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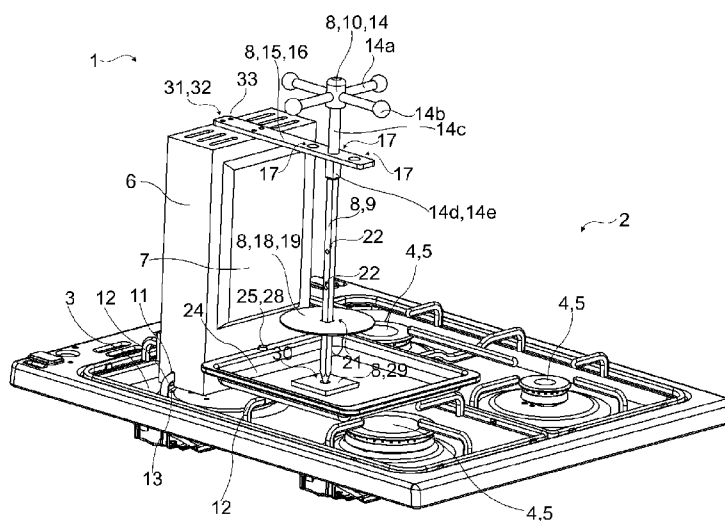
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(54) Title: DONER KEBAB APPARATUS FOR USE WITH A GAS COOKING APPLIANCE

Fig. 1



(57) Abstract: The present invention relates to a doner kebab apparatus (1). The present invention also relates to a gas cooking appliance (2). The present invention provides a gas cooking appliance (2) which has a cooktop (3) that is adapted for installation thereon the doner kebab apparatus (1) of the present invention. The doner kebab apparatus (1) of the present invention comprises: a main body (6) which is adapted for installation onto the cooktop (3), wherein the main body (6) includes a radiant gas burner (7) which includes a gas inlet that is arranged to oppose the respective gas injection outlet below the releasable burner head (5) in the cooktop (3) when the burner head (5) has been removed and the main body (6) is installed onto the cooktop (3); and a skewer assembly (8) in front of the radiant gas burner (7).

Description**DONER KEBAB APPARATUS FOR USE WITH A GAS COOKING APPLIANCE**

- [0001] The present invention relates to a doner kebab apparatus which can be operated using flammable gases. The present invention also relates to a gas cooking appliance which has a cooktop.
- [0002] The Turkish style doner kebab becomes increasingly more popular in the world. In order to enjoy the delicious taste of the doner kebab, customers usually go to a restaurant or a café. However, many customers are mistrustful about the quality and the preparation of the meat and the additional ingredients of the doner kebabs that are served in restaurants and cafés. Therefore, some customers avoid eating outdoors and prefer home-cooked food with the consequence that they have to refrain from consuming doner kebab.
- [0003] The doner kebab apparatuses are commonly known in the art. EP 1 386 569 A1 discloses a doner kebab apparatus. A problem with the prior art doner kebab apparatuses is that they are not convenient for domestic use.
- [0004] An objective of the present invention is to provide a doner kebab apparatus for private use which solves the aforementioned problems of the prior art in a cost effective way and which enables the customers to prepare their doner kebab at home.
- [0005] This objective has been achieved by the doner kebab apparatus as defined in claim 1, and the gas cooking appliance as defined in claim 15. Further achievements have been attained by the subject-matters respectively defined in the dependent claims.
- [0006] The present invention provides a gas cooking appliance which comprises a cooktop that is adapted for installation thereon the doner kebab apparatus of the present invention.
- [0007] The doner kebab apparatus of the present invention comprises a main body which is adapted for installation onto the cooktop. The main body includes a radiant gas burner for grilling pieces of meat. The radiant gas burner includes a gas inlet which is arranged to oppose the respective gas injection outlet of the gas burner in the cooktop in the state when the burner head has been removed and the main body has been installed onto

the cooktop. The doner kebab apparatus of the present invention further comprises a skewer assembly which includes: a vertical skewer for rotatably holding the pieces of meat about a vertical axis in front of the radiant gas burner; and a steering unit for rotating the skewer about the vertical axis.

