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(54) **MULTIFUNCTION, PORTABLE PIECE OF FURNITURE WITH FUNCTIONALITY OF PRODUCTION AND SUPPLY OF COCKTAILS AND OTHER BEVERAGES**

(57) Portable multifunction piece of furniture (10), having a structure (11) that comprises a first functional module (12) adapted for preparing and dispensing drinks, in particular mixtures of several ingredients adapted for forming cocktails, a second functional module (26) having the functions of a mini-bar and a third functional module (29) consisting of a stereo system. The furniture (10) can also include a further customizable functional module (30). Such a customizable functional module (30) can for example comprise a space (31) for housing a set of glasses or an ice-maker device (35) for producing ice cubes.

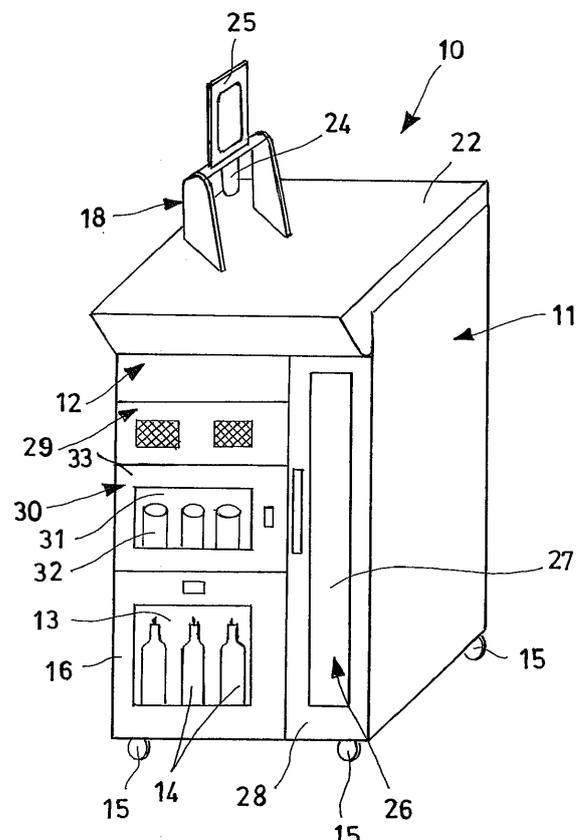


Fig. 1

Description

[0001] The present invention refers to an innovative portable piece of furniture that combines inside a plurality of functions and fittings adapted for making an item of furniture that compacts into a single small-sized structure, which is easy to transport, the functions of preparing and dispensing cocktails, liquors or other alcoholic or non-alcoholic drinks, fizzy or still, and various other functions that are desirable at home or in the hotel business.

[0002] Machines are known that are capable of preparing various cocktails and drinks starting from bottles or other suitable containers present in the machine through the application and use of suitable software and automatic ingredient dosing devices, selecting the drink or the desired mixture from a plurality of predetermined recipes, stored in the machine or coming from other sources connected to the machine itself (advantageously in wi-fi mode, for example using tablets, smartphones or computers).

[0003] These machines are in general of remarkable size, and in any case designed to be arranged in a fixed position, for example at bar desks, etc., and managed by specific workers.

[0004] For personal use, for example at home or in hotel rooms, mini-bars are typically used, made as independent appliances, advantageously able to move through wheels or inserted in the frame of a larger piece of furniture. Mini-bars, however, constitute a mere container suitable for holding and refrigerating bottles and other food and drink products.

[0005] Both mini-bars and fixed machines for preparing and dispensing cocktails currently known are exclusively able to perform the function for which they were singularly designed.

[0006] The general object of the present invention is to provide a portable piece of furniture that allows the drawbacks of the devices of the prior art, linked both to the functional specificity of the single devices, and to the low flexibility of use thereof due to the impossibility or limited possibility of movement that such known devices have, to be overcome.

[0007] A further object of the present invention is to increase the potentialities and the attractiveness of said furniture element with further functions that enrich the enjoyability thereof according to the needs and requirements of the user or the place for which it is intended.

[0008] In view of such objects, it has been thought, according to the invention, to devise a portable multifunction piece of furniture, having a structure that comprises at least one first functional module adapted for preparing and dispensing drinks, in particular mixtures of several ingredients adapted for forming cocktails, a second functional module having the functions of a mini-bar and a third functional module consisting of a stereo system.

