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**Portable Barbecue**

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The invention relates to a portable barbecue, said portable barbecue comprising a firebox, a grate and a cover. With a barbecue according to the invention the firebox and the cover are adapted to be coupled in a portable configuration, in which the cover functions as a cover of the firebox, and in a barbecue configuration, in which the cover functions as a stand of the firebox that vertically spaces the firebox at a distance from a support surface. This design of the barbecue, more in particular the cover of the barbecue, allows for an efficient use of components, and, since the firebox is simply placed on the cover, this is achieved without the requirement of complicated hinge connections.

Title: Portable Barbecue

5 The invention relates to a portable barbecue.

Portable barbecue grills have long been popular for camping and picnicking. Such portable barbecues are different from the barbecues used for backyard or patio cooking in that they must be light weight and easy to assemble and disassemble.

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Portable barbecues are known in the prior art, for example from US1540434 and US2477529. These portable barbecues typically have a suitcase like configuration to enable them to be carried with ease. The barbecues are folded between a portable configuration and a barbecue configuration. All in all the known portable barbecues are of a complicated  
15 design, comprising many components which are to be hingeable connected during assembly. Thus, they require an expensive and lengthy production process.

It is an object of a first aspect of the invention to provide an alternative, portable barbecue in which the above mentioned drawbacks are eliminated altogether or occur in a greatly  
20 reduced extent.

In particular it is an object of the first aspect of the invention to provide an alternative, portable barbecue which can be quickly and easily disassembled into a compact unit for carrying and storing and can be as quickly and easily set up for use.

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It is a further object of the present invention to provide a portable barbecue which allows for a simple production process, and is thus inexpensive to manufacture.

It is a further object of the present invention to provide a portable barbecue wherein the user  
30 may assemble and disassemble the various components without the need of any tools or separate fasteners.

According to the present invention, this object is achieved by providing a barbecue according to claim 1.

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A portable barbecue according to the invention comprises:

a firebox for holding embers, a grate for supporting food products to be barbecued above the embers, and a cover for said firebox,

wherein the firebox has a bottom panel, a front panel, a rear panel, a left side panel and a right side panel, which panels together form the firebox, the firebox having an open  
5 top,

wherein the grate has a food product support surface, which support surface is provided with a pattern of apertures, and which grate is configured to be mounted over the open top of the firebox,

wherein the cover has a top panel, a left side panel and a right side panel, which side  
10 panels are provided at opposite ends of the top panel, such that the cover is substantially U-shaped in a frontal view, and which left side panel and right side panel are spaced for receiving the firebox between them,

wherein the firebox and the cover are adapted to be coupled in a portable configuration, in which the cover functions as a cover of the firebox, and in a barbecue  
15 configuration, in which the cover functions as a stand of the firebox,

in which portable configuration the cover is mounted onto the firebox such that the top panel of the cover covers the open top of the firebox, and the left panel and the right side panel of the cover extend along the left panel and the right panel of the firebox, and

in which barbecue configuration, the firebox is mounted onto the cover, such that the  
20 cover forms a stand for the firebox, and the left side panel and the right side panel of the cover vertically space the firebox at a distance from a support surface.

With a barbecue according to the invention the firebox and the cover are adapted to be coupled in a portable configuration, in which the cover functions as a cover of the firebox,  
25 and in a barbecue configuration, in which the cover functions as a stand of the firebox that vertically spaces the firebox at a distance from a support surface. This design of the barbecue, more in particular the cover of the barbecue, allows for an efficient use of components, and, since the firebox is simply placed on the cover, this is achieved without the requirement of complicated hinge connections.

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Thus, the invention provides a portable barbecue having a simple design with few components and a simple construction. The barbecue according to the invention thus allows for an inexpensive and comparatively short production process.

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Furthermore, to switch between the portable configuration and the barbecue configuration, the firebox is to be mounted onto the cover, which cover functions as a stand for said firebox. The barbecue can be assembled and disassembled without the need of

tools, and is thus easy to use. The invention furthermore provides a portable barbecue which can be quickly and easily disassembled into a compact unit for carrying and storing and can be as quickly and easily set up for use.

5           It is noted that according to the invention, the cover is provided with two side panels, which side panels are provided on opposite sides of the top panel of the cover. Thus, the front and the back of the cover are open. In the barbecue configuration, the firebox is mounted onto the cover, such that the cover forms a stand for the firebox, and the left side panel and the right side panel of the cover vertically space the firebox at a distance from a  
10 support surface. By spacing the firebox relative to the support surface, e.g. the table top of a picnic table, the cover prevents the support surface from getting burned by the heat radiated by the firebox when used.

          Furthermore, the open front and back of the cover allow for air to freely pass below the firebox, and thus allow for venting the support surface as well as the firebox, and  
15 thus furthermore reduce the chance of the support surface getting burned.

          It is submitted that in a preferred embodiment, the cover is a simple U-shaped profile, comprising a flat top surface and two side panels. The side panels may be simple rectangular panels. However, the

          Furthermore, the side panels and the top panel of the cover may be provided with  
20 openings, for example a grid of openings providing a grate like appearance, and/or the side panels may be provided with recesses, for example providing the side panels with an N-shape, or an M-shape, without going beyond the scope of the invention. Such openings may further enhance ventilation of the firebox and of the support surface during use of the barbecue.

25           Also, in an embodiment, additional supports may be provided along the front side and back side of the cover, be it that the panels would not fully extend along the sides, front and rear of the cover, since the box like structure that would thus be created would prevent proper ventilation below the firebox and/or along the support surface during use of the barbecue.

30           In yet another embodiment, additional supports may be provided at the side of the top panel of the cover that faces the support surface when the cover is in the barbecue configuration. In a further embodiment, these additional supports are located away from the edge of the cover, and are received within the firebox when the cover is coupled with the firebox in the portable configuration.

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          It is submitted that the cover according to the invention functions as a stand for positioning the fire box at a significant distance from a support surface, i.e. at a distance that

allows for air to freely circulate below the firebox and at a distance the prevents the heat radiation of the firebox to burn the support surface.

In an embodiment the side panels of the cover are dimensioned such that the cover functions as a stand, positioning the box at a distance from the supporting surface of at least 5 3 cm, preferably at least 4 cm, for example 5 cm.

It is noted that in addition to the spacing provided by the cover, the top panel of the cover provides an additional protection against heat radiating from the firebox and that deflects that heat away from the support surface.

10 In an embodiment of a barbecue according to the invention, the left side panel and right side panel of the cover are provided with free ends that are configured to, in the barbeque configuration, be coupled with the firebox, preferably with the bottom panel of the firebox, such that in the barbecue configuration the side panels of the cover space the bottom panel of the firebox at a distance from the top panel of the cover.

15 In such an embodiment, the top panel of the cover thus forms a base of the stand provided by the cover. This is beneficial, since the space between the bottom panel of the firebox and the top panel of the cover allows for air to flow directly along the bottom side of the firebox, and thus optimally cool said bottom surface, and in turn prevent the support surface and/or the top panel of the cover to get burned by heat radiated form the firebox 20 during use.

In a preferred embodiment the firebox and the cover are configured such that the free ends of the side panels are coupled with the bottom panel of the firebox, to provide a maximum spacing between the bottom panel of the firebox and the top panel of the cover, when in the barbecue configuration.

25 In an alternative embodiment, the firebox and the cover are configured such that the free ends of the side panels are coupled with the side panels of the firebox, for example are provided with tabs that are to be inserted into slots provided in the side panels of the firebox. Such an embodiment would allow for the free ends of the side panels to be coupled with the firebox and different positions, for example by providing multiple slots, one above the other, 30 in each side panel of the firebox, to thus enable the spacing between the top panel of the cover and the bottom panel of the firebox to be adjusted.

In an alternative embodiment the cover is configured for supporting the firebox on top of its top panel, the side panels having free ends configured as feet that support the cover, and thus the firebox mounted on top of that cover, on a support surface. In such an 35 embodiment the top panel of the cover can be provided with apertures and/or with spacers, to allow air to flow directly along the bottom panel of the firebox.

As was already set out above, in a preferred embodiment of a barbecue according to the invention, in the barbecue configuration the cover is placed upon a support surface with its top panel facing the support surface and its side panels extending upwards. In such an embodiment the left side panel and right side panel of the cover are provided with free ends  
5 that are configured to, in the barbecue configuration, be coupled with the firebox, preferably with the bottom panel of the firebox, such that in the barbecue configuration the side panels of the cover space the bottom panel of the firebox at a distance from the top panel of the cover.

Furthermore, in such an embodiment, the space between the bottom panel of the  
10 firebox and the top panel of the cover allows for air to flow directly along the bottom side of the firebox, and thus optimally cool the bottom surface of the firebox. At the same time, the top panel of the cover also functions as a heat shield that shields the support surface from heat radiated by the firebox. This is in particular beneficial when the barbecue is used as a table top barbecue.

15 In a further preferred embodiment of a barbecue according to the invention, the cover is provided with feet, preferably in the form of tabs extending along the front and rear of top panel which tabs are folded at an angle relative to the top panel, for spacing the top panel of the cover relative to the support surface when the cover supports the firebox in the barbecue configuration.

