

(19)



(11)

EP 2 923 605 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
30.09.2015 Bulletin 2015/40

(51) Int Cl.:
A47B 87/00 ^(2006.01) **A47B 13/08** ^(2006.01)
A47B 37/00 ^(2006.01)

(21) Application number: **14161713.4**

(22) Date of filing: **26.03.2014**

(84) Designated Contracting States:
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR**
Designated Extension States:
BA ME

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(54) **Combination of a table and at least one coupling means**

(57) The invention relates to a combination of a table and at least one coupling means (13, 14), wherein the table comprises:

- a table top (6); and
- at least three table legs (5) arranged to the table top

(6), wherein at least one table leg (5) extends with an end surface towards the top surface of the table top (6) and comprises at the end surface of the at least one table leg a coupling element (12) for coupling with the at least one coupling means (13, 14).

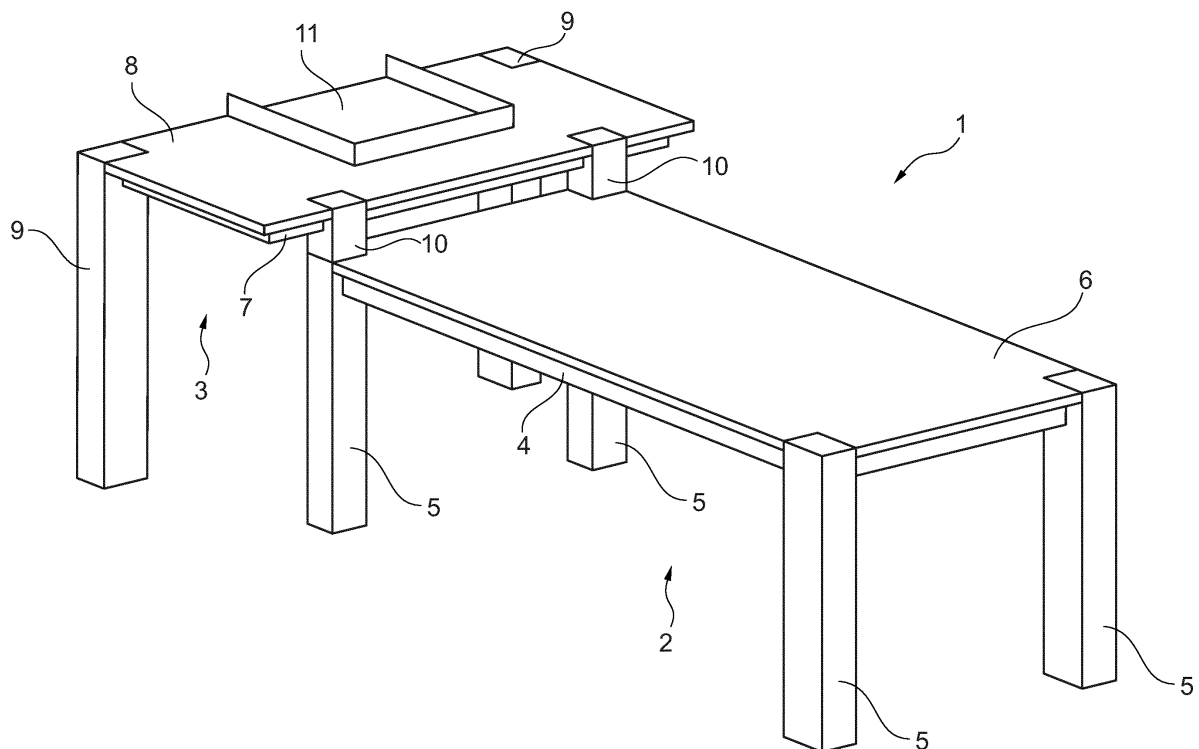


Fig. 1

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Description

[0001] The invention relates to a combination of a table and at least one coupling means.

[0002] In some applications it is desired to be able to couple a number of tables, such that a larger table is obtained. The coupling of tables ensures that a stable combination is achieved, such that inadvertent shifting of tables relative to each other is prevented.

