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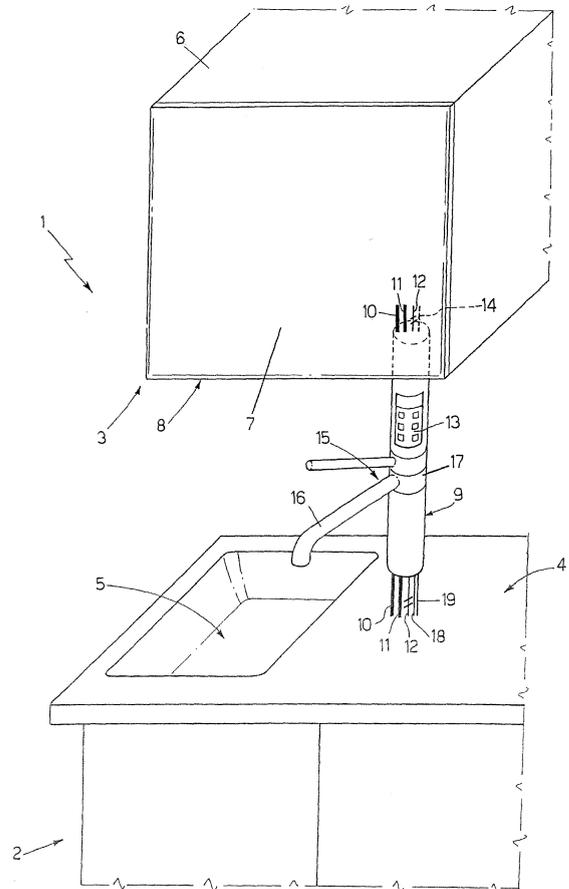
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(54) **Vertical kitchen fixture unit**

(57) A vertical kitchen fixture unit has a dishwasher (3) mounted over a sink unit (2) and a tubular post (9) extending between a top surface (4) of the sink unit (2) and the dishwasher (3); the tubular post (9) housing at least a first hydraulic circuit (10) which supplies fresh water to the dishwasher (6), and a second hydraulic circuit (11) which drains used water from the dishwasher (3).



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Description

[0001] The present invention relates to a vertical kitchen fixture unit.

[0002] In the furnishing industry, kitchens are known to comprise a sink unit, a number of wall cabinets, and a number of floor cabinets.

[0003] Various technical solutions are known for installing a dishwasher in known kitchens of the above type, and in particular in existing fitted kitchens.

[0004] In a first solution, the dishwasher is installed in place of one of the floor cabinets, and so reduces the storage space available to the user.

[0005] In a second solution, a relatively small-size dishwasher is mounted on the sink unit top surface, and so reduces the space available to the user on the top surface.

[0006] In a third solution, a relatively small-size dishwasher is installed inside the sink unit. This is not always possible, however, and, when it is, is fairly awkward.

[0007] In a fourth solution, the dishwasher is installed some distance from the sink, which involves plumbing and masonry work to connect the dishwasher, is relatively expensive, and is not always possible.

[0008] It is an object of the present invention to provide a new dishwasher arrangement designed to eliminate the above drawbacks, and which provides for straightforward, low-cost installation of a dishwasher in a kitchen, in particular an existing fitted kitchen.

[0009] According to the present invention, there is provided a vertical kitchen fixture unit as claimed in the accompanying Claims.

[0010] The present invention will now be described with reference to the accompanying drawing, which shows a schematic view in perspective of a non-limiting embodiment.

[0011] Number 1 in the accompanying drawing indicates as a whole a vertical kitchen fixture unit which comprises a preferably, though not necessarily, parallelepiped-shaped cabinet 2 which rests on the floor of the kitchen, and a dishwasher 3 which is structured so as to be attached to the vertical wall of the kitchen spaced over the floor cabinet 2.