20 In an alternative embodiment, in addition to, or instead of, the feet in the form of tabs, other type of feet can be provided as well. For example, the top panel can be provided with multiple protrusions or pojections, for example in the form of plastic domes attached, e.g. glued or screwed onto the top panel, to function as feet that space the top panel form the support surface. These protrusions preferably are made form an heat insulating material.

25 In an embodiment, the feet are provided in the form of tabs as set out above, and are provided with sleeves of insulating material to further enhance the insulating properties of the feet.

Providing the cover with feet sets the top panel apart from the support surface, and thus provides an additional layer of insulation between the heat radiated by the firebox and  
30 the support surface onto which the barbecue has been set up. Furthermore, the feet reduce the contact surface of the cover, c.q. the barbecue, with the support surface, and thus reduces heat transfer between barbecue and support surfaces as well.

Thus, the cover can be provided with a substantially flat top panel and still provide a solid base for the firebox. It is noted that when the cover would be provided with a fat top  
35 surface only and the barbecue would be set up on a flat surface, such as a table top, irregularities caught between support surface and cover might cause the an unstable support. By providing the cover with feet, the risk of an unstable base due to irregularities on

a support surface is reduced. Such an embodiment is in particular beneficial when the portable barbecue is to be used as a table top barbecue.

In a further embodiment, the front panel and the rear panel of the firebox are dimensioned such that, in the portable configuration, they extend above the top panel of the cover, preferably to such an extent that they extend up to or beyond the feet provided on the top cover. Thus, they prevent the feet from forming protrusions that extend beyond the contour of the barbecue, which protrusions may hook into foreign bodies or scratch surfaces during transport of the barbecue or when the barbecue is being stored.

In an embodiment of a barbecue according to the invention, the cover is configured to, in the portable configuration, be coupled with the firebox at the free ends of its left side panel and right side panel. Thus, a coupling device provided at the free ends of the side panels that is used to couple the cover with the firebox when in the barbecue configuration, is also used for coupling the cover with the firebox when in the portable configuration. Thus, the design of the cover can be kept simple. In yet a further embodiment the coupling devices provided on the firebox, for cooperation with the coupling devices provided at the free ends of the side panels of the cover, are also used in both the portable configuration and the barbecue configuration for coupling the cover with the firebox.

In an embodiment of a barbecue according to the invention, the firebox and the left side panel and the right side panel of the cover are provided with coupling devices in the form of a tab in slot connection which, in the barbecue configuration, and preferably also in the portable configuration, couples the cover with the firebox. Such an embodiment is in particular beneficial when the cover and the firebox are formed out of sheet metal, since the coupling devices can then be created in a simple and efficient manner during the production process by stamping and bending the sheet metal into the correct configuration.

In an alternative embodiment the side panels are provided with pins near the free ends of the side panels, which pins are to be inserted in apertures provided in the side panels of the firebox, or vice versa.

In a further embodiment of a barbecue according to the invention, the left side panel and the right side panel are embodied as resilient side panels, which resilient side panels need to be pushed away from each other or need to be pushed towards each other to position the tabs into the slots and thus couple the cover with the firebox, and which resiliently bias the tab in the slot once the cover is coupled with the firebox.

By thus providing the cover with flexible side panels, the barbecue is provided with simple and reliable coupling devices for coupling the cover with the firebox, which coupling

devices furthermore be provided by way of a simple and efficient production process when the cover is formed out of a sheet metal blank.

In such an embodiment the resilient side panels function as click fingers, which can be used for securely coupling the cover with the firebox in both the portable configuration  
5 and the barbecue configuration.

For example when the resilient side panels are used in combination with coupling devices embodied as tab slot connections, the side panels can be used to bias the tabs into the corresponding slots to secure the connection and prevent substantial movement of the firebox relative to the cover in a direction perpendicular to the top of the cover and/or to  
10 prevent a premature uncoupling of said coupling devices.

In an embodiment of a barbecue according to the invention, when in the portable configuration, the firebox and the cover engage each other such that they form a box, of which the cover provides the top panel, the left side panel and the right side panel, and the  
15 firebox provides the bottom panel, the front panel and the side panel. Such an embodiment provides a compact and firm configuration, in particular when the side panels of the cover tightly fit between the front and rear panel of the firebox. With such an embodiment, the barbecue, in particular the firebox, can be used to store and transport for example barbecue equipment and/or the grate and/or coals, etc.

In a preferred embodiment, the cover and the firebox are configured such that, in the portable configuration, form a closed box, i.e. both components fit into each other such that no gaps are formed between them. Thus, even small components can be securely held  
20 inside the firebox when in the portable configuration.

In an embodiment of a barbecue according to the invention, slots or apertures for receiving corresponding tabs or protrusions provided at the free ends of one of the side panels of the cover are provided in a sections of the bottom panel of the firebox that respectively extend beyond the left side panel and the right side panel of the firebox. Thus, the firebox comprises a compartment for holding embers, delimited by the front panel, rear  
25 panel, side panels and bottom panel of the firebox, which compartment has no opening in the bottom thereof.  
30

In an alternative embodiment, the firebox can be provided with a double bottom, the slot or apertures being provided in the outside bottom panel of the firebox.

In a further embodiment of a barbecue according to the invention, the bottom panel,  
35 the front panel and the rear panel of the firebox extend beyond the left side panel and the right side panel of the firebox, such that the firebox has substantially U-shaped side sections



for receiving the left side panel and the right side panel when the cover is combined with the firebox in the portable configuration.

In a further preferred embodiment of a barbecue according to the invention, when in the portable configuration, the side panels of the cover tightly fit between the front, rear and  
5 bottom panels of the firebox, such that the firebox and the cover form a box, preferably a closed box, of which the cover provides the top panel, the left side panel and the right side panel, and the firebox provides the bottom panel, the front panel and the side panel.

With such an embodiment, the barbecue, in particular the firebox, can be used to store and transport for example barbecue equipment and/or the grate and/or coals, etc.

10 In a further preferred embodiment of a barbecue according to the invention, the slots for receiving the tabs of the cover are provided in the bottom panel within the substantially U-shaped side sections. This embodiment provides the firebox, in particular the bottom panel of the firebox, with sections for providing coupling devices in the form of slots of apertures, outside a compartment for holding embers.

15 In a further embodiment of a barbecue according to the invention, the front panel and the rear panel of the firebox extend above the left side panel and the right side panel of the firebox, such that, in the portable configuration, the cover is received between the front panel and the rear panel of the firebox. In a further preferred embodiment, the firebox and the cover are configured for holding the grate between them when in the portable  
20 configuration. In such an embodiment the grate can be located on the open top of the firebox, between the firebox and the cover when combined in the portable configuration.

It a further preferred embodiment, the front panel and the rear panel of the firebox extend at an angle relative to each other, i.e. diverge in a direction away from the bottom panel of the firebox, such that they are farther apart at the top end of the fire box and closer  
25 together near the bottom panel of the fire box, to guide the side panels of the cover into the U-shaped sections, i.e. between the front panel and the rear panel of the firebox, when the cover is being mounted onto the firebox.

In a further embodiment of a barbecue according to the invention, the free end of  
30 each side panel of the cover is provided with a support surface and at least one tab, which at least one tab extends at an angle to the side panel of the cover and, when in the cover is coupled with the firebox, extends substantially parallel to the bottom surface of the firebox, and  
which support surface is spaced from the tab at a distance substantially similar to the  
35 thickness of the bottom panel of the firebox, such that, when in the cover is coupled with the firebox, the bottom panel is locked between the support surface and the tab, and the firebox and movement of the firebox relative to the cover in a direction parallel to the side panels of

the cover is prevented. Such an embodiment of the fastening devices provides a secure connection between the cover and the firebox, in particular when combined with flexible side panels that bias, i.e. resiliently force, the fastening devices into engagement.

5 In an embodiment of a barbecue according to the invention, the cover is folded from a single blank of sheet metal, which provides a simple a quick production process.

In an embodiment of a barbecue according to the invention, the front panel the bottom panel and the rear panel of the firebox are folded from a single blank of sheet metal, which provides a simple a quick production process. In a further embodiment, the side  
10 panels of the firebox are welded in the thus formed folded part of the firebox. In an alternative embodiment, the side panels are part of the same blank as the front, bottom and rear panels, and the firebox is folded from that single blank after which the panels are for example fixed to each other by welding.

15 In a preferred embodiment, the barbecue according to the invention has an elongate shape, its longitudinal axis extending perpendicular to the side panels of the firebox. In an embodiment, the barbecue is substantially symmetric relative to a plane of symmetry, which plane of symmetry extends perpendicular to the side panels of the firebox. In a further preferred embodiment, the barbecue is provided with a grip at a short end of the barbecue,  
20 such that, when it is carried in the portable configuration its longitudinal axis extends in the vertical direction. In such an embodiment, the relatively high grip in combination with a relatively low center of gravity, keeps the barbecue extra stable while being carried.

In an embodiment, the firebox is provided with a spacer bottom, i.e. the compartment  
25 defined by the firebox for holding the embers is provided with a double bottom that provides a space between the spacer bottom, which effectively forms the bottom of the compartment and the bottom panel of the firebox. Thus a barrier is provided in the form of an additional space that prevents the bottom panel of the firebox, i.e. the outside panel, from direct contact with the embers. It is submitted that the spacer bottom itself in addition functions as  
30 a heat shield as well. Thus, the outside of the firebox is not warmed up that much during use of the barbecue.