[0009] In order to make the explanation of the innovative principles of the present invention and its advantages with respect to the prior art clearer, hereinafter a possible

embodiment applying such principles will be described, with the help of the attached drawings.

[0010] In the drawings:

5 Fig.1 schematically represents a perspective view of the portable multifunction piece of furniture according to the invention, illustrated in operative condition.

10 Fig.2 represents a perspective view like that of Fig. 1, but illustrating the multifunction furniture with the upper cover open.

15 Fig.3 represents a view like that of Fig.1, relative to a variant embodiment of the multifunction furniture.

Fig.4 schematically represents an elevational view of the rear side of the multifunction furniture.

[0011] With reference to the figures, the portable multifunction piece of furniture 10 according to the invention consists of a structure 11 that internally comprises a plurality of functional modules 12, 26, 29, 30, which will be described in greater detail hereinafter.

[0012] The furniture 10 can of course be made of the most suitable materials for providing a valuable product, for example wood, possibly with finishes and inserts of other quality materials, for example leather.

[0013] In particular, the multifunction piece of furniture 10 comprises a first functional module 12 adapted for preparing and dispensing drinks, in particular mixtures of several ingredients adapted for forming cocktails. The functional module 12 for preparing and dispensing drinks in turn comprises a space 13 for housing a plurality of bottles 14 containing the ingredients for the composition of the drinks and cocktails (preferably consisting of one or more extractable drawers 16, 17 arranged, in the embodiment illustrated here, in the lower part of the furniture 10), a dispenser 18 arranged externally, at the upper end of the furniture, for dispensing the drink and a battery of pumps 19 for transferring the ingredients from the bottles 14 to the dispenser 18 through respective ducts 20 as can clearly be seen in Fig.2. The pumps 19 are preferably arranged in the upper portion of the furniture, in a space 21 formed immediately below the dispenser 18 and closed by an openable upper cover 22 on which the structure of the dispenser 18 is fixed externally.

[0014] In particular, it is provided for each bottle to have its own duct 20 with a first section that leads to a respective pump 19 and a second section that leads, through a respective passage 23 in the cover 22, from the pump 19 to the dispenser 18 up to its dispensing mouth 24. The same dispensing mouth 24 is provided with respective outlets for each duct 20.

[0015] The ducts 20 are made of plastic material certified for food use and are advantageously arranged inside the furniture along its side wall.

55 **[0016]** The pumps 19 are of the peristaltic type, as known in the technology of machines for managing liquids for food use, so as to avoid any contamination of the liquid by the components of the pump.

[0017] Moreover, the use of separate ducts from each bottle up to the respective dispensing mouth, with separate outlets from the latter, ensures that each ingredient is never in contact with other ingredients until it is poured out into the glass where the various ingredients are really meant to be mixed to form the cocktail.

[0018] As an example, the machine can contain twelve bottles and as many ducts for transferring the single ingredients from the respective bottle to the corresponding outlet on the dispensing mouth. Therefore, twelve corresponding peristaltic pumps 19 are housed in the space 21. Advantageously, the twelve bottles housed in the space 13 are divided into six bottles arranged in the front drawer 16 (visible in Figures 1-3) and six bottles arranged in a back drawer 17 (visible in Fig.4).

[0019] The management of the dispensing of the ingredients for the formation of the cocktails (selection of ingredients, calculation and calibration of the amounts, etc.) is entrusted to suitable software operating through minicomputers, electronic boards and control relays of the pumps, as can easily be imagined by the person skilled in the art.

[0020] The dispenser 18 advantageously has a bridge structure and, in its central part, the dispensing mouth 24 is arranged that, as stated, has twelve outlet openings, each dedicated to a specific ingredient to be dispensed.

[0021] The system for managing the dispensing of the ingredients for forming the cocktails also comprises a controller 25 (for example a tablet), arranged in a position easily accessed by the user, with interface function with the user to receive the commands relative to the selection and to the dispensing of the drink and to show suitable information relative to the operation in progress on its display. In the embodiment illustrated, the controller 25 is housed on the structure of the dispenser 18.

[0022] The controller can also be used to download recipes from the web to be added to its memory for the production of further cocktails.

[0023] The controller 25 is also configured to manage the functions relative to the stereo system 29 and to the mini-bar 26.

[0024] Advantageously, the controller 25 can be connected in wi-fi mode with other mobile devices, such as a smartphone or a portable computer to allow remote management of the machine.