[0003] US 2002 0166482 discloses such a combination in which tables can be coupled to each other. To this end the table top of a table is provided with a number of coupling elements along the circumference of the table top. Coupling means are provided to coupled two coupling elements of two adjacent tables.

[0004] The disadvantage of this combination is that the table top needs to be specially adapted to incorporate the coupling elements. For some materials used for table tops, this would very difficult to achieve. Also, it would require a substantial thickness of the table top to anchor the coupling elements. In the field of tables, for example outdoor tables, it is furthermore desired to be able to couple tables of different heights; for example a high table with a cooking facility integrated and a dining table. With the combination disclosed in US 2002 0166482, such configurations are not possible as the tables to be coupled according to this teaching need to be at the same height.

[0005] It is now an object of the invention to provide a combination according to the preamble, in which at least some of the disadvantages of the prior art are at least reduced.

[0006] This object is achieved according to the invention with a combination of a table and at least one coupling means, wherein the table comprises:

- a table top; and
- at least three table legs arranged to the table top, wherein at least one table leg extends with an end surface towards the top surface of the table top and comprises at the end surface of the at least one table leg a coupling element for coupling with the at least one coupling means.

[0007] With the combination according to the invention the coupling element is provided in the end surface of a table leg. A table leg is typically sufficiently robust, as it should withstand typical forces, such as when dragging a table over the floor when displacing the table. As a result any kind of table top of any kind of thickness or material can be used, while still be able to couple two tables via the coupling means.

[0008] In an embodiment of the combination according to the invention, the coupling element is defined by an opening in the end surface and wherein the coupling means comprise at least two protrusions each for engagement in the opening in the end surface.

[0009] With this embodiment at least two tables can

be positioned with two table legs next to each other and the coupling means with the two protrusions can be pressed into the openings in the end surfaces of both table legs to couple the tables via their respective table legs.

[0010] In a preferred embodiment of the combination according to the invention the at least one table leg has near the table top a pipe shaped portion and a protrusion of the coupling means is axially inserted into the open end of the pipe shaped portion.

[0011] A pipe, such as a cylindrical pipe or a square pipe is often used as a table leg. The open ends of the pipes typically are closed by a plug or the like. With this embodiment according to the invention, open end near the table top can be used as connection element for engagement of a protrusion of the coupling means. If the table is not coupled to another table, than the open end of the pipe shaped portion can be finished by a suitably shaped plug.

[0012] A further preferred embodiment of the combination according to the invention comprises a second table having a second table top and at least a table leg comprising two connectable first and second table leg portions, wherein the first table leg portion is arranged to the second table top and wherein the coupling means are arranged on the first table leg portion at the end distal from the table top for connection to the second table leg portion or to the coupling element of the first table.

[0013] In this embodiment, a second table being higher than the first table can be coupled to each other, as the coupling means are arranged at the first table leg portion. If however both tables are to be used separately, the second table leg portion is connected to the first table leg portion to form a full table leg.

[0014] In yet another embodiment of the combination according to the invention the coupling means comprise a handle.

[0015] The handle facilitates the extraction of the coupling means from the coupling element on the table leg.

[0016] Preferably, the handle is slidable between a position recessed in the coupling means and a position extending from the coupling means for operating the handle.

[0017] In this embodiment, the handle is recessed when not used, such that it will not hinder the normal use of the table. When the configuration of the table is to be altered, for example when the table needs to be disconnected from a second table, the handle can be pulled out of it recess and the handle can then be used for extraction of the coupling means from the connection element in the table leg.

[0018] In still another embodiment of the combination according to the invention the handle is U-shaped having two legs, which legs protrude through holes in the body of the coupling means and the free ends of both legs are provided with a widened portion having a main dimension larger than the main dimension of the cross section of the holes.

[0019] These and other features of the invention are elucidated in conjunction with the accompanying drawings.