In an embodiment, the barbecue comprises an ember retainer, which is preferably provided in the form of a basket, preferably folded from a blank of sheet metal, which is mounted, i.e. hung, in the firebox. The ember retainer provides some distance between the  
35 burning embers and the panels that form the firebox, and thus, the outside of the firebox is not warmed up that much during use of the barbecue.

In an embodiment of a barbecue according to the invention, the firebox is provided with a grip, preferably in the form of a flexible strip mounted with opposite ends to the front panel and the rear panel of the firebox. The strip is preferably made of a heat insulating material and/or is provided sections of heat insulating material, for example a silicone  
5 material or leather, to prevent heat of the firebox to be transferred to the grip.

In an alternative embodiment, the grip is for example provided in the form of an aperture, fit for engagement by hand, which aperture is provided in one of the panels of the cover or firebox, for example in a section of the bottom panel of the firebox extending beyond the side panels of the firebox.

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In a preferred embodiment, the grate is made out of a blank of sheet metal, which blank is cut and subsequently folded.

In an embodiment of a barbecue according to the invention, the grate is configured to rest on the left side panel and the right side panel of the firebox. In a preferred embodiment, the  
15 grate is provided with spacer walls extending substantially perpendicular to the food support surface, which spacer walls are provided with slots, or are spaced relative to each other, such that the spacer walls enable the grate to be mounted onto the firebox in a raised position, in which the spacer walls rest upon the side panels and/or front panel and rear panel of the firebox, and in a lowered position, in which the side panels and/or front panel  
20 and rear panel of the firebox are received in slots and/or spaces respectively provided in or between the spacer walls.

In an embodiment, the *spacer side walls are provided at opposite ends of the grate, which spacer side walls are provided with a flange that extends parallel to the food support surface, and which flanges are provided with positioning slots for receiving positioning tabs*  
25 *of the firebox.* In addition to these flanged spacer side walls, spacer walls are provided along the front and rear edge of the grate, such that in the lowered position the side panels of the firebox are each received between the front and rear spacer walls on one side and the flanged spacer wall on the other side, and in the raised position, the grate rests with one of the flanges on one side panel and with a front spacer wall and a rear spacer wall on the  
30 other side panel.

*Thus,* the spacer walls enable the grate to be mounted in a lowered and in a raised position on the side panels of the firebox. In the raised position the grate rests with the spacer walls on the side panels of the firebox. In the lowered position the spacer walls of the grate can be  
35 positioned along the side panels and/or front and rear panels of the firebox. Preferably, the

lowered position also allows for the cover to be mounted in the portable configuration over the grate.

In a preferred embodiment, some or all of the spacer walls are embodied as skewer wall as well, i.e. are provided with slots for receiving skewers and supporting those skewers at a  
5 distance from the grill, i.e. the food support surface of the grate.

In an embodiment of a barbecue according to the invention, the grate is provided with preferably parallel skewer side walls on opposites sides of the grate, which skewer side walls extend substantially perpendicular to the food support surface, and which skewer side  
10 walls are provided with skewer slots for receiving a skewer, such that the skewer side walls can support that skewer at a distance above the food support surface of the grate. The skewer slots are configured to provide sufficient distance between skewer and the grill forming the food support surface to enable the skewers to support food products and preferably to allow those skewers to be rotated. In an embodiment the skewers are  
15 supported at a distance of at least 1 cm of the food support surface, preferably at least 1,5 cm, for example 2 cm above the food support surface.

In an embodiment, the skewer slots are V-shaped to facilitate positioning a skewer in the slots.

According to a second aspect, the invention furthermore provides a skewer grate,  
20 which skewer grate can be used with a barbecue according to the first aspect of the invention, which skewer grate can be used in a first position, in which its food support surface faces upwards, for supporting food products to be barbecued above the firebox, and a second position, in which the its food support surfaces faces downwards, for supporting skewers above the firebox. Such a skewer grate allows for a flexible use of the barbecue.

25 In an embodiment, the panels of the firebox are provided with skewer slots for supporting skewers.

In an embodiment of a barbecue according to the invention, the front panel and the rear panel of the firebox extend above the left side panel and the right side panel of the  
30 firebox, such that the cover, more in particular the top panel of the cover, when in the portable configuration, is received between the front panel and the rear panel of the firebox. Thus enclosing the top panel between the front panel and the rear panel of the firebox provides a firm configuration, i.e. a configuration that can withstand impact during transport.

35 The invention furthermore provides a method for installing a barbeque, said method comprising the steps:

carrying a barbecue according to one or more of the preceding claims to a barbecue location;

removing the cover from the firebox of the barbecue and placing the cover onto a support surface; and

5 mounting the firebox on the cover.

Advantageous embodiments of the barbecue according to the invention and the method according to the invention are disclosed in the subclaims and in the description, in which the invention is further illustrated and elucidated on the basis of a number of exemplary

10 embodiments, of which some are shown in the schematic drawing.

In the drawings

Fig. 1 shows a perspective view of a portable barbecue according to the invention in a barbecue configuration;

15 Fig. 2 shows a perspective view of the barbecue of Fig. 1 in a portable configuration;

Fig. 3 shows an exploded view of the barbecue of Fig. 1;

Fig. 4 shows a perspective view of the barbecue of fig. 1 with a grate in a raised position; and

Fig. 5 shows a perspective view of the barbecue of fig. 1 with a grate in a skewer position.

20

Fig. 1 shows a perspective view of a portable barbecue 1 according to the invention in a barbecue configuration. Fig. 2 shows a perspective view of the barbecue 1 in a portable configuration.

25 The portable barbecue 1 comprises a firebox 2 for holding embers, a grate 3 for supporting food products to be barbecued above the embers, and a cover 4 for the firebox 2.

The firebox 2 has a bottom panel 5, a front panel 6, a rear panel 7, a left side panel 8 and a right side panel 9, which panels together form the firebox, i.e. they define a compartment 10

30 for holding embers. The firebox 2 has an open top 11.

The grate 3 has a food product support surface 12, which support surface is provided with a pattern of apertures 13. The grate 3 is configured to be mounted over the open top 11 of the firebox 2.

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The cover 4 has a top panel 14, a left side panel 15 and a right side panel 16, which side panels are provided at opposite ends of the top panel, such that the cover 4 is substantially

U-shaped in a frontal view. The left side panel 15 and right side panel 16 are spaced for receiving the firebox 2 between them.

According to the invention, the firebox 2 and the cover 4 are adapted to be coupled in a barbecue configuration in which the cover functions as a cover of the firebox, shown in Fig. 1, and in a portable configuration in which the cover functions as a stand of the firebox that vertically spaces the firebox at a distance from a support surface, shown in Fig. 2.

In the portable configuration, the cover 4 is mounted onto the firebox 2 such that the top panel 14 of the cover 4 covers the open top 11 of the firebox, and thus the compartment for holding the embers. In the portable configuration, the left side panel 15 and the right side panel 16 of the cover extend along the left side panel 8 and the right side panel 9 of the firebox 2. In the particular embodiment shown, the side panels of the cover 4 and firebox 2 overlap when the barbecue, in its portable configuration, is seen in side view. It is noted that the cover and the firebox are dimensioned such that the side panels of the cover are spaced from the side panels of the firebox when the cover is mounted on the firebox.

In the preferred embodiment shown, the firebox 2 and the cover 4, when in the portable configuration, engage each other such that they form a closed box, of which the cover provides the top panel, the left side panel and the right side panel, and the firebox provides the bottom panel, the front panel and the side panel. Such an embodiment provides a compact and firm configuration, in particular when the side panels of the cover tightly fit between the front and rear panel of the firebox. With such an embodiment, the barbecue, in particular the firebox, can be used to store and transport for example barbecue equipment and/or the grate and/or coals, etc.

In the barbecue configuration, the firebox 2 is mounted onto the cover 4, such that the cover forms a stand for the firebox. In this configuration, the left side panel 15 and the right side panel 16 of the cover 4 vertically space the firebox 2 at a distance from a support surface 17 that supports the cover. When the cover 4 functions as a stand, it positions the fire box 4 at a distance from the support surface 17, which distance allows for air to freely circulate below the firebox and which distance prevents the heat radiation of the firebox to burn the support surface. This is in particular beneficial when the barbecue is set up on a table top.

In an embodiment the side panels 15,16 of the cover 4 are dimensioned such that the cover functions as a stand positions the firebox at a distance from the supporting surface of at least 3 cm, preferably at least 4 cm, for example 5 cm. In the preferred embodiment shown,

the side panels of the cover have a height similar, but not identical, to the height of the front panel and rear panel of the firebox. They space the firebox at a distance of about 8 cm from the top panel of the cover and about 9 cm from the support surface onto which the barbecue has been set up.

5

In the preferred embodiment shown the cover 4 is provided with two side panels 15,16, which side panels are provided on opposite sides of the top panel 14 of the cover. The cover is open at the front and the rear, i.e. no front and rear panel are provided. In the embodiment shown, the cover thus has a U-shaped profile when seen in frontal view. The open front and back of the cover allow for air to freely pass below the firebox, and thus allow for venting the support surface as well as the firebox, and thus furthermore reduce the chance of the support surface getting burned.

The side panels of the embodiment shown are simple rectangular panels. However, the side panels can have other shapes, for example may comprise multiple apertures, cut outs, etc., as long as they are able to function as feet for spacing the firebox relative to the support surface.