[0025] The multifunction piece of furniture 10 also comprises a second functional module 26 having the functions of a mini-bar that, in the embodiment illustrated here, is arranged at one side of the furniture 10, with substantially vertical extension.

[0026] The mini-bar 26 comprises in particular an inner space 27, able to be closed through a door 28, for housing bottles, cans or other containers of drinks normally not intended for use in the functional module 12 adapted for preparing and dispensing cocktails, as well as possible food items (for example snacks) usually eaten together with cocktails.

[0027] The multifunction piece of furniture 10 also com-

prises a third functional module 29 consisting of a hi-fi stereo system, with relative speakers, amplifier and wi-fi board for connection to the web and/or to mobile devices to allow music to be played both locally and streamed.

[0028] Advantageously, the management software of the stereo system is integrated in the software package that also manages the production and dispensing of the drinks.

[0029] The multifunction piece of furniture 10 also comprises, above the housing 13 for the bottles, a further functional module 30 able to be customized according to the version of multifunction furniture required by the customer.

[0030] In the embodiment illustrated in Figures 1 and 2, such a functional module 30 comprises an inner space 31 for housing a set of glasses 32. Like in the case of the housing 13 for bottles, the space 31 for containing glasses can also be accessible both from the front side of the furniture 10, through the door 33, and from the back side through the further door 34 visible in Fig.4. In the embodiment illustrated in Fig. 3, on the other hand, the customizable functional module 30 comprises an ice-maker device 35 for producing ice cubes, advantageously with a closed circuit, i.e. of the type with water reservoir and system for recovering and recycling the melted water possibly produced.

[0031] In the figures it can be clearly seen how the occupation of the spaces by the functional modules 12, 26, 29, 30 is greatly optimised. Indeed, the mini-bar 26 occupies one side of the furniture 10, whereas the housing 13 for the bottles, the customizable functional module 30 and the stereo system 29 are grouped together in the remaining volume of the furniture, at the opposite side with respect to the mini-bar, arranged above one another respectively.

[0032] At this point it is clear how the portable multifunction piece of furniture according to the invention has allowed the preset objects to be accomplished. Indeed, further to combining into a single furniture element various functions capable of increasing the attractiveness and enjoyability thereof according to the needs and requirements of the user or the place for which it is intended, it is made with extremely compact dimensions (the dimensions of the entire piece of furniture can be kept down to less than one metre in height, excluding the dispenser, with a base of about half a metre per side). Its mobility is thus ensured in any type of environment (house, hotel rooms, lounges, temporary catering facilities, etc.).

[0033] In order to further improve the portability of the multifunction furniture 10, suitable wheels 15 can in any case be provided at the base.

[0034] Substantially, the portable multifunction piece of furniture according to the invention needs only to be connected to the electrical mains through a common electric cable, and therefore can operate wherever an electric socket is available. Otherwise, it can be considered totally autonomous and self-sufficient.

[0035] Of course, the above description of an embodiment applying the innovative principles of the present invention is given only as an example of such innovative principles and should not therefore be taken to limit the scope of protection claimed here.

[0036] For example, the number of bottles containing the ingredients for the composition of the drinks and cocktails housed in the space 13 can be increased, according to the need and the space available, with respect to the twelve described and illustrated here. In this case, the number of pumps 19, of ducts 20, of passages 23 in the cover 22 and, of course, of outlets at the dispensing mouth 24 will also be increased.

[0037] The bottles 14 containing the ingredients for the composition of the drinks and cocktails could also be replaced by other containers, for example cartons suitable for use with food substances. This would allow better exploitation of the volume available in the space 13, thanks to the different shape and the greater capacity of such containers with respect to bottles. In this case the drawer 16, which in the embodiment illustrated here has a glass portion to make the bottles visible from the outside, can be made with an entirely closed wall to hide the containers from view.