Figure 1 shows a perspective view of a first embodiment of the combination according to the invention. Figure 2 shows a cross sectional view of the embodiment of figure 1.

Figure 3 shows a cross sectional view of a second embodiment of the combination according to the invention.

Figure 4 shows a perspective view of a third embodiment of a table for a combination according to the invention.

[0020] Figure 1 shows a perspective view of a first embodiment 1 of the combination according to the invention. The combination 1 has a first table 2 and a second table 3. The first table 2 has a frame 4 at which corners table legs 5 are arranged. A table top 6 is placed over the frame 4.

[0021] The second table 2 also has a frame 7 and a table top 8 arranged over the frame 7. A cooking area 11 is arranged in the table top 8. Furthermore two regular table legs 9 are attached to the frame 7 as well as two table leg portions 10. Because the table legs 9 are longer than the table legs 5, the second table 3 can be used as a kitchen counter, while the first table 1 can be used for sitting.

[0022] Figure 2 shows a cross sectional view of the combination 1 of figure 1. The table leg 5 is embodied as a hollow tube with an opening 12 at the top surface of the table leg 5. The table leg portion 10 of the second, higher table 3 is provided with coupling means 13, 14 positioned in the first table leg portion 10 at the end distal from the table top 8. The coupling means have a body 13 which is pressed into the distal end of the table leg portion 10. The body 13 is provided with a protrusion 14, which engages into the opening 12 to connect the first table 2 with the second table 3.

[0023] When the first table 2 is disconnected from the second table 3 by removing the protrusion 14 from the opening 12 in the table leg 5, a second table leg portion (not shown) could be provided and connected to the first table leg portion 10, such that the second table 3 could also be used separately.

[0024] Figure 3 shows a cross sectional view of a second embodiment 20 of a combination according to the invention. This combination 20 has two tables 2, similar to the first table of figure 1, with a frame 4, pipe like table legs 5 with each an opening 12 at the end surface of the table leg 5, which end surface is directed towards the top surface of the table top 6.

[0025] The combination 20 has furthermore coupling means having a body 21 with two protrusions 22, 23 for engagement into the openings 12 of the table legs 5.

[0026] The body 21 of the coupling means is furthermore provided with two holes 24, 25 through which the

legs 26, 27 of a U-shaped handle 28 extend. The free ends of the legs 26, 27 are provided with widened portions 29, 30 which have a main dimension (in this case the diameter) larger than the main dimension (in this case the diameter) of the cross section of the holes 24, 25.

[0027] At the top surface of the body 21, a recess 31 is provided for accommodating the handle 28, when the handle 28 is not used.

[0028] In case the coupling means need to be removed from the openings 12, one can take out the handle 28 from the recess 31 and firmly grip the coupling means and take them out to disconnect the tables 2.

[0029] Figure 4 shows a perspective view of a third embodiment of a table 30 for a combination according to the invention. This third embodiment of a table 30 can for example be used in the combination shown in figure 1 as the second table 2.

[0030] The table 30 has a center table top portion 31, and two side table top portion 32, 33. Both side table top portions 32, 33 have each a leg 34, 35, whereas the center table top portion 31 has two legs 36, 37. The two legs 36, 37 can be taken apart into two table leg portions, such that the table 30 can be connected with another table by connecting the upper table leg portions of the legs 36, 37 with the legs of another table, as for example explained in conjunction with the figures 1 - 3.

[0031] The center table top portion 31 has a recess 38 underneath which a support surface 39 is suspended via links 40. A connector plate 41 is arranged on top of the support surface 39. This connector plate 41 correspond with a specific foot print of a cooking device (not shown), such as a grill or barbecue. The connector plate 41 ensures that the cooking device can be positioned securely on the support surface 39 and cannot by accident slide off of this surface 39.

[0032] The two side table top portion 32, 33 are connected in a convenient way to the center table top portion 31, such that a number of center table top portions 31 can be manufactured for different kinds and sizes cooking devices. In this way one can assemble easily a table 30 by selecting a center table top portion 31 suitable for a specific kind of cooking device and by combining this with two side table top portions 32, 33.