[0012] In a preferred embodiment, the floor cabinet 2 is provided with a substantially horizontal top surface 4 and with a sink 5 which opens outwards at top surface 4 with its concavity facing upwards, so as to form a sink unit 2.

[0013] With reference to the accompanying drawing, dishwasher 3 is positioned substantially aligned over sink 5 of the floor cabinet 2 and comprises a substantially parallelepiped-shaped casing 6 which is attached to the vertical masonry wall of the kitchen, is provided with a front door 7 hinged to casing 6, and is preferably, though not necessarily, bounded at the bottom by a substantially horizontal face 8 parallel to top surface 4 of the floor cabinet 2.

[0014] Vertical kitchen fixture unit 1 also comprises a

tubular post 9 which extends from bottom face 8 of dishwasher 3 to top surface 4 of the floor cabinet 2, i.e. sink unit 2, preferably, though not necessarily, in a substantially vertical direction; a first hydraulic tubing 10 which supplies fresh water to dishwasher 3; and a second hydraulic tubing 11 which drains used water from dishwasher 3 with or without the aid of a known drain pump (not shown). Both hydraulic tubing 10 and hydraulic tubing 11 are at least partially housed inside tubular post 9.

[0015] Preferably, though not necessarily, vertical kitchen fixture unit 1 is also provided with an electric power line 12 which extends at least partially inside tubular post 9 and connects dishwasher 3 to the electrical circuit of the kitchen for supplying electric energy to dishwasher 3.

[0016] With reference to the accompanying drawing, in a preferred embodiment vertical kitchen fixture unit 1 also comprises a control panel 13 which is integrated in the tubular post 9, is electrically connected to dishwasher 3 via electrical wires 14 housed inside the tubular post 9, and is able to control the functioning of dishwasher 3.

[0017] Obviously, if present, the control panel 13 that controls the functioning of dishwasher 3 may be positioned in other places such as, for example, inside or outside casing 6 of dishwasher 3 or on the horizontal top surface 4 of floor cabinet 2.

[0018] In addition to what above, in the example shown vertical kitchen fixture unit 1 is optionally provided with a water tap 15 which is integrated in the tubular post 9 and is dimensioned for supplying water directly to the sink 5 of sink unit 2. More in details, water tap 15 comprises a water supply pipe 16 that projects from tubular post 9 over sink 5, and a valve element 17 which is housed inside tubular post 9 and controls water supply to water supply pipe 16; whereas vertical kitchen fixture unit 1 comprises two additional hydraulic tubing 18 and 19 which are at least partially housed inside tubular post 9 and which supply cold and, respectively, hot water to valve element 17 of water tap 15.

[0019] In an alternative embodiment, one of the additional hydraulic tubing 18 and 19 housed inside tubular post 9 may be replaced by the hydraulic tubing 10 which supplies fresh water to dishwasher 3. In that case hydraulic tubing 10 supplies cold or hot water both to dishwasher 3 and to valve element 17.

[0020] Obviously, in an alternative embodiment vertical kitchen fixture unit 1 may be provided with a traditional water tap positioned on horizontal top surface 4 of floor cabinet 2, near the sink 5. In that case, vertical kitchen fixture unit 1 does not comprise hydraulic tubing 18 and 19 inside tubular post 9, and tubular post 9 may be provided only with control panel 13, if present.

[0021] The advantages of vertical kitchen fixture unit 1 are evident. Due to its particular structure, vertical kitchen fixture unit 1 permits the installation of a dishwasher in a relatively small kitchen, in an existing fitted kitchen, with no reduction in the storage space available to the user, and with only relatively minor masonry, plumbing

and electrical work required.

[0022] For example, dishwasher 3 may be installed in place of the wall cabinet which is normally fitted over the sink unit and which is provided with a dish-rack for hand-washed kitchen utensils. In that case, tubular post 9 is simply fitted in place between face 8 of dishwasher 3 and top surface of existing sink unit, either replacing ordinary existing tap or sideways to the existing tap.