Claims

1. Portable multifunction piece of furniture, having a structure (11) that comprises a first functional module (12) adapted for preparing and dispensing drinks, in particular mixtures of several ingredients adapted for forming cocktails, a second functional module (26) having mini-bar functions and a third functional module (29) consisting of a stereo system.
2. Portable multifunction piece of furniture according to claim 1, **characterised in that** it comprises a further customizable functional module (30).
3. Portable multifunction piece of furniture according to claim 2, **characterised in that** said further customizable functional module (30) comprises an inner space (31) for housing a set of glasses (32).
4. Portable multifunction piece of furniture according to claim 3, **characterised in that** said inner space (31) for housing glasses is accessible through a door (33) openable on the front side of the furniture.
5. Portable multifunction piece of furniture according to claim 4, **characterised in that** said inner space (31) for housing glasses is also accessible through a further door (34) openable on the rear side of the furniture.
6. Portable multifunction piece of furniture according to claim 2, **characterised in that** said further customizable functional module (30) comprises an ice-maker device (35) for producing ice cubes.
7. Portable multifunction piece of furniture according to claim 6, **characterised in that** said ice-maker device (35) is of the closed circuit type, with water reservoir and melted water recovery and recirculation system.
8. Portable multifunction piece of furniture according to claim 1, **characterised in that** the functional module (12) adapted for preparing and dispensing drinks comprises a space (13) for housing a plurality of bottles (14) containing the ingredients for the composition of the drinks and cocktails, arranged in the lower part of the furniture, a dispenser (18) arranged externally, at the upper end of the furniture, for dispensing the drink and a battery of pumps (19) for transferring the ingredients from the bottles (14) to the dispenser (18) through respective ducts (20).
9. Portable multifunction piece of furniture according to claim 8, **characterised in that** the pumps (19) are arranged in the upper portion of the furniture, in a space (21) formed immediately below the dispenser (18) and closed by an openable upper cover (22) on which the structure of the dispenser (18) is fixed externally.
10. Portable multifunction piece of furniture according to claim 8, **characterised in that** the pumps (19) are of the peristaltic type.
11. Portable multifunction piece of furniture according to claim 9, **characterised in that** each bottle (14) is connected with the dispenser (18) through its own duct (20) having a first section that leads to a respective pump (19) and a second section that leads, through a respective passage (23) in the cover (22), from the pump (19) to the dispenser (18) up to a dispensing mouth (24) thereof, the dispensing mouth (24) being provided with respective outlets for each duct (20).
12. Portable multifunction piece of furniture according to claim 8, **characterised in that** the space (13) for housing the bottles comprises at least one extractable drawer (16) arranged on the front side of the furniture.
13. Portable multifunction piece of furniture according to claim 12, **characterised in that** said space (13) for housing the bottles comprises a further extractable drawer (17) arranged on the rear side of the furniture.
14. Portable multifunction piece of furniture according to claims 2 and 8, **characterised in that** the mini-bar (26) is arranged at one side of the furniture, whereas the space (13) for housing the bottles, the custom-

izable functional module (30) and the stereo system (29) are grouped at the opposite side of the furniture, arranged respectively one above the other.

15. Portable multifunction piece of furniture according to claim 8, **characterised in that** the dispenser (18) has a bridge structure and, in its central part, a dispensing mouth (24) thereof is arranged. 5
16. Portable multifunction piece of furniture according to claim 1, **characterised in that** it comprises a controller (25) with interface function with the user to receive the commands relative to the selection and dispensing of the drink and to show information relative to the operation in progress on a display. 10 15
17. Portable multifunction piece of furniture according to claim 16, **characterised in that** the controller (25) is configured to also manage the functions relative to the stereo system (29) and to the mini-bar (26). 20
18. Portable multifunction piece of furniture according to claims 8 and 16, **characterised in that** the controller (25) is housed on the structure of the dispenser (18). 25
19. Portable multifunction piece of furniture according to claim 1, **characterised in that** it is equipped, at the base, with wheels 15.

