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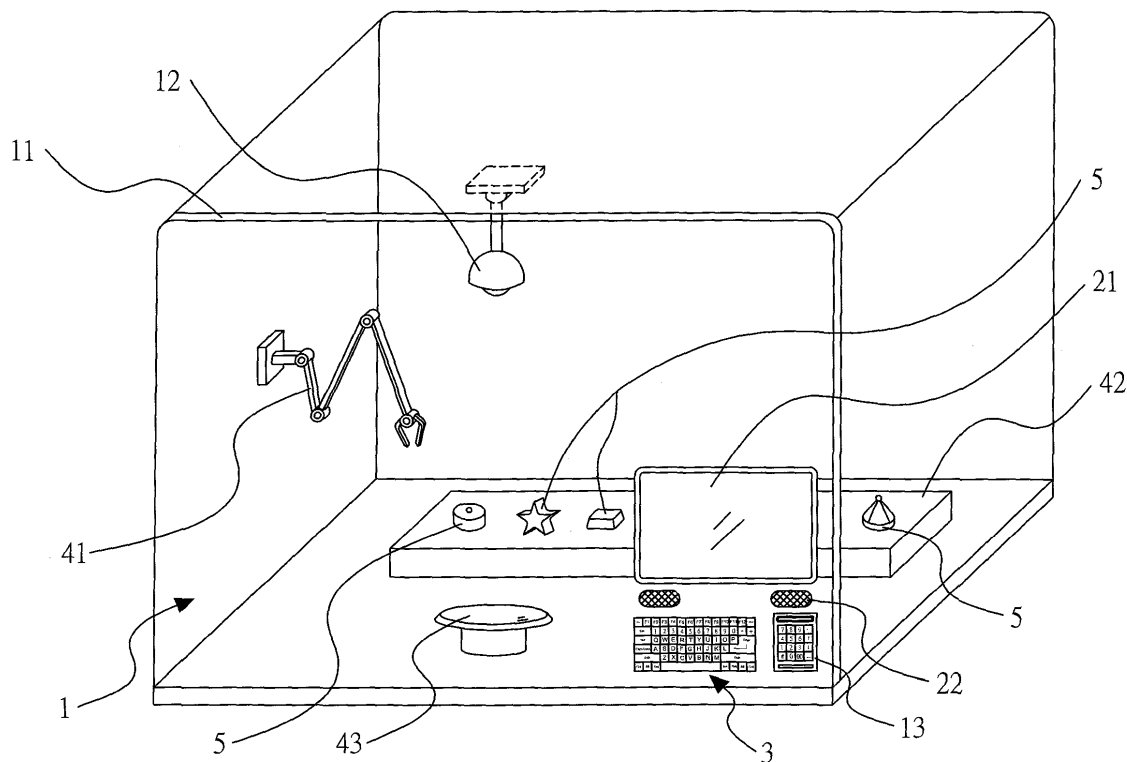
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(54) **Display machine**

(57) A display machine includes a container, a video and audio output unit, an input unit and a picking unit. The container includes at least one transparent panel.

The video and audio output unit is mounted on the transparent panel. The input unit is mounted on the transparent panel. The picking unit is disposed in the container and connected to the video and audio output unit.



**Fig. 1**

## Description

### BACKGROUND OF INVENTION

#### 1. FIELD OF INVENTION

[0001] The present invention relates to a display machine and, more particularly, to a display machine for displaying and describing products, taking orders, and giving receipts and/or tickets.

#### 2. RELATED PRIOR ART

[0002] In traditional shops, products are displayed on racks. Customers can pick any products from the racks and check the same.

[0003] Cards, sheets or brochures may be used to describe the products.

However, the cards, sheets or brochures provide limited data about the products. The data only include the names of the shops, the appearance of the products and the prices of the products. The data do not include few information about the contents and features of the products. These limited data about the products generally cannot clear the customers' doubt about the products.

[0004] Clerks may be hired to provide information of the products. However, all of the clerks are not excellent. Some of the clerks might fail to provide enough information about the products. Some other of the clerks might get emotional when challenged by the customers. In some cases, the customers simply enjoy watching the products alone, without the service from the clerks.

[0005] The present invention is therefore intended to obviate or at least alleviate the problems encountered in prior art.

### SUMMARY OF INVENTION

[0006] The primary objective of the present invention is to provide a display machine for displaying and describing products, taking orders, and giving receipts and/or tickets.

[0007] According to the present invention, a display machine includes a container, a video and audio output unit, an input unit and a picking unit. The container includes at least one transparent panel. The video and audio output unit is mounted on the transparent panel. The input unit is mounted on the transparent panel. The picking unit is disposed in the container and connected to the video and audio output unit.