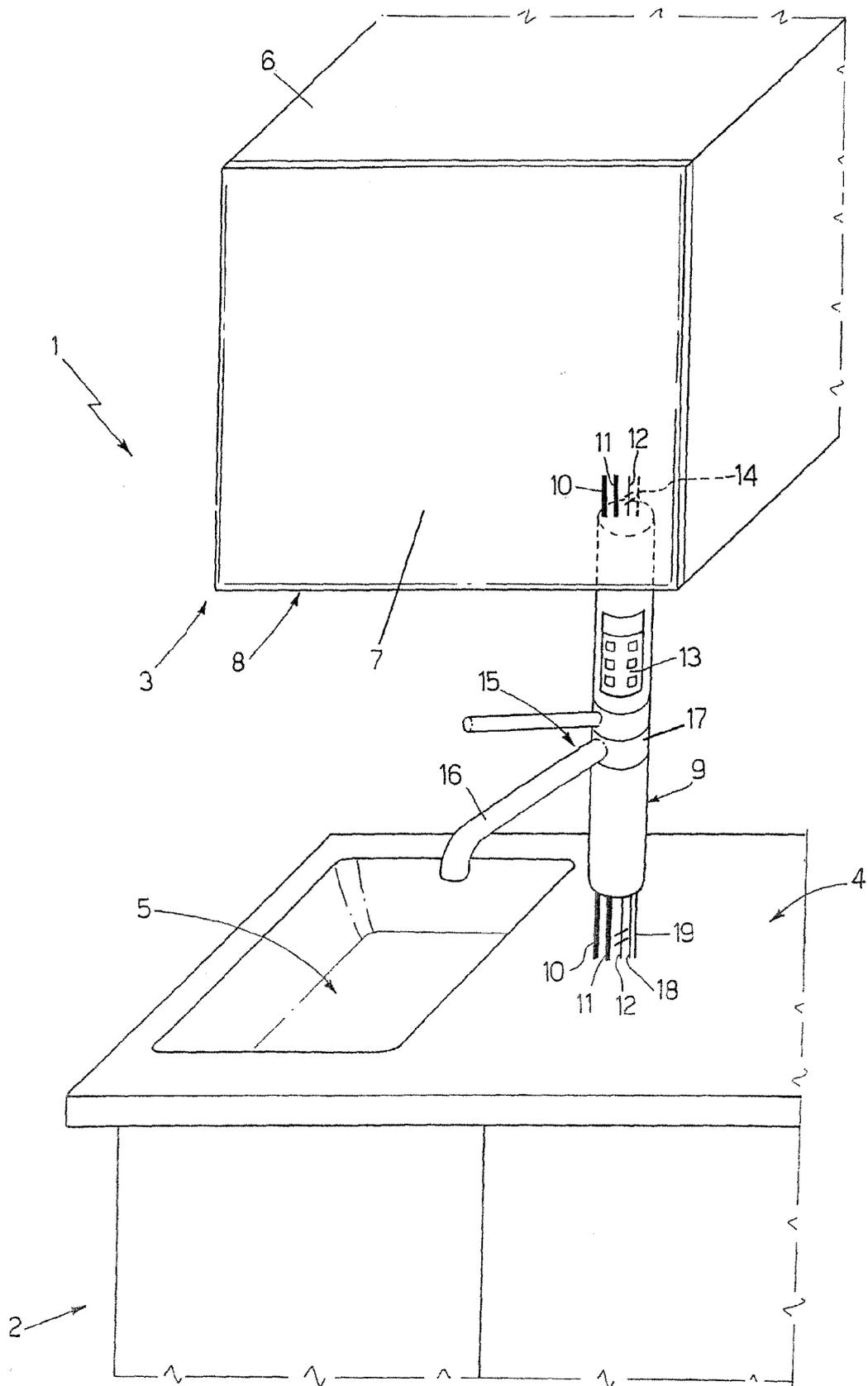
[0023] Clearly, changes may be made to vertical kitchen fixture unit 1 as described and illustrated herein without, however, departing from the scope of the present invention.