[0008] A major advantageous effect of the present invention is that the user is enabled to prepare doner kebab at home easily by way of installing the doner kebab apparatus onto the cooktop of the gas cooking appliance. Thereby, the customer can prepare the doner kebab with confidence about the quality and origin of the ingredients to be used for the preparation. Thereby, the customer has also been enabled to prepare the doner kebab according to his/her own taste and in the desired quantity and at the desired time. Another major advantageous effect of the present invention is that the domestic gas cooking appliance has been endowed with the doner kebab function, and can be used any time by the customer for preparing doner kebab. With the present invention the customer satisfaction can be further increased.

[0009] In alternative embodiments, the doner kebab apparatus can be installed onto the cooktop solely by fittingly placing and/or fixing the main body thereof in the designated position ready for use. These embodiments are particularly advantageous as the doner kebab apparatus can be reliably installed to the gas cooking appliance, and thus prevented from tilting or dislodging in case of any strong impacts. In the installed state the gas inlet and the gas injection outlet are securely coupled with each other in proper relative positions for the conveyance of the gas and the intake of ambient air at the required mixing ratio, and thus a gas leakage can be prevented. In alternative versions of these embodiments, the main body can be fittingly placed into the recess of the cooktop and/or the recess of the gas burner and/or other additional recess/protrusions that can be formed into the cooktop. In other alternative versions of these embodiments, the main body can be detachably fixed through an interlocking-connection or a snap-connection or a screw-connection to the cooktop. Other type of connections which are known to those skilled in the art may be

alternatively used for fittingly placing and/or fixing the main body. In another version of these embodiments, the main body has one or more notches which interlock with the rack on the cooktop.

- [0010] In other alternative embodiments, the skewer assembly can be operated manually through a steering handle and/or electrically through an electric motor. The level of gas flowing to the radiant gas burner can be regulated through the gas valve of the corresponding gas burner whose gas injection outlet supplies the gas inlet of the radiant gas burner. Of course, the radiant gas burner can be additionally provided a separate gas regulator. In another embodiment, the speed of the motor is adjustable to different levels through an input means. These embodiments are particularly advantageous as the doner kebab can be roasted to different browning levels in accordance with the taste of the user.
- [0011] In another embodiment, the radial distance between the skewer and the radiant gas burner is adjustable through an adjustment unit. This embodiment is particularly advantageous as the user can add more meat to the skewer by increasing the radial distance and/or change the rate of the radiant heat impinging on the pieces of meat. In alternative versions of this embodiment, the adjustment unit is adapted to allow continual or incremental adjustment of the radial distance.
- [0012] In another embodiment, the position of the pieces of meat along the axial direction of the skewer can be adjusted through another adjustment unit. This embodiment is particularly advantageous as the doner kebab can be centered with respect to the radiant gas burner in the axial direction, and thus the radiant heat can be more effectively used.
- [0013] In another embodiment, the doner kebab apparatus has a tray for collecting the grease which drips from the pieces of meat. In alternative versions of this embodiment, the tray can be releasably fixed to the cooktop and/or the main body of the doner kebab apparatus. This embodiment is particularly advantageous as the tray lends additional stability to the doner kebab apparatus on the cooktop, and thus further reduces the risk of tilting. This embodiment is also particularly advantageous as the tray prevents the grease from dripping onto the

cooktop, and thus facilitates the cleaning thereof.

[0014] In another embodiment, the lower end of the skewer is rotatably supported and aligned by means of a support which can be placed onto the cooktop and/or into the tray. This embodiment is particularly advantageous as the support lends additional stability to the doner kebab apparatus on the cooktop, and thus further reduces the risk of tilting.