Claims

1. Combination of a table and at least one coupling means, wherein the table comprises:

- a table top; and
- at least three table legs arranged to the table top, wherein at least one table leg extends with an end surface towards the top surface of the table top and comprises at the end surface of the at least one table leg a coupling element for coupling with the at least one coupling means.

2. Combination according to claim 1, wherein the coupling element is defined by an opening in the end surface and wherein the coupling means comprise at least two protrusions each for engagement in the opening in the end surface. 5
3. Combination according to claim 2, wherein the at least one table leg has near the table top a pipe shaped portion and wherein a protrusion of the coupling means is axially inserted into the open end of the pipe shaped portion. 10
4. Combination according to any of the preceding claims, comprising a second table having a second table top and at least a table leg comprising two connectable first and second table leg portions, wherein the first table leg portion is arranged to the second table top and wherein the coupling means are arranged on the first table leg portion at the end distal from the table top for connection to the second table leg portion or to the coupling element of the first table. 15
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5. Combination according to any of the preceding claims, wherein the coupling means comprise a handle. 25
6. Combination according to claim 5, wherein the handle is slidable between a position recessed in the coupling means and a position extending from the coupling means for operating the handle. 30
7. Combination according to claim 6, wherein the handle is U-shaped having two legs, which legs protrude through holes in the body of the coupling means and wherein the free ends of both legs are provided with a widened portion having a main dimension larger than the main dimension of the cross section of the holes. 35

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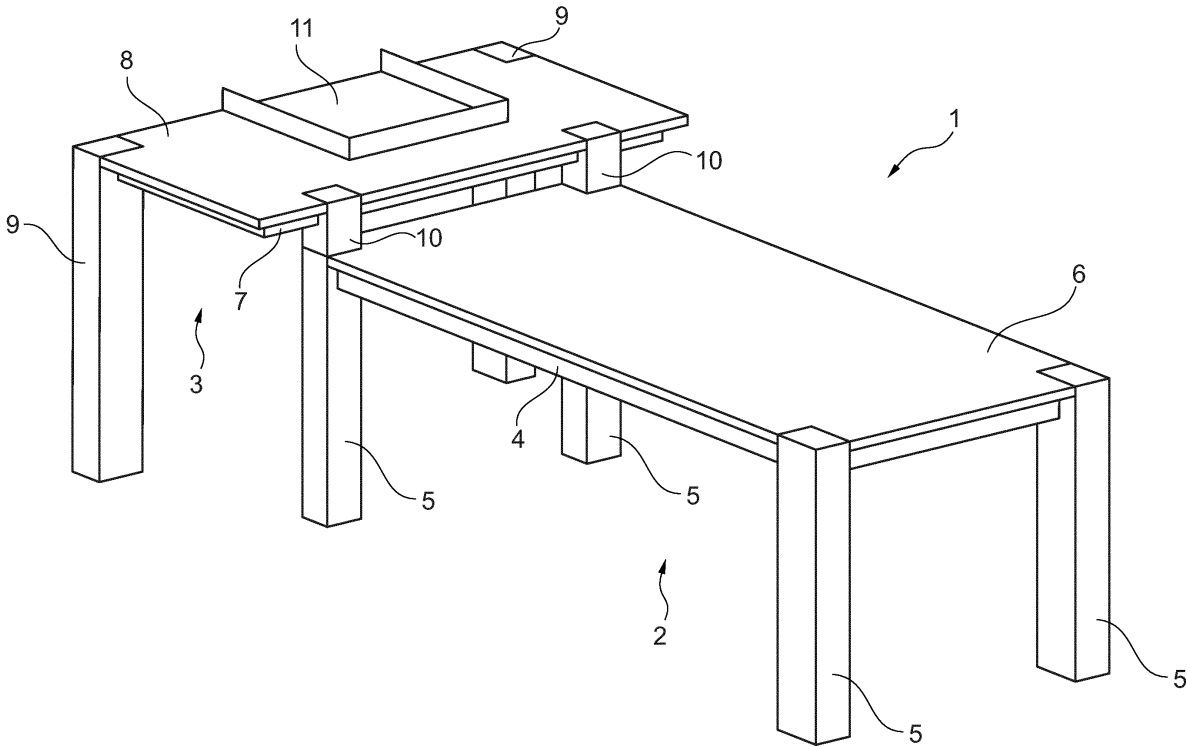