Also, in an alternative embodiment, additional supports may be provided along the front side and back side of the cover, for example in the form of partial front and rear panels. These partial panels extend only along sections of the front and rear to enable proper ventilation below the firebox and/or along the support surface during use of the barbecue.

Also, in an alternative embodiment, the cover may be provided with apertures, for example a grid of openings may be provided in the top panel of the cover. Such openings may further enhance ventilation of the firebox and of the support surface during use of the barbecue.

25

It is noted that in addition to the spacing provided by the cover, the top panel of the cover provides an additional protection against heat radiating from the firebox and that deflects it away from the support surface.

30 In the embodiment shown, the cover 4, when in the barbecue configuration, is positioned with its top panel 14 facing down, i.e. towards a support surface, and its side panels 15,16 extending upwards. Thus, the top panel of the cover forms a base of the stand that is created by the cover.

35 In an alternative embodiment the cover is configured for supporting the firebox on top of its top panel, the side panels having free ends configured as feet that support the cover, and thus the firebox mounted on top of that cover, or a support surface.

In the preferred embodiment shown, the left side panel 15 and right side panel 16 of the cover 4 are provided with free ends 18 that are configured to, in the barbecue configuration, be coupled with the firebox 2. Thus, the side panels of the cover 4 not only space the fire  
5 box away from the support surface, but also away from the top panel of the cover.

The space thus created between the bottom panel of the firebox and the top panel of the cover allows for air to flow directly along the bottom side of the firebox, and thus optimally cool said bottom surface, and in turn prevent the support surface and/or the top panel of the  
10 cover to get burned by heat radiated from the firebox during use.

In the preferred embodiment shown, the firebox and the cover are configured such that the free ends of the side panels are coupled with the bottom panel of the firebox, to provide a maximum spacing between the bottom panel of the firebox and the top panel of the cover,  
15 when in the barbecue configuration.

In an alternative embodiment, the firebox and the cover are configured such that the free ends of the side panels are coupled with the side panels of the firebox, for example are provided with tabs that are to be inserted into slots provided in the side panels of the firebox.  
20

In the preferred embodiment of a barbecue according to the invention shown, the firebox 2 and the cover 4 are provided with coupling devices in the form of a tab in slot connection. The free ends 18 of the left side panel 15 and the right side panel 16 of the cover 4 are provided with a tab 19, and the firebox 2 is provided with slots 20 in its bottom panel 5 for  
25 receiving those tabs 19.

By providing a tab slot connection, or similar coupling devices, the barbecue can be assembled and disassembled without the need of tools, and is thus easy to use. The invention thus furthermore provides a portable barbecue which can be quickly and easily  
30 disassembled into a compact unit for carrying and storing and can be as quickly and easily set up for use.

Furthermore, in the preferred embodiment shown, the left side panel 15 and the right side panel 16 are embodied as resilient side panels, which resilient side panels need to be  
35 pushed towards each other to position the tabs into the slots and thus couple the cover with the firebox. Once the tabs are inserted in the slots, the side panels resiliently bias the tabs



into engagement with the slots, and thus secure the connection, i.e. maintain the coupling, between the cover and the firebox.

By thus providing the cover with flexible side panels, the barbecue is provided with simple and reliable coupling devices for coupling the cover with the firebox, which coupling devices furthermore be provided by way of a simple and efficient production process when the cover is formed out of a sheet metal blank.

In the preferred embodiment of a barbecue 1 according to the invention shown, the coupling devices provided at the free ends 18 of the side panels 15,16 of the cover 4, which are used to couple the cover 4 with the firebox 2 when in the barbecue configuration, are also used for coupling the cover with the firebox when in the portable configuration. More in particular, in the preferred embodiment shown, the cover 4 and the firebox 2 are configured such that the tab slot connection that is used to connect the cover with the firebox in the barbecue configuration is also used to connect the cover with the firebox in the portable configuration. Thus, the design of the cover can be kept simple.

In the preferred embodiment of a barbecue according to the invention shown, the bottom panel 5, the front panel 6 and the rear panel 7 of the firebox 2 extend beyond the left side panel 8 and the right side panel 9 of the firebox 2, such that the firebox has substantially U-shaped side sections for receiving the left side panel 15 and the right side panel 16 of the cover 4, when the cover is combined with the firebox to achieve the portable configuration.

The slots 20 for receiving the tabs 19 provided at the free ends 18 of the side panels 15,16 of the cover 4 are provided in sections of the bottom panel 5 of the firebox 2 that extend beyond the left side panel 8 and the right side panel 9 of the firebox 2. Thus, the firebox can be provided with slots of a slot tab connection for coupling with the cover outside the compartment 11 for holding embers. Thus, the compartment 10 for holding embers, which compartment is delimited by the front panel 6, rear panel 7, side panels 8,9 and bottom panel 5 of the firebox, has no openings in its bottom.

In the preferred embodiment of a barbecue according to the invention shown, when in the portable configuration, the side panels 15,16 of the cover 4 tightly fit between the front panel 6, rear panel 7 and bottom panel 5 of the firebox 2. Thus, the firebox 2 and the cover 4 form a closed box, shown in Fig. 2, of which box the cover 4 provides the top panel, the left side panel and the right side panel, and the firebox 2 provides the bottom panel, the front panel and the side panel. With such an embodiment, the barbecue, in particular the firebox,

can be used to store and transport for example barbecue equipment and/or the grate and/or coals, etc.

It is noted that in the preferred embodiment shown, the front panel 6 and the rear panel 7 of the firebox 2 extend at an angle relative to each other, such that they are farther apart at the top end of the fire box and closer together near the bottom panel of the fire box, to guide the side panels 15, 16 of the cover 4 into the U-shaped sections at opposite ends of the firebox when the cover is being mounted onto the firebox.

Furthermore, in the particular embodiment shown, the front panel 6 and the rear panel 7 of the firebox 2 extend above the left side panel 8 and the right side panel 9 of the firebox 2, such that, in the portable configuration, see Fig. 2, the cover 4 is received between the front panel 6 and the rear panel 7 of the firebox 2. Thus enclosing the top panel between the front panel and the rear panel of the firebox provides a firm configuration, i.e. a configuration that can withstand impact during transport.

In the embodiment of a barbecue according to the invention shown, the free end 18 of each side panel 15,16 of the cover 4 is provided with a central tab, and a support surface 21 at each side of said tab. In the embodiment shown, the support surfaces 21 are provided in the form of an edge of the side panel. In an alternative embodiment, the supports surface can for example also be embodied in the form of a tab.

At each free end 18 of the side panels 15,16 of the cover 4, the tab 19 extends at such an angle to the side panel, that, when the cover is coupled with the firebox, the tabs extends substantially parallel to the bottom surface of the firebox.

At the same time, the support surface 21 is spaced from the tabs 19 at a distance substantially similar to the thickness of the bottom panel 5 of the firebox 2, such that, when the cover is coupled with the firebox, the bottom panel 5 is locked between the support surface 21 and the tab 19, such that movement of the firebox relative to the cover in a direction parallel to the side panels of the cover is prevented.

In a further embodiment, the tabs are inclined relative to a direction at which the free end of the side panel is inserted into the slot, to provide the side panels with a click finger like function, to facilitate coupling the cover with the firebox.

35

In the preferred embodiment of a barbecue according to the invention shown, the cover 4 is provided with feet 22. In the preferred embodiment shown the feet 22 are provided in the

form of tabs extending along the front and rear of top panel 14. The tabs 22 are folded at an angle relative to the top panel 14, for spacing the top panel from the support surface 17. The feet provide the top cover with stability on an irregular support platform.

5 The front panel 6 and the rear panel 7 of the firebox 2 are dimensioned such that, in the portable configuration, they extend above the top panel 14 of the cover 4, in the preferred embodiment shown in Fig. 2 to such an extent that they extend beyond the feet provided on the top cover. Thus, they prevent the feet from forming protrusions that extend beyond the contour of the barbecue, which protrusions may hook into foreign bodies or scratch surfaces  
10 during transport of the barbecue or when the barbecue is being stored.

Fig. 3 shows an exploded view of the barbecue of Fig. 1, in which the fire box 2, the cover 4 and the grate 3 are shown in isolation. The barbecue shown furthermore comprises a spacer bottom 23 and an ember retainer 24.

15

The spacer bottom 23 is provided in the firebox 2. The spacer bottom 23 effectively forms the bottom of the compartment 10 for holding the embers, and thus creates a space between the spacer bottom 10 and the bottom panel 5 of the firebox 2. Thus a barrier is provided in the form of an additional space that prevents the bottom panel of the firebox, i.e.  
20 the outside panel, from direct contact with the embers. Thus, the outside of the firebox is not warmed up that much during use of the barbecue.

The barbecue 2 is furthermore provided with the ember retainer 24, which is provided in the form of a basket, folded from a blank of sheet metal, which is mounted, i.e. hung, in the  
25 firebox. When the barbecue is used for barbecuing food products, the ember retainer 24 provides some distance between the burning embers and the panels that form the firebox, and thus, the outside of the firebox is not warmed up that much during use of the barbecue.

In the particular embodiment shown, the barbecue is according to the invention, more in particular the firebox 2 is provided with a grip 25 in the form of a flexible strip mounted with  
30 opposite ends to the front panel 6 and the rear panel 7 of the firebox 2.