[0015] Additional features and additional advantageous effects of the doner kebab apparatus and the gas cooking appliance of the present invention will become more apparent with the detailed description of the embodiments with reference to the accompanying drawings in which:

[0016] Figure 1 – is a schematic perspective view of a doner kebab apparatus which is installed onto the cooktop of a gas cooking appliance according to an embodiment of the present invention, wherein the rear left gas burner of the cooktop is covered by the main body of the doner kebab apparatus;

[0017] Figure 2 – is a schematic perspective front view of the main body of the doner kebab apparatus according to an embodiment of the present invention;

[0018] Figure 3 – is a schematic perspective rear view of the main body of the doner kebab apparatus according to an embodiment of the present invention;

[0019] Figure 4 – is a schematic perspective exploded view of the skewer assembly of the doner kebab apparatus according to an embodiment of the present invention;

[0020] Figure 5 – is a schematic perspective front view of a tray of the doner kebab apparatus according to an embodiment of the present invention;

[0021] Figure 6 – is a schematic perspective rear view of the tray of the doner kebab apparatus according to an embodiment of the present invention.

[0022] The reference signs appearing on the drawings relate to the following technical features.

1. Doner kebab apparatus
2. Cooking appliance
3. Cooktop
4. Gas burner

- 5. Burner head
- 6. Main body
- 7. Radiant gas burner
- 8. Skewer assembly
- 9. Skewer
- 10. Steering unit
- 11. 1st fixing means
- 12. Rack
- 13. Notch
- 14. Handle
- [0023] 14a. Arm
- [0024] 14b. Grip
- [0025] 14c. Shaft
- [0026] 14d. Interlocking end
- [0027] 14e. Interlocking end
 - 1. 15. 1st adjustment unit
 - 2. 16. Support arm
 - 3. 17. Pivot
 - 4. 18. 2nd adjustment unit
 - 5. 19. Plate
 - 6. 20. Fastening means
 - 7. 21. Aperture
 - 8. 22. Hole
 - 9. 23. Pin
- [0028] 23a. Grip
- [0029] 24. Tray
- [0030] 25. 2nd fixing means
- [0031] 26. Retainer
- [0032] 27. Opening
- [0033] 28. Projection
- [0034] 29. Support
- [0035] 30. Indent
- [0036] 31. Hole

[0037] 32. hole

[0038] 33. Screw

[0039] The doner kebab apparatus (1) is suitable for use with a domestic gas cooking appliance (2) which comprises a cooktop (3), one or more gas burners (4) which are arranged into the cooktop (3); and a rack (12) for supporting a cooking utensil (not shown) on the respective gas burner (4). Each gas burner (4) includes a releasable burner head (5) and a gas outlet (not shown) for injecting the gas to the burner head (5).

[0040] In the gas cooking appliance (2) of the present invention, the cooktop (3) is adapted for installation thereon the doner kebab apparatus (1) of the present invention.

[0041] The doner kebab apparatus (1) of the present invention comprises: a main body (6) which is adapted for installation onto the cooktop (3), wherein the main body (6) includes a radiant gas burner (7) for grilling pieces of meat (not shown), and wherein the radiant gas burner (7) includes a gas inlet (not shown) which is arranged to oppose the respective gas outlet of the gas burner (4) in the cooktop (3) in the state when the burner head (5) has been removed and the main body (6) has been installed onto the cooktop (3); and a skewer assembly (8) which includes: a vertical skewer (9) for rotatably holding the pieces of meat about a vertical axis in front of the radiant gas burner (7); and a steering unit (10) for rotating the skewer (9) about the vertical axis.

[0042] In an embodiment, the doner kebab apparatus (1) further comprises a first fixing means (11) for releasably fixing the main body (6) to the cooktop (3).

[0043] In another embodiment, the first fixing means (11) comprises one or more notches (13) which are disposed onto the main body (6). In this embodiment, each notch (13) engages with the respective sections of the rack (12) when the main body (6) is installed onto the cooktop (3).

[0044] In another embodiment, the steering unit (10) comprises a steering handle (14) for manually rotating the skewer (9) about the vertical axis.