Fig. 1

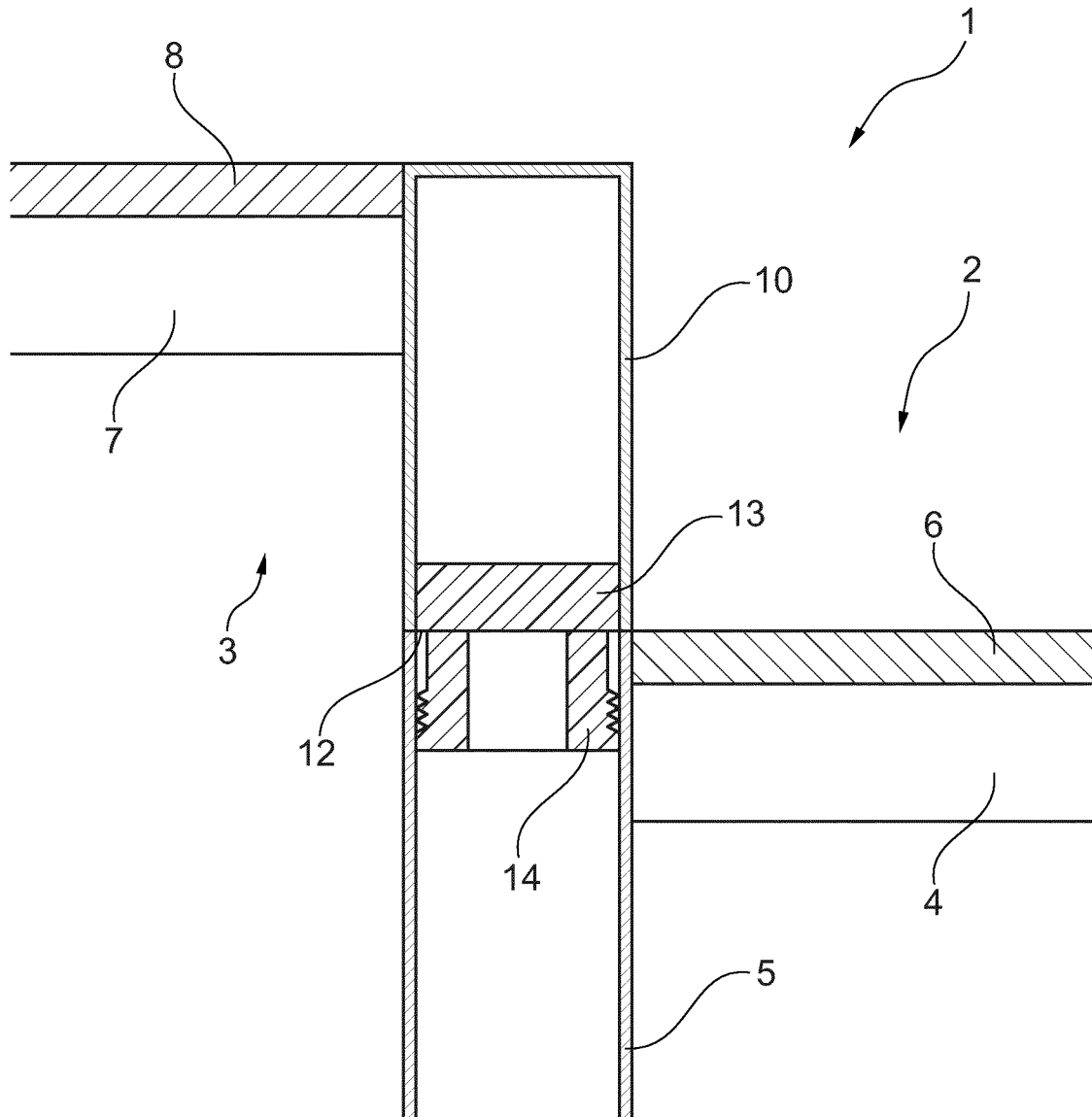


Fig. 2

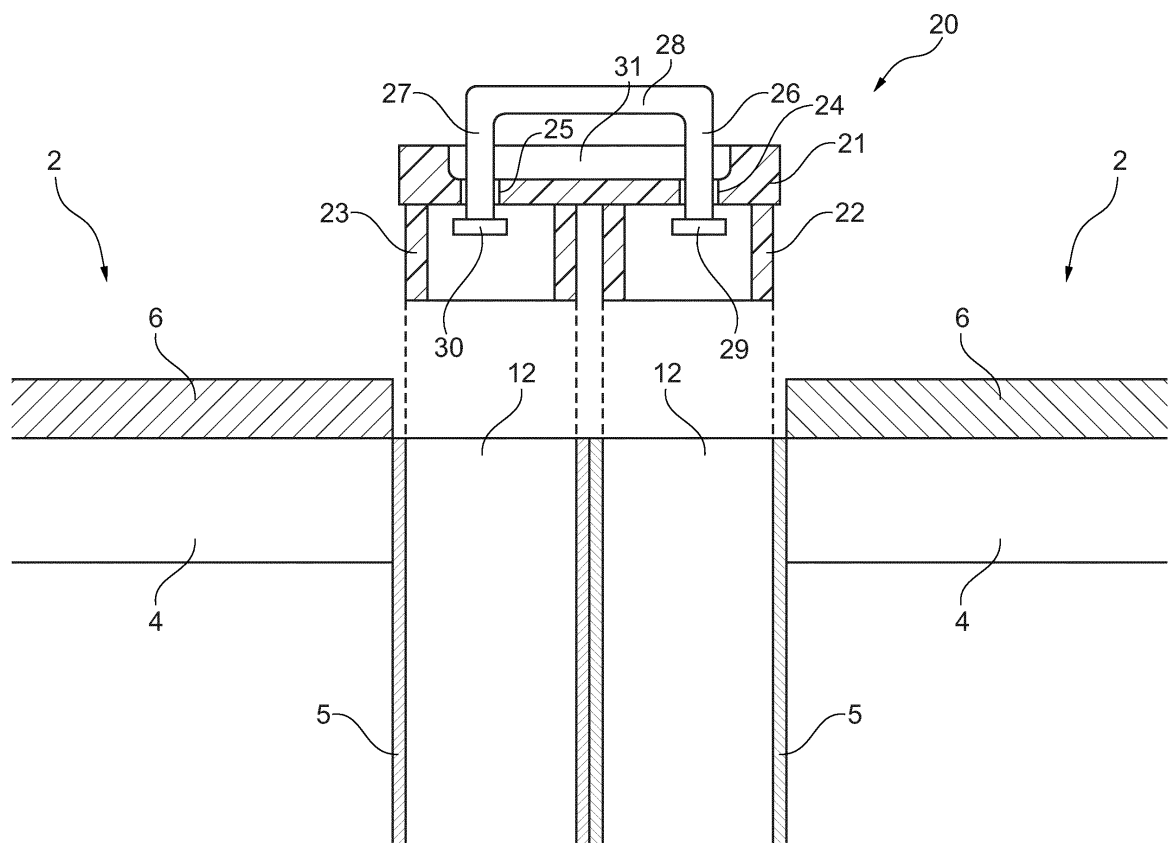


Fig. 3

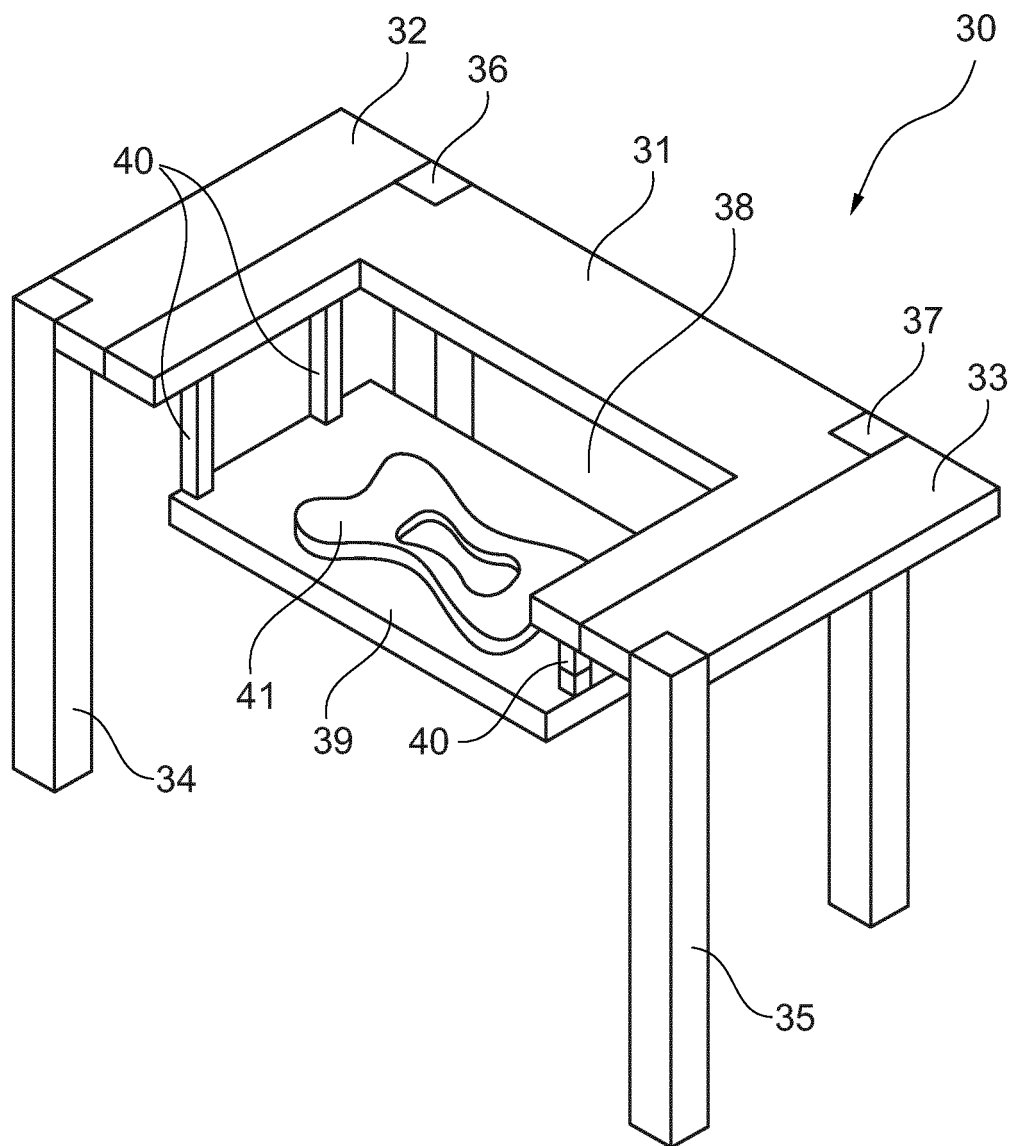


Fig. 4



EUROPEAN SEARCH REPORT

Application Number
EP 14 16 1713

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Place of search The Hague		Date of completion of the search 29 August 2014	Examiner Bitton, Alexandre
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EPO FORM 1503 03.92 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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