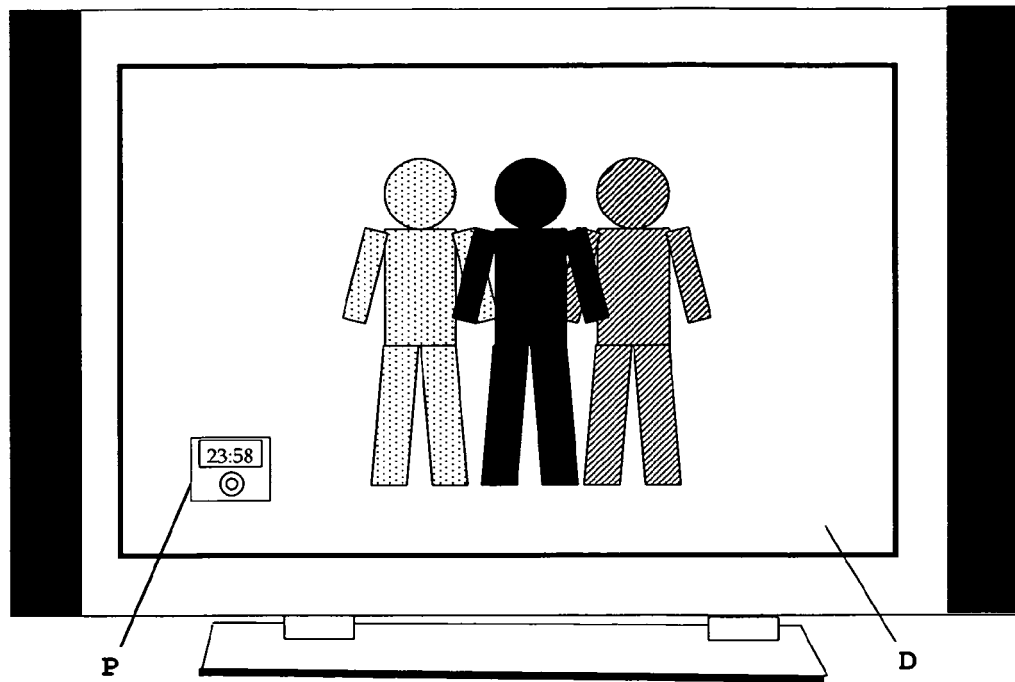


Fig. 1

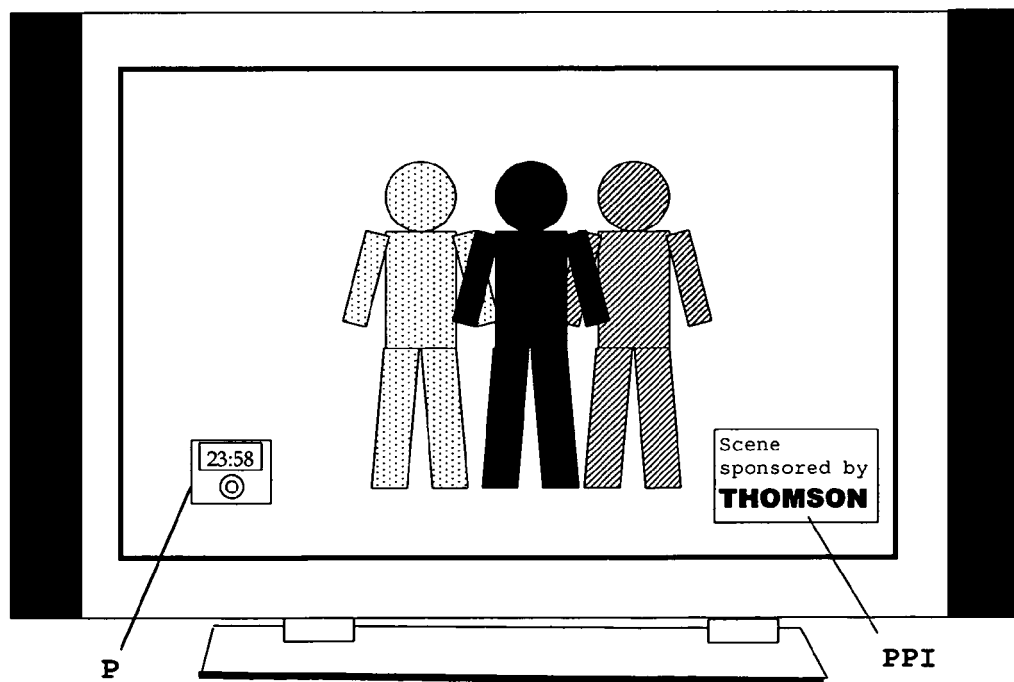


Fig. 2

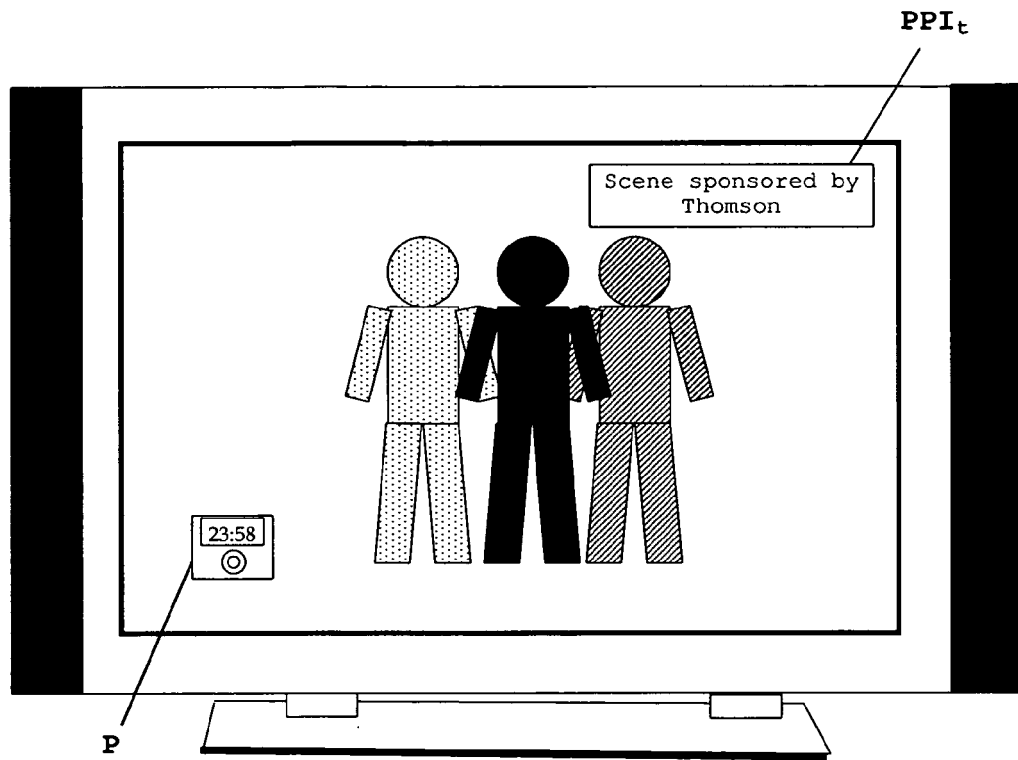


Fig. 3

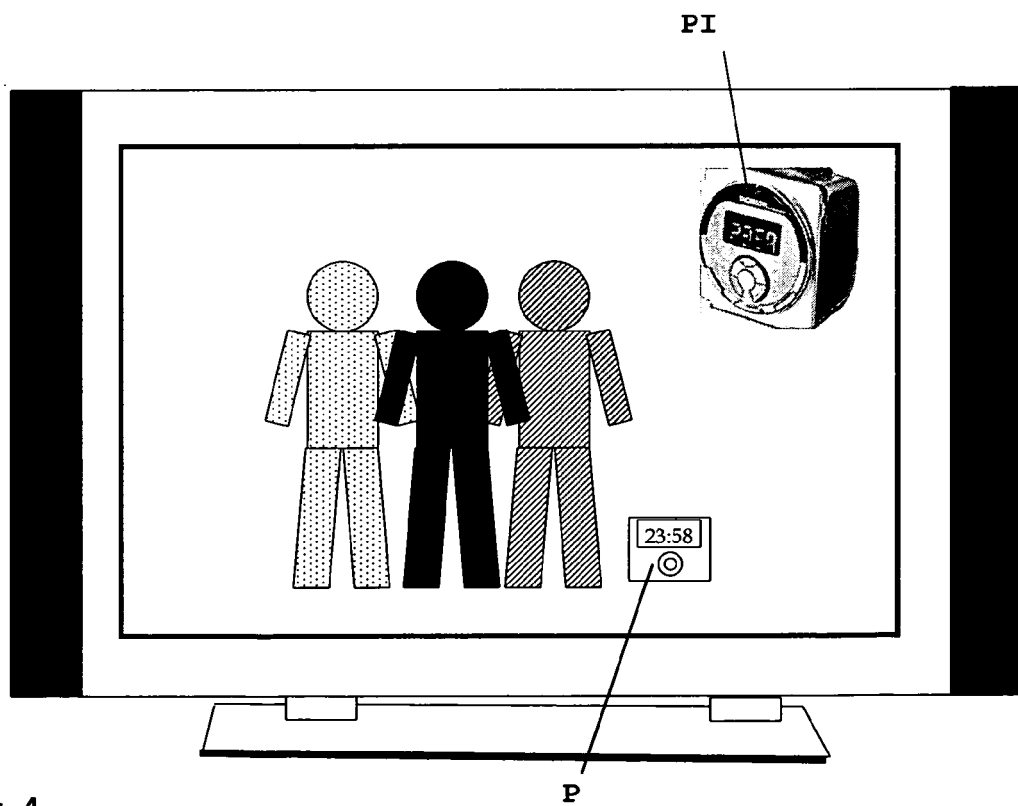


Fig. 4

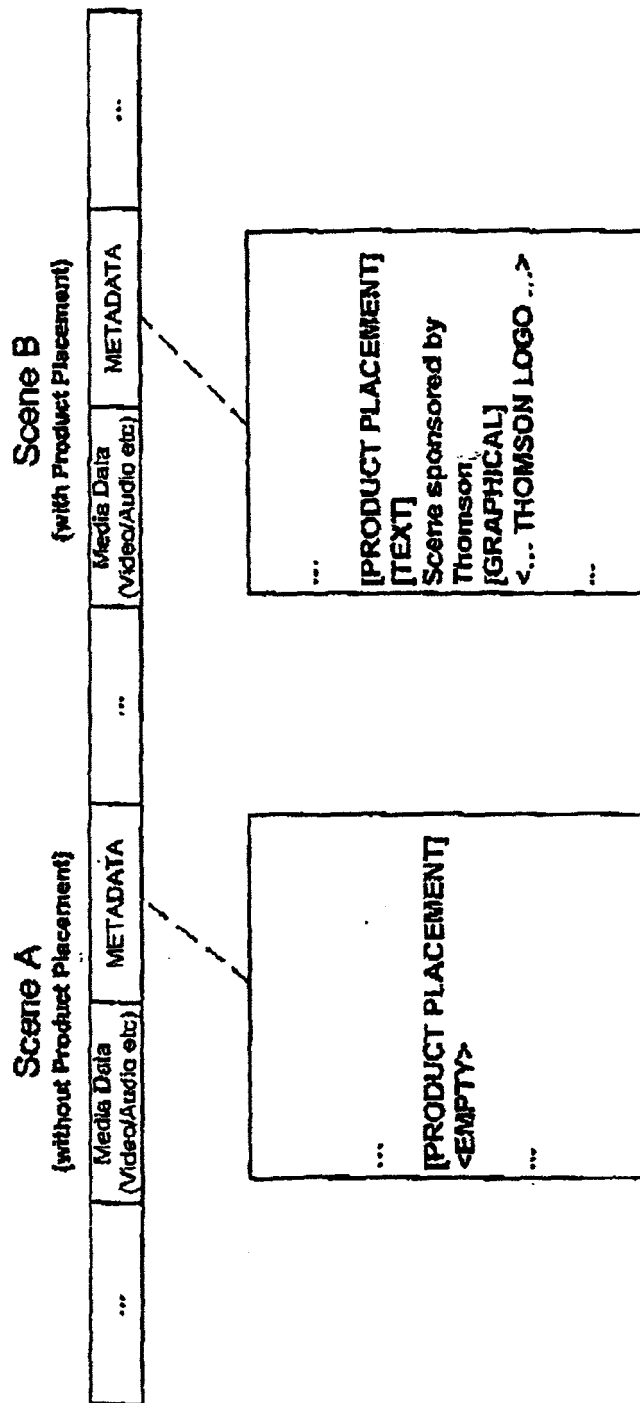


Fig. 5

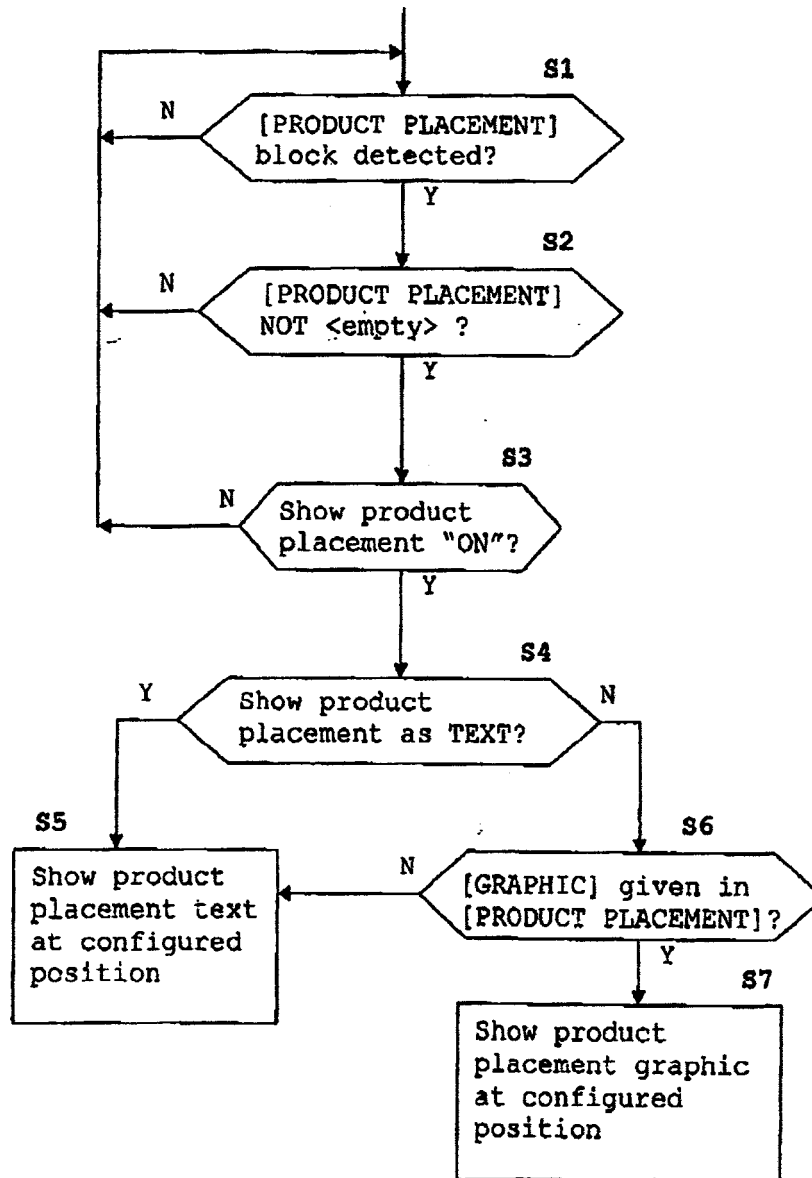


Fig. 6



**European Patent
Office**

DECLARATION

Application Number

which under Rule 45 of the European Patent Convention EP 06 00 5378 shall be considered, for the purposes of subsequent proceedings, as the European search report

The Search Division considers that the present application, does not comply with the provisions of the EPC to such an extent that it is not possible to carry out a meaningful search into the state of the art on the basis of all claims

Reason:

The claims relate to subject matter excluded from patentability under Art. 52(2) and (3) EPC. Given that the claims are formulated in terms of such subject matter or merely specify commonplace features relating to its technological implementation, the search examiner could not establish any technical problem which might potentially have required an inventive step to overcome. Hence it was not possible to carry out a meaningful search into the state of the art (Rule 45 EPC). See also Guidelines Part B Chapter VIII, 1-3.

The problems which are addressed do not appear to require a technical, but rather an administrative/organisational, or business, solution. The implementation of this solution may include the use of generic technical features, however these do not interact to solve any overall technical problem but merely serve their well-known functions.

The applicant's attention is drawn to the fact that a search may be carried out during examination following a declaration of no search under Rule 45 EPC, should the problems which led to the declaration being issued be overcome (see EPC Guideline C-VI, 8.5).

CLASSIFICATION OF THE APPLICATION (IPC)

INV.
G06Q30/00

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EPO FORM 1504 (P04C37)

Place of search

Munich

Date

8 June 2006

Examiner

Anastasov, Y