[0045] In another embodiment, the steering handle (14) has two crossed arms (14a) which have four ball-shaped grips (14b) at the opposing ends respectively.

- [0046] In another embodiment, the skewer assembly (8) further comprises a first adjustment unit (15) for adjusting the radial distance between the skewer (9) and the radiant gas burner (7).
- [0047] In another embodiment, the first adjustment unit (15) comprises a support arm (16) which includes three pivots (17) each for rotatably supporting the skewer (9) at a respective different radial distance from the radiant gas burner (7).
- [0048] In another embodiment, the steering handle (14) and the skewer (9) are detachably attachable through their interlocking ends (14d, 14e). In this embodiment, the pivots (17) in the support arm (16) each rotatably receives the shaft (14c) of the steering handle (14).
- [0049] In another embodiment, the support arm (16) and the main body (6) comprise one or more matching screw holes (31, 32) for jointly receiving one or more respective fixing screws (33).
- [0050] In another embodiment, the skewer assembly (8) further comprises a second adjustment unit (18) for adjusting the position of the pieces of meat along the axial direction of the skewer (9).
- [0051] In another embodiment, the second adjustment unit (18) comprises: a plate (19) which is height-adjustably disposed onto the skewer (9) and adapted to support the pieces of meat from below. In addition, the second adjustment unit (18) comprises a fastening means (20) for selectively fastening the plate (19) at different positions to the skewer (9) along the axial direction.
- [0052] In another embodiment, the plate (19) has an aperture (21) for slidably receiving the skewer (9). In addition, the skewer (9) comprises three holes (22) at the corresponding different positions along the axial direction. And the fastening means (20) comprises a locking pin (23) which is adapted for selective insertion into the the holes (22) of the skewer (9) and to bear the plate (19) from below.
- [0053] In another embodiment, the skewer (9) has a rectangular cross-section. And the aperture (21) of the plate (19) has a matching shape to prevent relative rotation.
- [0054] In another embodiment, the locking pin (23) has a hook shaped grip (23a).

- [0055] In another embodiment, the doner kebab apparatus (1) further comprises: a tray (24) for collecting the grease which drips from the pieces of meat; and a second fixing means (25) which is adapted to releasably fix the tray (24) to the cooktop (3) and the main body (6).
- [0056] In another embodiment, the tray (24) has a rectangular shape.
- [0057] In another embodiment, the second fixing means (25) comprises two retainers (26) which are disposed onto the back of the tray (24). In this embodiment, each retainer engages with the respective section of the rack (12) when the tray (24) is installed onto the cooktop (3).
- [0058] In another embodiment, the tray (24) has an opening (27). In this embodiment, the second fixing means (25) comprises a projection (28) which is disposed onto the main body (6). This projection (28) engages with the respective opening (27) when the tray (24) is installed onto the cooktop (3).
- [0059] In another embodiment, the skewer assembly (8) further comprises a support (29) for rotatably bearing and positioning the lower end of the skewer (9). The support (29) is adapted for releasable placement into the tray (24). The user can place the support (29) into the tray (24) at the position where the skewer (9) is vertically aligned in accordance with the adjustment unit (15).
- [0060] In another embodiment, the support (29) has an indent (30) which bears the spiky lower end of the skewer (9).
- [0061] A major advantageous effect of the present invention is that the user is enabled to prepare doner kebab at home easily by way of installing the doner kebab apparatus (1) onto the cooktop (3) of the gas cooking appliance (2). Thereby, the customer can prepare the doner kebab with confidence about the quality and origin of the ingredients to be used for the preparation. Thereby, the customer has also been enabled to prepare the doner kebab according to his/her own taste and in the desired quantity and at the desired time. Another major advantageous effect of the present invention is that the domestic gas cooking appliance (2) has been endowed with the doner kebab function, and can be used any time by the customer for preparing doner kebab. With the present invention the

customer satisfaction can be further increased. Other additional advantageous effects of the present invention can be taken from the aforementioned embodiments.