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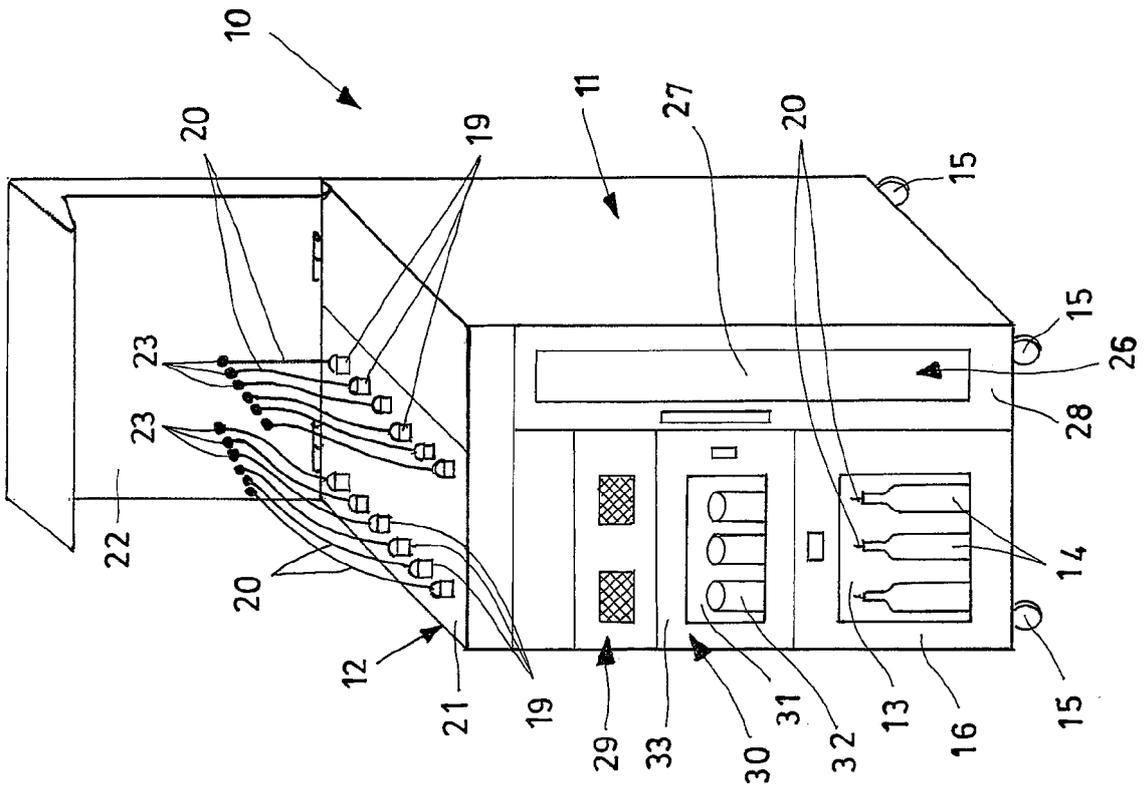