[0024] For example, according to a first design variant, tubular post 9 may be telescopic so as to allow rapid adjustment of the distance between dishwasher 3 and top surface 4, thus permitting a quick installation of vertical kitchen fixture unit 1 in existing fitted kitchens.

[0025] According to a second design variant, dishwasher 3 may be equipped with an electrical drying device (not shown) which can dry, on command, hand-washed kitchen utensils positioned on drip basket/s (not shown) positioned inside dishwasher 3. In that case, dishwasher 3 can be used as a traditional dish-rack drainer and thus it can be advantageously installed in place of a traditional wall cabinet provided with the dish-rack for hand-washed kitchen utensils without compromise functionality of the kitchen.

Claims

1. A vertical kitchen fixture unit (1) **characterised by** comprising a dishwasher (3) which can be attached to a vertical wall of a kitchen so as to be arranged spaced over a floor cabinet (2) provided with a top surface (4); said vertical kitchen fixture unit (1) also comprising a tubular post (9) extending between the dishwasher (3) and the top surface (4) of the floor cabinet (2), at least a first hydraulic tubing (10) for supplying fresh water to the dishwasher (6) and at least a second hydraulic tubing (11) for draining used water from the dishwasher (3); said first hydraulic tubing (10) and said second hydraulic tubing (11) being at least partially housed inside said tubular post (9).
2. Vertical kitchen fixture unit as claimed in Claim 1, wherein said floor cabinet (2) is provided with a sink (5) which opens outwards at top surface (4) of the floor cabinet (2) with its concavity facing upwards so as to form a sink unit (2).
3. Vertical kitchen fixture unit as claimed in Claim 2, wherein said dishwasher (3) is positioned substantially over the sink (5) of said floor cabinet (2).
4. Vertical kitchen fixture unit as claimed in any one of the foregoing Claims, wherein it also comprises an electric power line (12) which extends at least partially inside said tubular post (9) and connects dishwasher (3) to the electrical circuit of the kitchen.
5. Vertical kitchen fixture unit as claimed in any one of the foregoing Claims, wherein it also comprises a control panel (13) which is electrically connected to dishwasher (3) and is able to control the functioning of said dishwasher (3).
6. Vertical kitchen fixture unit as claimed in Claim 5, wherein said control panel (13) is integrated in the tubular post (9) and is electrically connected to said dishwasher (3) via electrical wires (14) housed inside said tubular post (9).
7. Vertical kitchen fixture unit as claimed in Claim 2 and in any other of the foregoing Claims, wherein it also comprises a water tap (15) which is integrated in the tubular post (9) and is dimensioned for supplying water directly to the sink (5) of said floor cabinet (2), and at least a third hydraulic tubing (18, 19) which is housed inside said tubular post (9) and which supplies water to said water tap (15).
8. Vertical kitchen fixture unit as claimed in Claim 7, wherein said first hydraulic tubing (10) supplies cold or hot water to said dishwasher (3) and also to said water tap (15).
9. Vertical kitchen fixture unit as claimed in Claim 7, wherein it also comprises a fourth hydraulic tubing (18, 19) which is housed inside said tubular post (9) and which supplies cold water to said water tap (15); said third hydraulic tubing (18, 19) supplying hot water to said water tap (15).
10. Vertical kitchen fixture unit as claimed in any one of the foregoing Claims, wherein said tubular post (9) is telescopic.





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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A	* page 1, last paragraph - page 3, last paragraph; figures 3,8 *	7-10	
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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
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Place of search		Date of completion of the search	Examiner
The Hague		4 January 2007	Jones, Clive
CATEGORY OF CITED DOCUMENTS		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	
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		& : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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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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