[0008] Other objectives, advantages and features of the present invention will become apparent from the following description referring to the attached drawings.

### BRIEF DESCRIPTION OF DRAWINGS

[0009] The present invention will be described via the detailed illustration of the preferred embodiment referring

to the drawings.

[0010] Fig. 1 is a perspective view of a display machine according to the preferred embodiment of the present invention.

5 [0011] Fig. 2 is a perspective view of the display machine in another position than shown in Fig. 1.

### DETAILED DESCRIPTION OF PREFERRED EMBODIMENT

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[0012] Referring to Fig. 1, there is shown a display machine according to the preferred embodiment of the present invention. The display machine includes a container 1, a video and audio output unit 2, an input unit 3 and a picking unit 4.

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[0013] The container 1 may be circular or polygonal and in various sizes. The container 1 is used to contain products 5. The container 1 includes at least one transparent panel 11 through which the products 5 can be observed. The transparent panel 11 may be made of reinforced glass. There is a light source 12 disposed in the container 1 to cast light on the products 5 so that the products 5 can clearly be observed. Mounted on the transparent panel 11 is a payment-handling element 13 for handling payments for the products 5.

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[0014] The video and audio output unit 2 includes a display 21 and two speakers 22. The display 21 is used to provide video information about the products 5. The display 21 is disposed in the container 1. The speakers 22 are mounted on the transparent panel 11 to provide audio information about the products 5.

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[0015] The input unit 3 is mounted on the transparent panel 11. The input unit 3 is operable for the input of data about the customers' picks. The input unit 3 may be a keyboard or a touch panel. The touch panel may be of a static charge type or a capacitor type.

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[0016] The picking unit 4 is disposed in the container 1 and connected to the video and audio output unit 3. The picking unit 4 includes a robot 41, a board 42 and a rotational tray 43. The board 42 is disposed in the container 1. The products 5 are displayed on the board 42. Mounted on a wall of the container 1 is the robot 41 for picking up one of the products 5 and then laying down the chosen product 5 on the rotational tray 43. The rotational tray 43 is in rotation for showing various angles of the chosen product 5.

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[0017] Referring to Fig. 2, they display machine may be used in an airport, a railway station, an apartment store, a mall, a shop, a hotel, an in or a motel. The display machine can be located inside or outside a building.

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[0018] In operation, a customer operates the input unit 3 to choose one from the products 5. According to the customer's choice, the robot 41 picks up one of the products 5. The rotor 41 may show the chosen product 5. Alternatively, the robot 41 may lay down the chosen product 5 on the rotational tray 43, which rotates and shows various angles of the chosen product 5. The light source 12 can be operated to cast light on the chosen product

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5. Various optical effects can be provided by the light source 12.

**[0019]** After the choice, the display 21 provides video information about the chosen product 5. The video information includes pictures, photographs, motion pictures, films, 3D holographs. The audio information is provided according to the video information. The video information and the audio information are about the features, effects, advantages and structures of the chosen product 5 so that the customer may know how the chosen product 5 is made and used. After learning about the chosen product 5, the customer operates the input unit 3 to instruct the display machine to deliver the chosen product 5 or demonstrate another one of the products 5.

**[0020]** Wishing to buy the chosen product, the customer may provide a payment to the payment-handling element 13. The payment-handling element 13 may be a card reader or any other proper sensor to read or sense a credit card or bank card. Then, the payment-handling element 13 provides an invoice or receipt and a ticket. The customer takes the ticket to a warehouse and claims the chosen product 5. Alternatively, the customer may operate the input unit 3 to provide his or her address to the display machine. The chosen product 5 will be delivered to the customer in a package according to the address.

**[0021]** The present invention has been described via the detailed illustration of the preferred embodiment. Those skilled in the art can derive variations from the preferred embodiment without departing from the scope of the present invention. Therefore, the preferred embodiment shall not limit the scope of the present invention defined in the claims.

## Claims

1. A display machine comprising:

a container comprising at least one transparent panel;  
a video and audio output unit mounted on the transparent panel;  
an input unit mounted on the transparent panel;  
and  
a picking unit disposed in the container and connected to the video and audio output unit.

2. The display machine according to claim 1, wherein the container is polygonal.

3. The display machine according to claim 1, wherein the transparent panel is made of reinforced glass.

4. The display machine according to claim 1 comprising a light source disposed in the container.

5. The display machine according to claim 1 comprising

a payment-handling element mounted on the transparent panel.