Claims

1. A doner kebab apparatus (1) for use with a domestic gas cooking appliance (2) comprising a cooktop (3) which comprises at least one gas burner (4) that includes a releasable burner head (5) and a gas outlet for injecting the gas to the burner head (5), the doner kebab apparatus (1) being **characterized in that** a main body (6) which is adapted for installation onto the cooktop (3), wherein the main body (6) includes a radiant gas burner (7) for grilling pieces of meat, and wherein the radiant gas burner (7) includes a gas inlet which is arranged to oppose the respective gas outlet of the gas burner (4) in the cooktop (3) in the state when the burner head (5) has been removed and the main body (6) has been installed onto the cooktop (3) and a skewer assembly (8) which includes: a vertical skewer (9) for rotatably holding the pieces of meat about a vertical axis in front of the radiant gas burner (7) and a steering unit (10) for rotating the skewer (9) about the vertical axis.
2. The doner kebab apparatus (1) according to claim 1, **characterized in that** a first fixing means (11) for releasably fixing the main body (6) to the cooktop (3).
3. The doner kebab apparatus (1) according to claim 2, wherein the gas cooking appliance (2) has a rack (12), and the doner kebab apparatus (1) being **characterized in that** the first fixing means (11) comprises one or more notches (13) which are disposed onto the main body (6), and adapted to engage with the respective sections of the rack (12).
4. The doner kebab apparatus (1) according to claim 1, **characterized in that** the steering unit (10) comprises a steering handle (14) for manually rotating the skewer (9) about the vertical axis.
5. The doner kebab apparatus (1) according to claim 1, **characterized in that** the steering unit (10) comprises an electric motor for rotating the skewer (9) about the vertical axis and an input means for setting the rotational speed of the electric motor.
6. The doner kebab apparatus (1) according to claim 1, **characterized in that** the skewer assembly (8) further comprises a first adjustment unit (15) for adjusting the radial distance between the skewer (9) and the radiant gas burner (7).
7. The doner kebab apparatus (1) according to claim 6, **characterized in that** the first adjustment unit (15) comprises a support arm (16) which includes one or

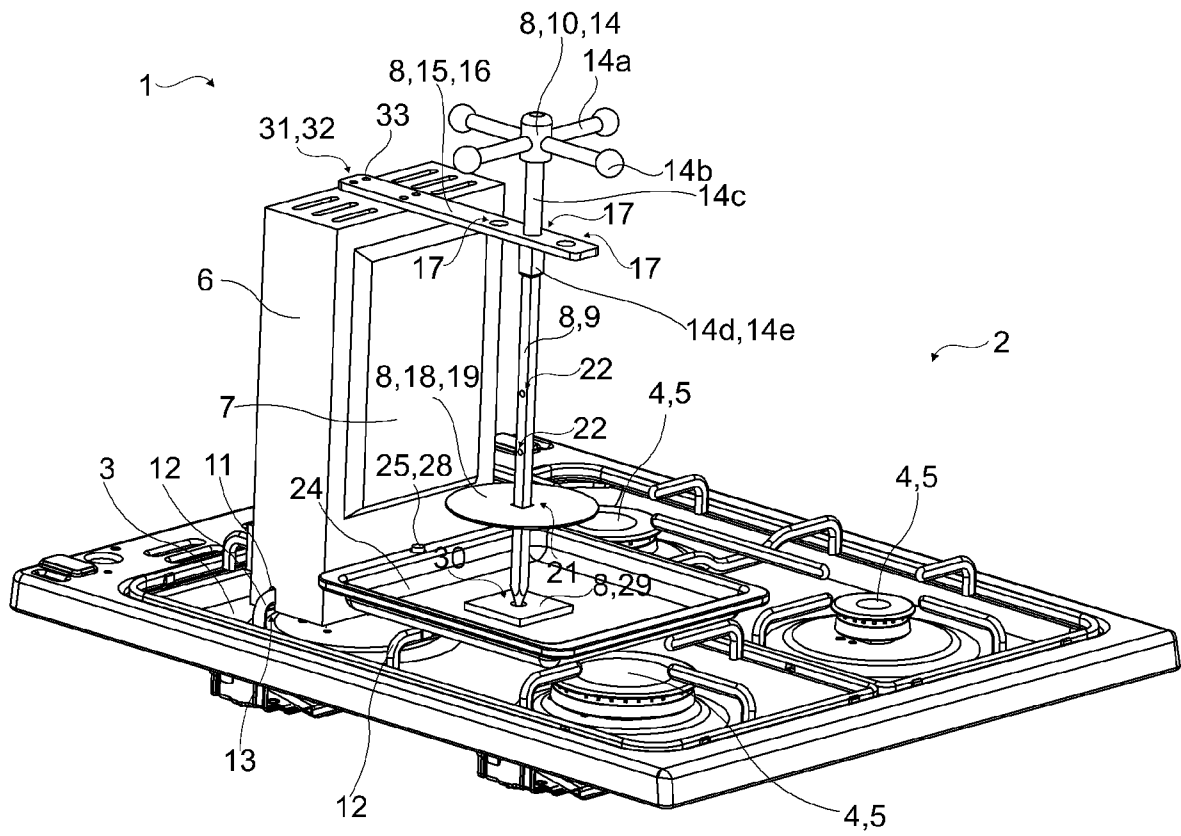
more pivots (17) for rotatably supporting the skewer (9) at respectively different radial distances from the radiant gas burner (7).