In an alternative embodiment, the grip is for example provided in the form of an aperture, fit for engagement by hand, which aperture is provided in one of the panels of the cover or firebox, for example in a section of the bottom panel of the firebox extending beyond the  
35 side panels of the firebox.

In the preferred embodiment shown, the barbecue according to the invention has an elongate shape, its longitudinal axis extending perpendicular to the side panels 8,9 of the firebox 2. It is submitted that in use, a user will typically sit along a long side of the barbecue, such that he/she faces the front or rear panel of the firebox of the barbecue.

- 5 Furthermore, in the exemplary embodiment shown, the barbecue 1 is substantially symmetric relative to a plane of symmetry, which plane of symmetry extends perpendicular to the side panels of the firebox.

In the preferred embodiment shown, the grip 25 is provided at a short end of the barbecue 1, such that, when it is carried in the portable configuration, its longitudinal axis extends in  
10 the vertical direction. In such an embodiment, the relatively high grip in combination with a relatively low center of gravity, keeps the barbecue extra stable while being carried.

In the preferred embodiment shown, the cover 4 of the barbecue 1 is folded from a single blank of sheet metal, which provides a simple and quick production process. From the  
15 exploded view shown in Fig. 3, it is clear that the entire cover can be bent form a single blank.

Furthermore, the front panel 6, the bottom panel, 5 and the rear panel, 7 of the firebox 2 are folded from a single blank of sheet metal as well. In the embodiment shown, the side panels  
20 8,9 of the firebox 2 are welded in the thus formed folded part of the firebox. In an alternative embodiment, the side panels are part of the same blank as the front, bottom and rear panels, and the firebox is folded from that single blank after which the panels are for example fixed to each other by welding.

25 In the embodiment shown, the grate 3 is made out of a blank of sheet metal. The grate 3 is configured to rest on the left side panel 8 and the right side panel 9 of the firebox 2. To keep the grate 3 in position the grate is provided with slots, which positioning slots 26 match with corresponding positioning tabs 27 provided on top edges of the side panels 8,9 of the  
firebox 2.

30

In the preferred embodiment shown, the grate 3 is furthermore provided with spacer walls 28 that extend substantially perpendicular to the food support surface 12. In the embodiment shown, the grate is provided with spacer side walls that are provided with a flange 30 that extends parallel to the food support surface 12, and which flanges are provided with  
35 additional positioning slots 26 for receiving the positioning tabs 27 of the firebox 2.

Furthermore, the grate is provided with walls along the front and rear, which walls function

as spacer walls as well. In addition these front and rear spacer walls also function as skewer walls.

The spacer walls 28 enable the grate 3 to be mounted in a lowered position, shown in Fig. 1, and in a raised position, shown in Fig. 4, on the side panels of the firebox. In the raised position the grate 3 at one end rests with the flange 29 of one of the spacer side walls 28 on one of the side panels 8,9 of the firebox 2 and with the front and rear spacer wall on the other side wall of the firebox at the opposite end of the grate. The spacer side walls thus function as spacers. In the lowered position the side panels of the firebox are received between a spacer side wall located on one side of the respective side panel, and the front and rear spacer walls, located on an opposite side of the respective side panel. The spacer walls 28 of the grate 3 are positioned alongside the side panels 8,9 of the firebox 2, as shown in fig. 1.

The lowered position also allows for the cover 4 to be mounted in the portable configuration over the grate 3. In the preferred embodiment shown, the firebox 2 and the cover 4 are configured for holding the grate 3 between them when in the portable configuration. In such an embodiment the grate can be located on the open top of the firebox, between the firebox and the cover when combined in the portable configuration.

20

Furthermore, in the embodiment of a barbecue according to the invention shown, the grate 3 is provided with preferably parallel skewer side walls 30 on opposite sides of the grate. The skewer side walls 30 extend substantially perpendicular to the food support surface 12 of the grate, and are provided with skewer slots 31 for receiving a skewer. Thus, the grate 3 can be used in a barbecue position, as shown in Fig. 1 and Fig. 4, in which the food support surface 12 is turned upwards, and in a skewer position, as shown in Fig. 5, in which the food support surface 12 is turned downward, facing the firebox 2, for supporting skewers above the open top 11 of the firebox 2.

Thus, when the grate 3 is in the skewer position the skewer side walls 30 can support skewers at a distance above the food support surface 12 of the grate. The skewer slots 31 are configured to provide sufficient distance between supported skewer and the part of the grate forming the food support surface to enable the skewers to support food products and preferably to allow those skewers to be rotated. In an embodiment the skewers are

supported at a distance of at least 1 cm of the food support surface, preferably at least 1,5 cm, for example 2 cm above the food support surface.

In an embodiment, the skewer slots are V-shaped to facilitate positioning a skewer in the slots.

According to a second aspect, the invention furthermore provides a skewer grate, which can  
5 be used with a barbecue according to the first aspect of the invention, which skewer grate  
can be used in a first position, in which its food support surface faces upwards, for  
supporting food products to be barbecued above the firebox, and a second position in which  
the its food support surfaces faces downwards, for supporting skewers above the firebox.  
Such a skewer grate is shown in Figs. 1 and 3.

Ref signs

01 barbecue

02 firebox

03 grate

5 04 cover

05 bottom panel fire box

06 front panel fire box

07 rear panel fire box

08 left side panel fire box

10 09 right side panel fire box

10 compartment for holding embers.

11 open top fire box

12 support surface grate

13 apertures grate

15 14 top panel of the cover

15 left side panel of the cover

16 right side panel of the cover

17 support surface

18 free ends side panels cover

20 19 tabs cover

20 slots firebox

21 support surface free end side panel

22 feet

23 spacer bottom

25 24 ember retainer

25 grip

26 positioning slots grate

27 positioning tabs side tabs firebox.

28 spacer side walls grate

30 29 flange spacer walls grate

30 skewer side walls grate

31 skewer slot

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## CONCLUSIES

1. Draagbare barbecue, de draagbare barbecue omvattende:

een vuurdoos voor het houden van sintels, een rooster voor het ondersteunen van boven de sintels te barbecueën voedingsproducten en een deksel voor genoemde vuurdoos,

5 waarbij de vuurdoos een bodempaneel, een voorpaneel, een achterpaneel, een linker zijpaneel en een rechterzijpaneel heeft, welke panelen tezamen de vuurdoos vormen, welke vuurdoos een open bovenkant heeft;

waarbij het rooster een voedingsmiddelenondersteuningsoppervlak heeft, welk

ondersteuningsoppervlak is voorzien van een patroon van openingen, en welk rooster is

10 ingericht om te worden geplaatst over de open bovenkant van de vuurdoos;

waarbij het deksel een bovenpaneel, een linker zijpaneel en een rechter zijpaneel heeft,

welke zijpanelen zijn voorzien aan tegenovergelegen einden van het bovenpaneel, zodanig dat het deksel in hoofdzaak U-vormig is in vooraanzicht, en welk linker zijpaneel en rechter zijpaneel zijn gespatieerd voor het tussen hen in opnemen van de vuurdoos;

15 waarbij de vuurdoos en het deksel zijn ingericht om gekoppeld te worden in een draagbare configuratie, waarin het deksel functioneert als een deksel van de vuurdoos, en in een barbecueconfiguratie, waarin het deksel functioneert als een standaard van de vuurdoos, in welke draagbare configuratie het deksel is aangebracht op de vuurdoos zodanig dat het bovenpaneel van het deksel de open bovenkant van de vuurdoos afdekt, en het linker  
20 zijpaneel en het rechter zijpaneel van het deksel zich uitstrekken langs het linker zijpaneel en het rechter zijpaneel van de vuurdoos, en

in welke barbecue configuratie, de vuurdoos geplaatst is op het deksel, zodanig dat het deksel een standaard vormt voor de vuurdoos, en het linker zijpaneel en het rechter zijpaneel van het deksel de vuurdoos op een afstand van een ondersteuningsvlak spatiëren.

25

2. Barbecue volgens conclusie 1, waarbij het linker zijpaneel en het rechter zijpaneel van het deksel zijn voorzien van een koppelinrichting aan een vrij einde van het respectievelijke zijpaneel, welke koppelingsinrichtingen zijn ingericht om, in de barbecue configuratie, te worden gekoppeld met koppelinrichtingen voorzien op de vuurdoos, bij voorkeur op het  
30 bodempaneel van de vuurdoos, zodanig dat in de barbecue configuratie de zijpanelen van het deksel het bodempaneel van de vuurdoos spatiëren op een afstand van het bovenpaneel van het deksel.

3. Barbecue volgens conclusie 2, waarbij het deksel is voorzien van voeten, bij voorkeur in  
35 de vorm van tabs die zich uitstrekken langs de voorkant en de achterkant van het



bovenpaneel welke tabs gevouwen zijn onder een hoek ten opzichte van het bovenpaneel, voor het spatieren van het bovenpaneel van het deksel ten opzichte van het ondersteuningsvlak wanneer het deksel de vuurdoos ondersteund.

5 4. Barbecue volgens een of meer van de voorgaande conclusies, waarbij het deksel is ingericht om, in de draagbare configuratie, gekoppeld te zijn met de vuurdoos aan de vrije einden van zijn linker zijpaneel en rechter zijpaneel.