Fig. 2

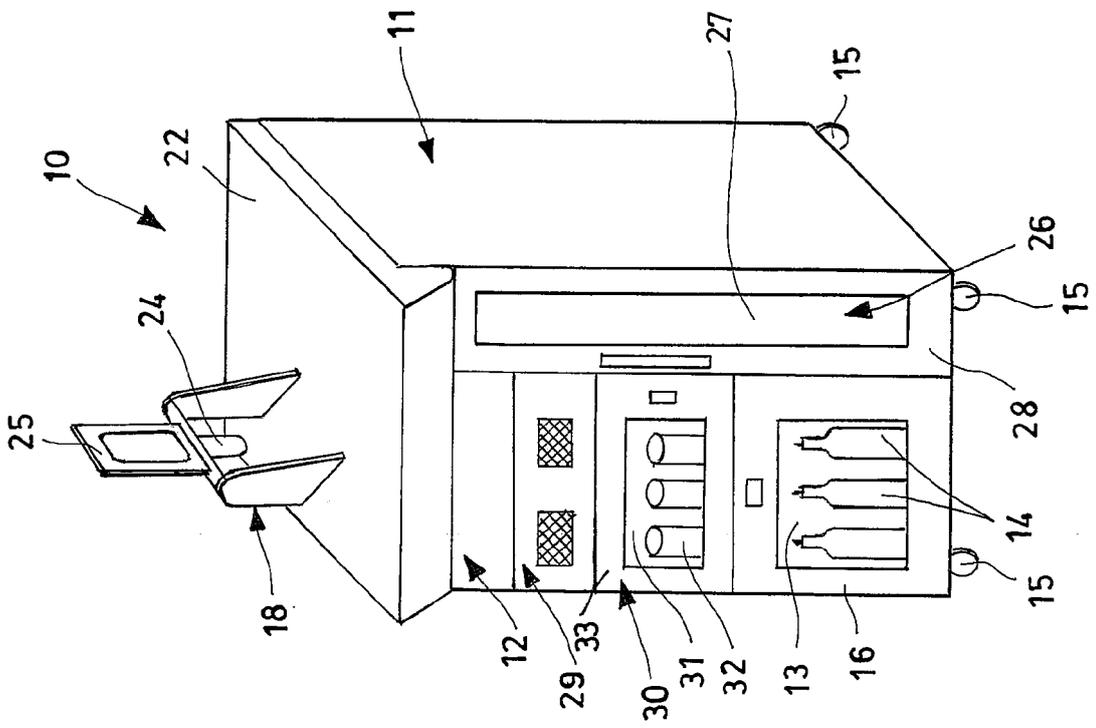


Fig. 1

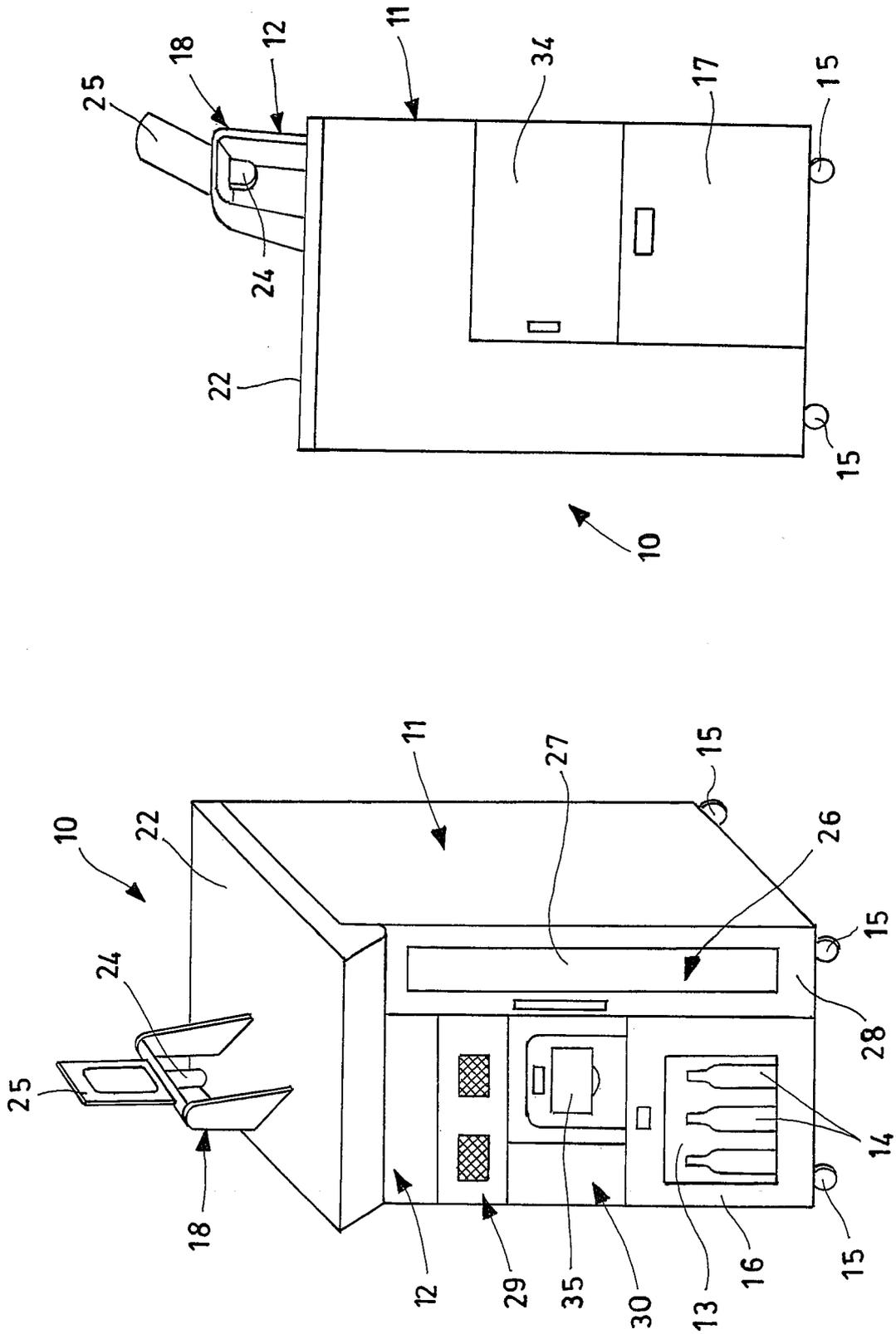


Fig.4

Fig.3



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Application Number
EP 16 16 9445

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Place of search Munich		Date of completion of the search 27 September 2016	Examiner Schultz, Tom
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