8. The doner kebab apparatus (1) according to claim 1, **characterized in that** the skewer assembly (8) further comprises a second adjustment unit (18) for adjusting the position of the pieces of meat along the axial direction of the the skewer (9).
9. The doner kebab apparatus (1) according to claim 8, **characterized in that** the second adjustment unit (18) comprises a plate (19) which is height-adjustably disposed onto the skewer (9) and adapted to support the pieces of meat from below; and a fastening means (20) for selectively fastening the plate (19) at different positions to the skewer (9) along the axial direction.
10. The doner kebab apparatus (1) according to claim 9, **characterized in that** the plate (19) has an aperture (21) for slidably receiving the skewer (9), the skewer (9) comprises holes (22) at the corresponding different positions along the axial direction and the fastening means (20) comprises a locking pin (23) which is adapted for selective insertion into the holes (22) of the skewer (9) and to bear the plate (19) from below.
11. The doner kebab apparatus (1) according to any one of claims 1 to 10, **characterized in that** a tray (24) for collecting the grease which drips from the pieces of meat and a second fixing means (25) which is adapted to releasably fix the tray (24) to the cooktop (3) and/or the main body (6).
12. The doner kebab apparatus (1) according to claim 11, wherein the gas cooking appliance (2) has a rack (12), and the doner kebab apparatus (1) being **characterized in that** the second fixing means (25) comprises one or more retainers (26) which are disposed onto the tray (24), and adapted to engage with the respective sections of the rack (12).
13. The doner kebab apparatus (1) according to claim 12, **characterized in that** the tray (24) has one or more openings (27) and the second fixing means (25) comprises one or more projections (28) which are disposed onto the main body (6), and adapted to engage with the respective opening (27) of the tray (24).
14. The doner kebab apparatus (1) according to claim 1, **characterized in that** the skewer assembly (8) further comprises a support (29) for rotatably bearing and

positioning the lower end of the skewer (9), wherein the support (29) is adapted for releasable placement into the tray (24).

15. A domestic gas cooking appliance (2) comprising a cooktop (3), one or more gas burners (4) which are arranged into the cooktop (3), wherein each gas burner (4) includes a releasable burner head (5) and a gas outlet for injecting the gas to the burner head (5) and a rack (12) for supporting a cooking utensil on the respective gas burner (4), the gas cooking appliance (2) being **characterized in that** the cooktop (3) is adapted for installation thereon the doner kebab apparatus (1) as defined in claim 1.