10 5. Barbecue volgens een of meer van de conclusies 2-3, waarbij de vuurdoos en het linker zijpaneel en het rechter zijpaneel van het deksel zijn voorzien van een tab in sleuf verbinding welke, in de barbecue configuratie, en bij voorkeur eveneens in de draagbare configuratie, het deksel met de vuurdoos koppelt.

15 6. Barbecue volgens conclusie 5, waarin het linker zijpaneel en het rechter zijpaneel zijn uitgevoerd als verende zijpanelen, welke verende zijpanelen van elkaar af of naar elkaar toe moeten worden geduwd om de tabs in de sleuven te positioneren en aldus het deksel met de vuurdoos te koppelen, en welke de tab verend in de sleuf duwen wanneer het deksel met de vuurdoos is gekoppeld.

20 7. Barbecue volgens een of meer van de voorgaande conclusies, waarbij, wanneer in de draagbare configuratie, de vuurdoos en het deksel zodanig op elkaar ingrijpen dat ze een doos vormen, waarvan het deksel het bovenpaneel, het linker zijpaneel en het rechter zijpaneel verschaft, en de vuurdoos het onderpaneel, het voorpaneel en het achterpaneel verschaft.

25 8. Barbecue volgens een of meer van de voorgaande conclusies, waarbij het bodempaneel, het voorpaneel en het achterpaneel van de vuurdoos zich uitstrekken voorbij het linker zijpaneel en het rechter zijpaneel van de vuurdoos, zodanig dat de vuurdoos een in hoofdzaak U-vormig zijsecties heeft voor het opnemen van het linkerzijpaneel en het rechter  
30 zijpaneel wanneer het deksel is gecombineerd met de vuurdoos in de draagbare configuratie.

35 9. Barbecue volgens conclusie 8, waarbij het voorpaneel en het achterpaneel van de vuurdoos zich uitstrekken boven het linker zijpaneel en het rechter zijpaneel van de vuurdoos, zodanig dat, in de draagbare configuratie, het deksel is opgenomen tussen het voorpaneel en het achterpaneel van de vuurdoos, en bij voorkeur het rooster kan worden

gelokaliseerd op de open bovenkant van de vuurdoos, tussen de vuurdoos en het deksel wanneer gecombineerd in de draagbare configuratie.

5 10. Barbecue volgens conclusie 4 en conclusie 8 of 9, waarbij de sleuven voor het opnemen van de tabs van het deksel zijn voorzien in het bodempaneel binnen de in hoofdzaak U-vormige zijsecties.

10 11. Barbecue volgens conclusie 10, waarbij het vrije einde van ieder van de zijpanelen van het deksel is voorzien van een steunoppervlak en ten minste een tab, welke ten minste enige tab zich uitstrekt onder een hoek met het zijpaneel van het deksel, en wanneer het deksel is gekoppeld met de vuurdoos, zich in hoofdzaak parallel aan het bodemoppervlak van de vuurdoos uitstrekt, en  
15 welk steunoppervlak gespatieerd is ten opzichte van de tab op een afstand in hoofdzaak gelijk aan de dikte van het bodempaneel van de vuurdoos, zodanig dat, wanneer het deksel is gekoppeld met de vuurdoos, het bodempaneel is opgesloten tussen het steunoppervlak en de tab, en beweging van de vuurdoos ten opzichte van het deksel in een richting parallel aan de zijpanelen van het deksel wordt voorkomen.

20 12. Barbecue volgens een of meer van de voorgaande conclusies, waarbij het deksel gevouwen is uit een enkele blank plaatstaal.

13. Barbecue volgens een of meer van de voorgaande conclusies, waarbij het voorpaneel, het bodempaneel en het achterpaneel van de vuurdoos zijn gevouwen uit een enkele blank  
25 plaatstaal.

14. Barbecue volgens een of meer van de voorgaande conclusies, waarbij de vuurdoos is voorzien van een greep, bij voorkeur in de vorm van een flexibele strip, bevestigd met tegenovergelegen einden aan het voorpaneel en het achterpaneel van de vuurdoos.

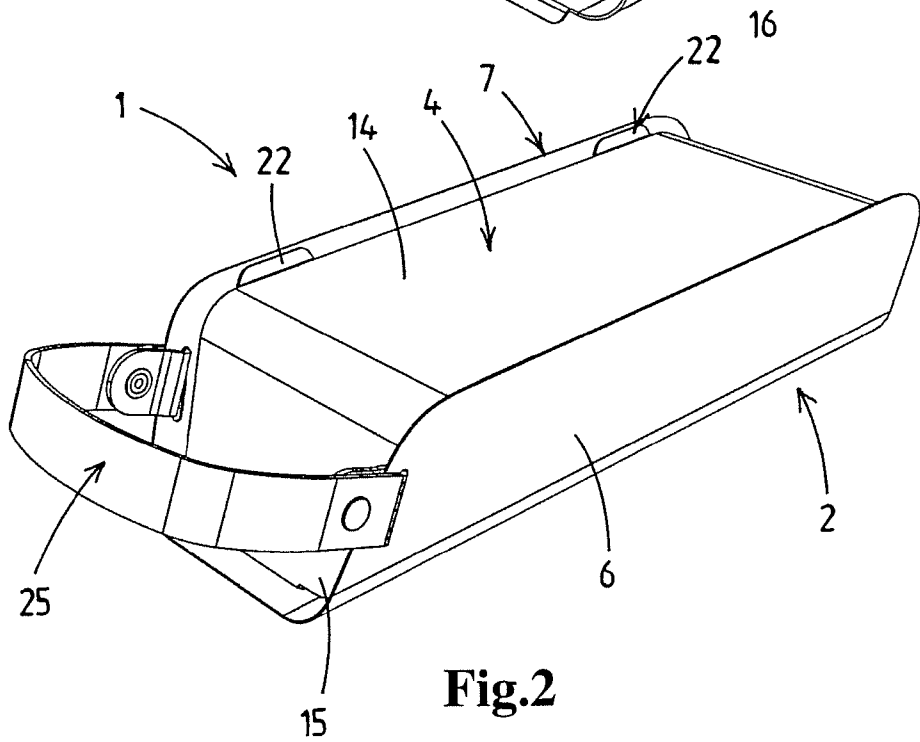
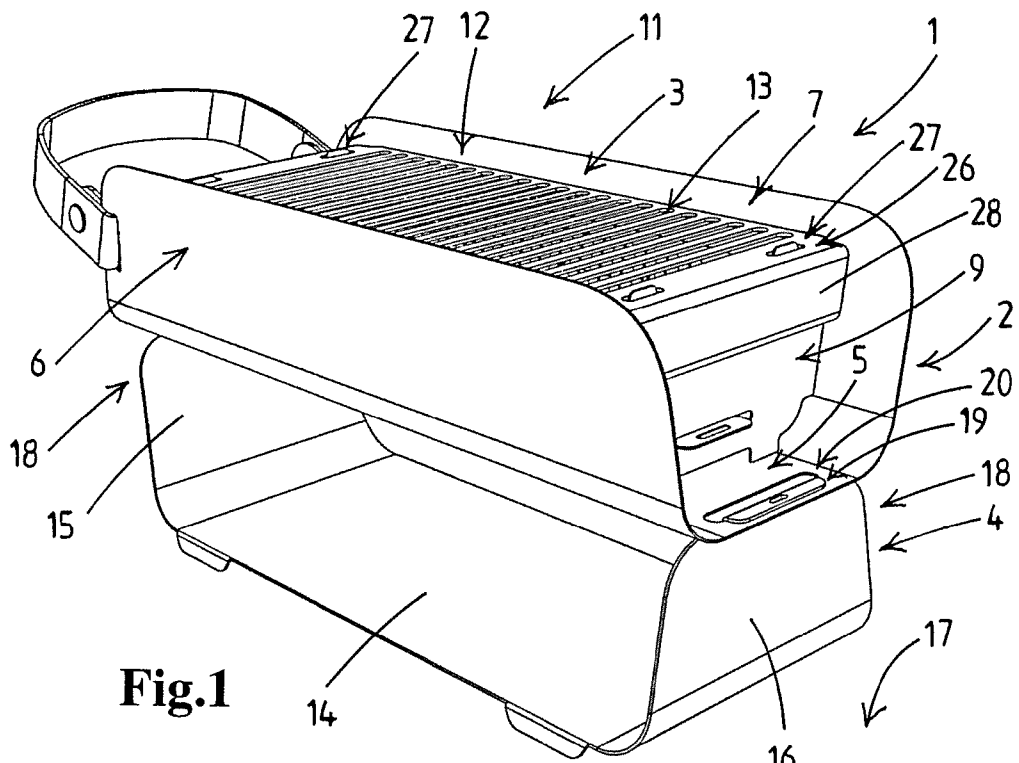
30 15 barbecue volgens een of meer van de voorgaande conclusies, waarbij het rooster is ingericht om te rusten op het linker zijpaneel en het rechter zijpaneel van de vuurdoos, en bij voorkeur is voorzien van spatieerwanden die zich uitstrekken in hoofdzaak loodrecht op het voedingsmiddenondersteuningsoppervlak, welke spatieerwanden zijn voorzien van sleuven, of ten opzichte van elkaar zijn gespatieerd, zodanig dat de spatieerwanden het  
35 mogelijk maken om het rooster op de vuurdoos te plaatsen in een verhoogde positie, waarin de spatieerwanden rusten op de zijwanden en/of het voorpaneel en het achterpaneel van de vuurdoos, en in een verlaagde positie, waarin de zijpanelen en/of voorpaneel en