6. The display machine according to claim 1, wherein the video and audio output unit comprises at least one display and at least one speaker.

7. The display machine according to claim 6, wherein the display and the input device are merged in a touch panel.

8. The display machine according to claim 1, wherein the input device is a touch panel.

9. The display machine according to claim 1, wherein the picking unit comprises a board for supporting products and a robot for picking up a chosen one from the products.

10. The display machine according to claim 9, wherein picking unit comprises a rotational tray for receiving the chosen product from the robot and showing various angles of the chosen product.

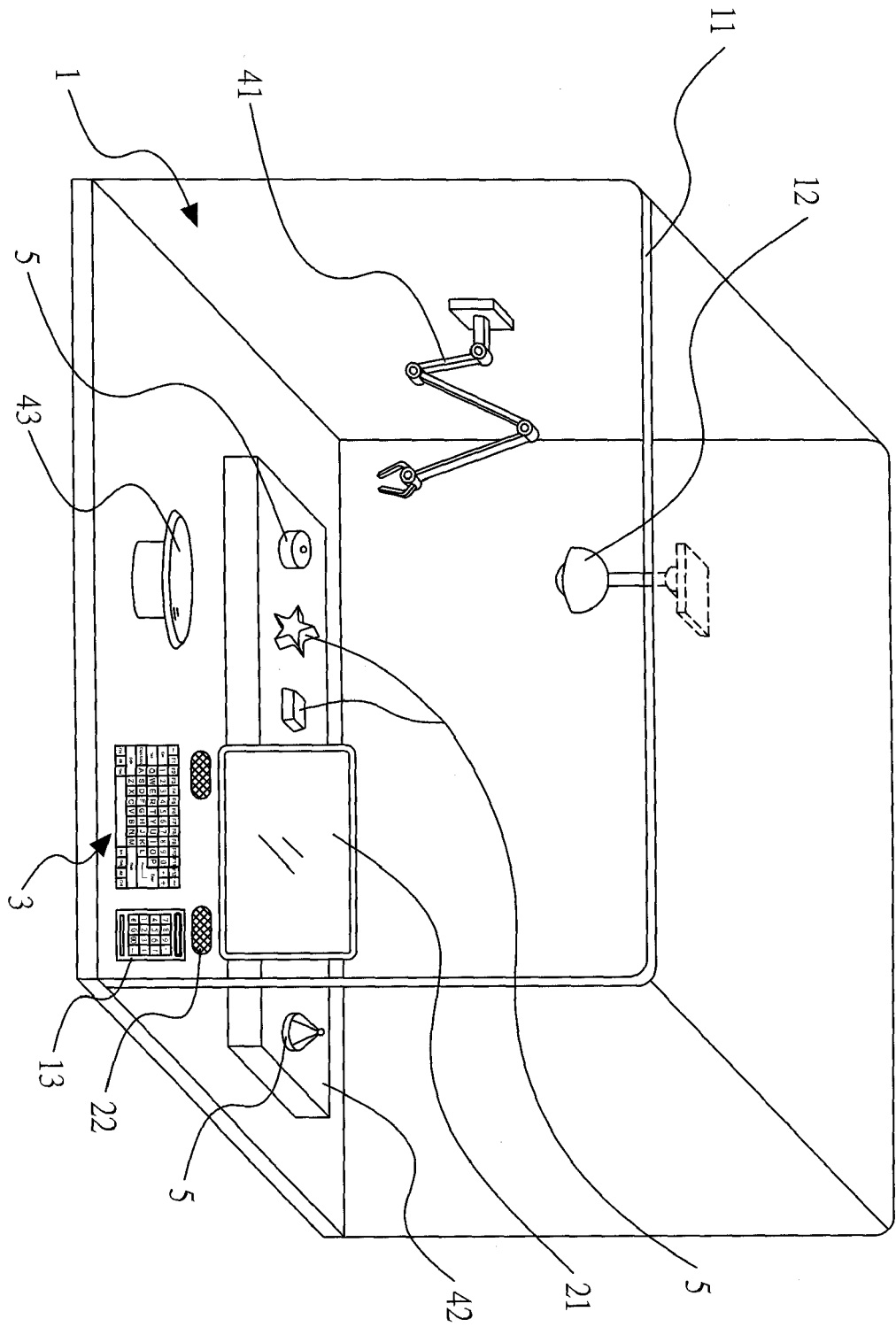


Fig. 1

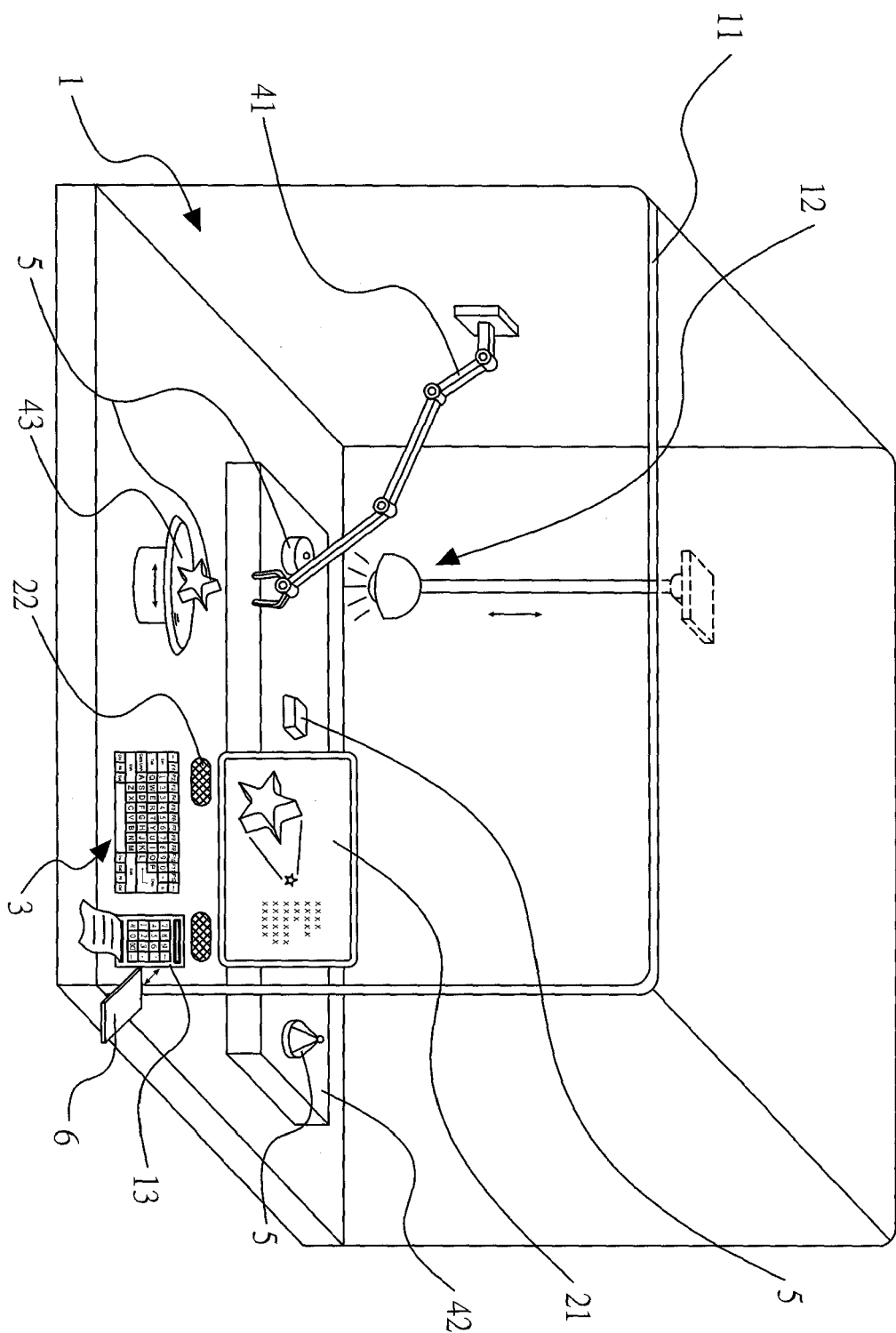


Fig. 2



## EUROPEAN SEARCH REPORT

Application Number  
EP 08 16 1778

| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                            |                                                   |                                         |
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| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                            |                                                   |                                         |
| Place of search<br>Munich                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                            | Date of completion of the search<br>24 April 2009 | Examiner<br>Aupiais, Brigitte           |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>&amp; : member of the same patent family, corresponding document</p> |                                                                                                                                                                                                                                            |                                                   |                                         |

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EPO FORM 1503 03.82 (P04C01)



## EUROPEAN SEARCH REPORT

Application Number  
EP 08 16 1778

| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                    |                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                              |                                         |
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| Place of search<br>Munich                                                                                                                                                                                                                              |                                                                                                                                                                                                 | Date of completion of the search<br>24 April 2009                                                                                                                                                                                                                            | Examiner<br>Aupiais, Brigitte           |
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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 08 16 1778

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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24-04-2009

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