Fig. 1



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Fig. 2

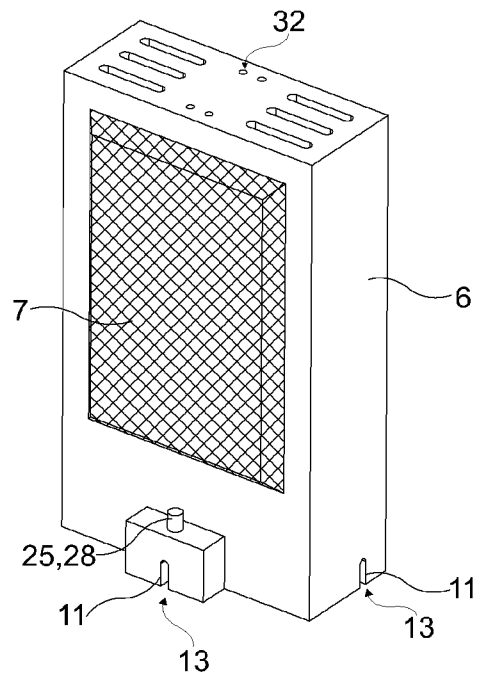


Fig. 3

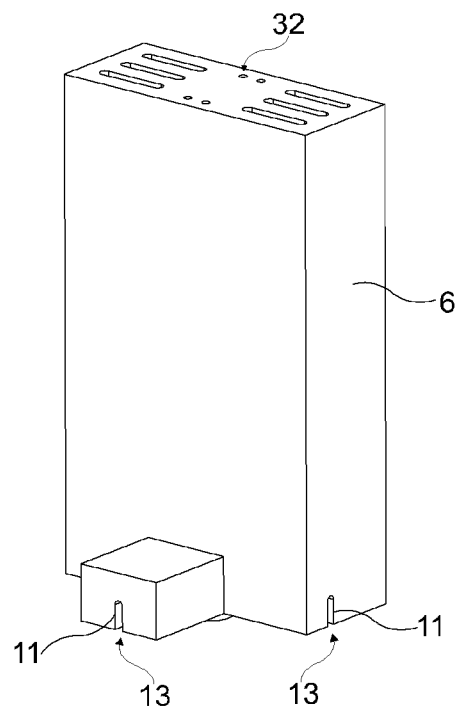


Fig. 4

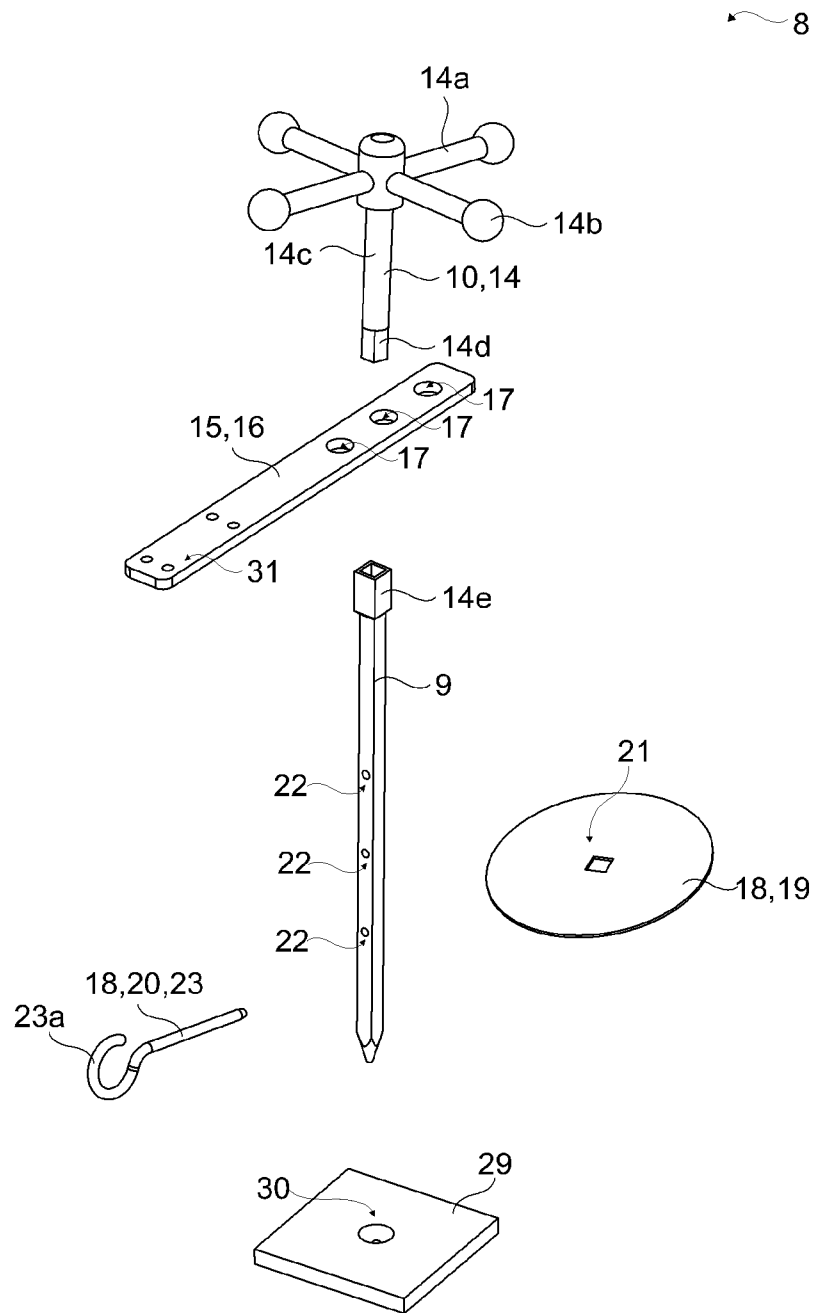


Fig. 5

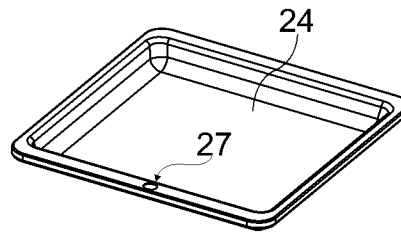
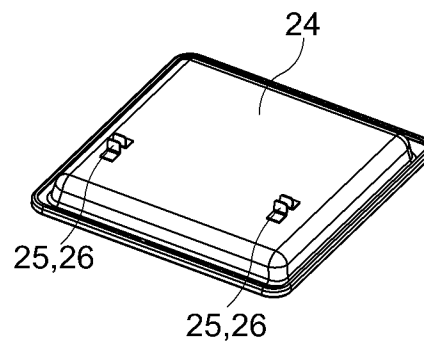


Fig. 6



INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2015/059855

A. CLASSIFICATION OF SUBJECT MATTER

INV. A47J37/04

ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

F24C A47J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 22 38 528 A1 (ISREX ISRAEL GENERAL TRADING C) 14 February 1974 (1974-02-14) page 3, line 13 - page 4, line 25; figures 1,2 -----	1-15
X	US 2002/175213 A1 (WODESLAVSKY JOSEF [US]) 28 November 2002 (2002-11-28) paragraph [0007] - paragraph [0012]; figures 1,2 -----	15
A	FR 2 906 990 A3 (INOKSAN MUTFAK SAN VE TIC A S [TR]) 18 April 2008 (2008-04-18) page 14, line 12 - page 20, line 30; figures 1-18 -----	1-15
A	DE 20 2012 002380 U1 (OEZDEMIR EMIN LEVENT [DE]) 20 June 2012 (2012-06-20) paragraph [0001] - paragraph [0006]; figures a-i -----	1-15



Further documents are listed in the continuation of Box C.



See patent family annex.

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Date of the actual completion of the international search

18 January 2016

Date of mailing of the international search report

22/02/2016

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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US 2002175213	A1	28-11-2002	NONE	
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