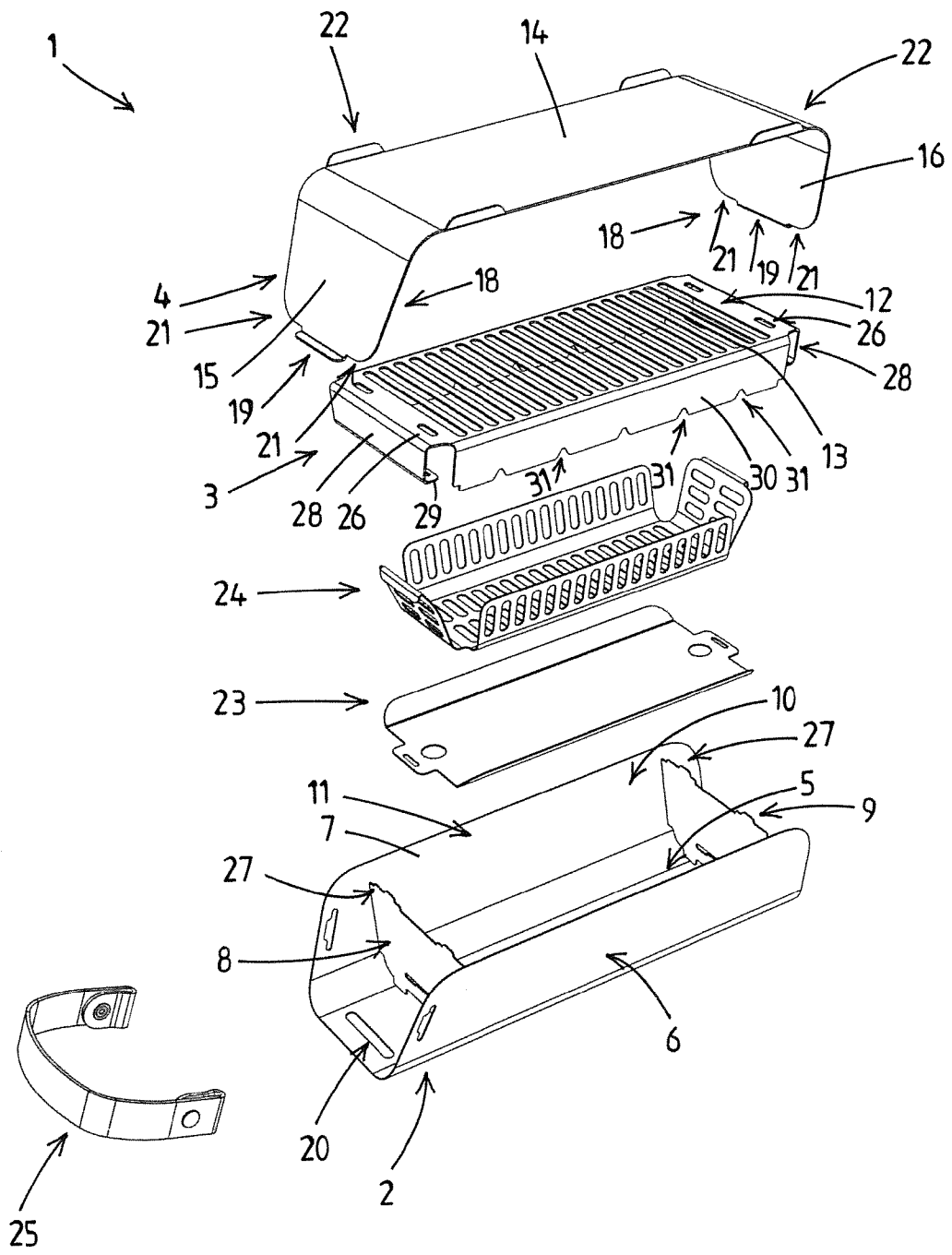
achterpaneel van de vuurdoos zijn opgenomen in sleuven en/of ruimtes respectievelijk voorzien in of tussen de spatiewanden.

5 16. Barbecue volgens een of meer van de voorgaande conclusies, waarbij het rooster is voorzien van bij voorkeur parallelle spieszijwanden aan tegenovergelegen zijden van het rooster, welke spieszijwanden zich in hoofdzaak loodrecht uitstrekken op het voedingsmiddelenondersteuningsoppervlak, en welke spieszijwanden zijn voorzien van spiessleuven voor het opnemen van een spies, zodanig dat de spieszijwanden die spies kunnen ondersteunen op een afstand boven het voedingsmiddelenondersteuningsoppervlak  
10 van het rooster.

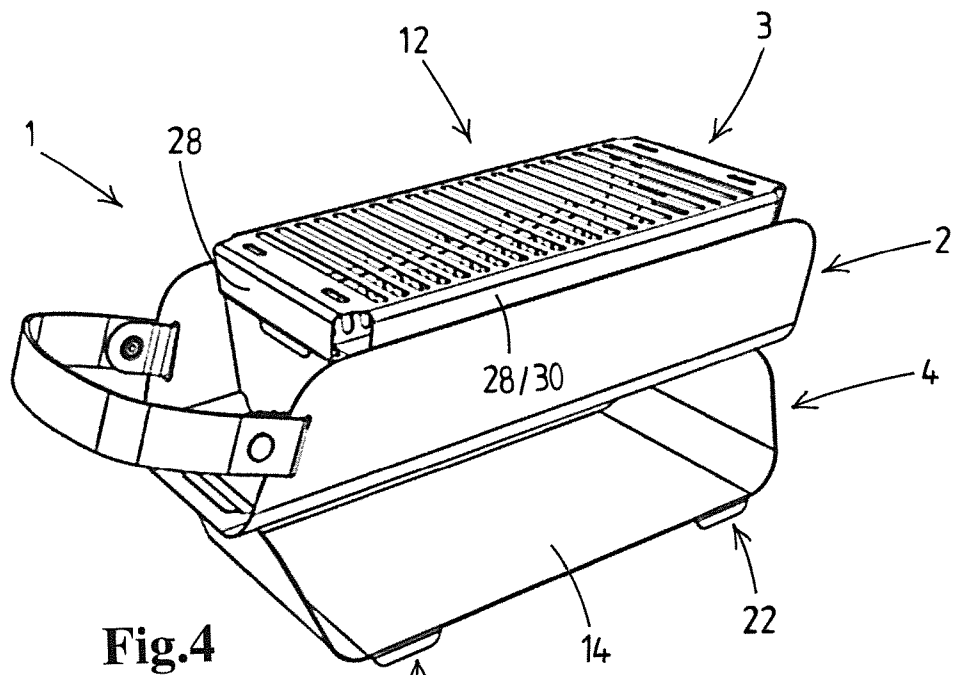
15 17. Barbecue volgens een of meer van de voorgaande conclusies, waarbij het voorpaneel en het achterpaneel van de vuurdoos zich uitstrekken boven het linker en het rechter zijpaneel van de vuurdoos, zodanig dat het deksel, meer in het bijzonder het bovenpaneel van het deksel, wanneer in de draagbare configuratie, opgenomen wordt tussen het voorpaneel en het achterpaneel van de vuurdoos.

18. Werkwijze voor het installeren van een barbecue volgens de uitvinding, genoemde werkwijze omvattende de stappen:  
20 dragen van de barbecue volgens een of meer van de voorgaande conclusies, naar een barbecue locatie;  
verwijderen van het deksel van de vuurdoos van de barbecue en het plaatsen van het barbecuedeksel op een ondersteuningsvlak; en  
plaatsen van de vuurdoos op het deksel.

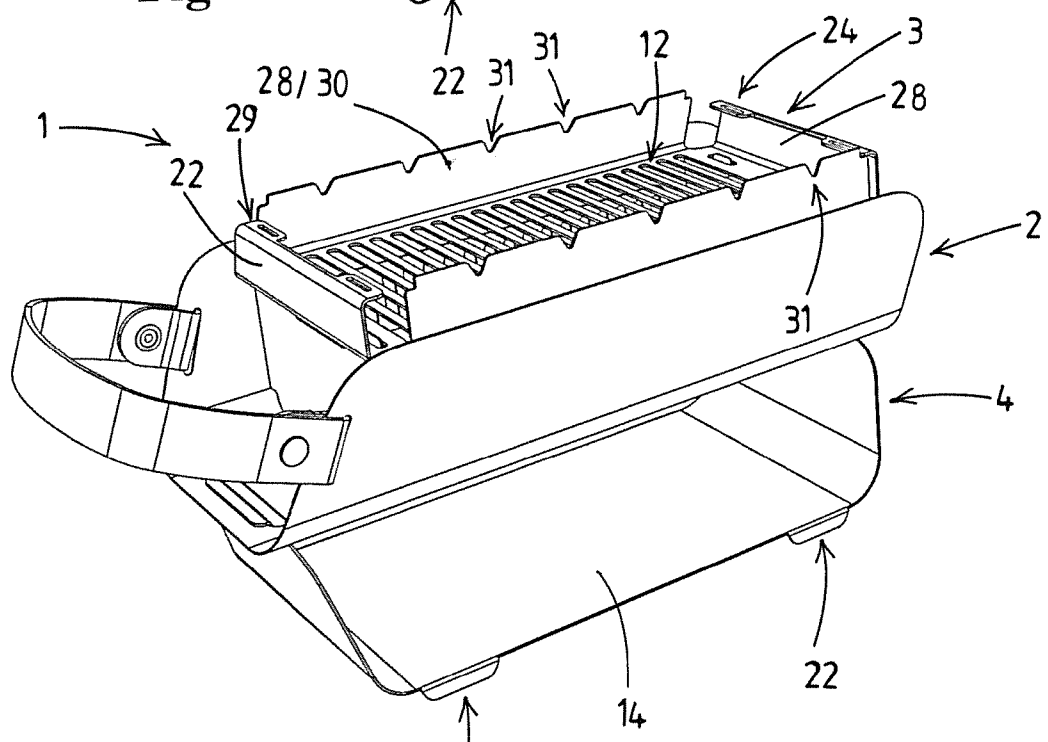




**Fig.3**



**Fig.4**



**Fig.5**

## ABSTRACT

The invention relates to a portable barbecue, said portable barbecue comprising a firebox, a grate and a cover. With a barbecue according to the invention the firebox and the cover are adapted to be coupled in a portable configuration, in which the cover functions as a cover of the firebox, and in a barbecue configuration, in which the cover functions as a stand of the firebox that vertically spaces the firebox at a distance from a support surface.

5 This design of the barbecue, more in particular the cover of the barbecue, allows for an efficient use of components, and, since the firebox is simply placed on the cover, this is achieved without the requirement of complicated hinge connections.

## SAMENWERKINGSVERDRAG (PCT)

### RAPPORT BETREFFENDE NIEUWHEIDSONDERZOEK VAN INTERNATIONAAL TYPE

IDENTIFICATIE VAN DE NATIONALE AANVRAGE	KENMERK VAN DE AANVRAGER OF VAN DE GEMACHTIGDE
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Nederlands aanvraag nr.	Indieningsdatum
<b>2017404</b>	<b>01-09-2016</b>
	Ingeroepen voorrangsdatum
Aanvrager (Naam)	
<b>Mohammad Charif Soubra</b>	
Datum van het verzoek voor een onderzoek van internationaal type	Door de Instantie voor Internationaal Onderzoek aan het verzoek voor een onderzoek van internationaal type toegekend nr.
<b>15-10-2016</b>	<b>SN67595</b>
<b>I. CLASSIFICATIE VAN HET ONDERWERP</b> (bij toepassing van verschillende classificaties, alle classificatiesymbolen opgeven)	
Volgens de internationale classificatie (IPC)	
<b>A47J37/07</b>	
<b>II. ONDERZOCHETE GEBIEDEN VAN DE TECHNIEK</b>	
Onderzochte minimumdocumentatie	
Classificatiesysteem	Classificatiesymbolen
<b>IPC</b>	<b>A47J</b>
Onderzochte andere documentatie dan de minimum documentatie, voor zover dergelijke documenten in de onderzochte gebieden zijn opgenomen	
<b>III.</b>	<b>GEEN ONDERZOEK MOGELIJK VOOR BEPAALDE CONCLUSIES</b> (opmerkingen op aanvullingsblad)
<b>IV.</b>	<b>GEBREK AAN EENHEID VAN UITVINDING</b> (opmerkingen op aanvullingsblad)



**ONDERZOEKSRAPPORT BETREFFENDE HET  
RESULTAAT VAN HET ONDERZOEK NAAR DE STAND  
VAN DE TECHNIEK VAN HET INTERNATIONALE TYPE**

Nummer van het verzoek om een onderzoek naar  
de stand van de techniek

NL 2017404

<p>A. CLASSIFICATIE VAN HET ONDERWERP INV. A47J37/07 ADD.</p>		
<p>Volgens de Internationale Classificatie van octrooien (IPC) of zowel volgens de nationale classificatie als volgens de IPC.</p>		
<p>B. ONDERZOCHETE GEBIEDEN VAN DE TECHNIEK</p>		
<p>Onderzochte minimum documentatie (classificatie gevolgd door classificatiesymbolen) A47J</p>		
<p>Onderzochte andere documentatie dan de minimum documentatie, voor dergelijke documenten, voor zover dergelijke documenten in de onderzochte gebieden zijn opgenomen</p>		
<p>Tijdens het onderzoek geraadpleegde elektronische gegevensbestanden (naam van de gegevensbestanden en, waar uitvoerbaar, gebruikte trefwoorden) EPO-Internal, WPI Data</p>		
<p>C. VAN BELANG GEACHTE DOCUMENTEN</p>		
Categorie *	Geciteerde documenten, eventueel met aanduiding van speciaal van belang zijnde passages	Van belang voor conclusie nr.
X	DE 20 2009 004311 U1 (KNAPPE & LEHBRINK PROMOTION GM [DE]) 12 augustus 2010 (2010-08-12)	1,7-9, 12-16,18
A	* alinea [0017] - alinea [0027]; figuren 1-3 *	2-6,10, 11,17
X	US 4 471 749 A (GALDES EMANUEL [US]) 18 september 1984 (1984-09-18)	1,7-9, 12-16,18
A	* kolom 2, regel 23 - kolom 4, regel 22; figuren 1-3 *	2-6,10, 11,17
A	GB 2 461 402 A (PLUM PRODUCTS LTD [GB]) 6 januari 2010 (2010-01-06)	1-18
	* bladzijde 2, regel 15 - bladzijde 3, regel 25; figuren 1-6 *	
	-/--	
<p><input checked="" type="checkbox"/> Verdere documenten worden vermeld in het vervolg van vak C.      <input checked="" type="checkbox"/> Leden van dezelfde octrooifamilie zijn vermeld in een bijlage</p>		
<p>* Speciale categorieën van aangehaalde documenten</p>		
<p>"A" niet tot de categorie X of Y behorende literatuur die de stand van de techniek beschrijft</p>		<p>"T" na de indieningsdatum of de voorrangdatum gepubliceerde literatuur die niet bezwaarlijk is voor de octrooiaanvraag, maar wordt vermeld ter verheldering van de theorie of het principe dat ten grondslag ligt aan de uitvinding</p>
<p>"D" in de octrooiaanvraag vermeld</p>		<p>"X" de conclusie wordt als niet nieuw of niet inventief beschouwd ten opzichte van deze literatuur</p>
<p>"E" eerdere octrooi(aanvraag), gepubliceerd op of na de indieningsdatum, waarin dezelfde uitvinding wordt beschreven</p>		<p>"Y" de conclusie wordt als niet inventief beschouwd ten opzichte van de combinatie van deze literatuur met andere geciteerde literatuur van dezelfde categorie, waarbij de combinatie voor de vakman voor de hand liggend wordt geacht</p>
<p>"L" om andere redenen vermeldde literatuur</p>		<p>"Z" lid van dezelfde octrooifamilie of overeenkomstige octrooipublicatie</p>
<p>"O" niet-schriftelijke stand van de techniek</p>		
<p>"P" tussen de voorrangdatum en de indieningsdatum gepubliceerde literatuur</p>		
<p>Datum waarop het onderzoek naar de stand van de techniek van internationaal type werd voltooid</p>		<p>Verzenddatum van het rapport van het onderzoek naar de stand van de techniek van internationaal type</p>
<p>5 mei 2017</p>		
<p>Naam en adres van de instantie European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040 Fax: (+31-70) 340-3016</p>		<p>De bevoegde ambtenaar  Klintebäck, Daniel</p>

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**ONDERZOEKSRAPPORT BETREFFENDE HET  
 RESULTAAT VAN HET ONDERZOEK NAAR DE STAND  
 VAN DE TECHNIEK VAN HET INTERNATIONALE TYPE**

Nummer van het verzoek om een onderzoek naar  
 de stand van de techniek

NL 2017404

C.(Vervolg). VAN BELANG GEACHTE DOCUMENTEN		
Categorie *	Geciteerde documenten, eventueel met aanduiding van speciaal van belang zijnde passages	Van belang voor conclusie nr.
A	DE 203 06 625 U1 (GESTELLTECHNIK GEORGENTHAL GMB [DE]) 28 augustus 2003 (2003-08-28) * bladzijde 4, regel 29 - bladzijde 6, regel 21; figuren 1,2 *	1-18
A	WO 2010/000111 A1 (DIRECT DESIGNS INTERNAT LTD [CN]; JOHN BRUNNER [CN]; AARON PROBYN [CN]) 7 januari 2010 (2010-01-07) * bladzijde 3, regel 4 - bladzijde 4, regel 22; figuren 1-3 *	1-18

**ONDERZOEKSRAPPORT BETREFFENDE HET  
 RESULTAAT VAN HET ONDERZOEK NAAR DE STAND  
 VAN DE TECHNIEK VAN HET INTERNATIONALE TYPE**

Informatie over leden van dezelfde octrooifamilie

Nummer van het verzoek om een onderzoek naar  
 de stand van de techniek

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In het rapport genoemd octrooigescrift	Datum van publicatie	Overeenkomend(e) geschrift(en)	Datum van publicatie
DE 202009004311 U1	12-08-2010	DE 102010016050 A1 DE 202009004311 U1	30-09-2010 12-08-2010
US 4471749	A 18-09-1984	GEEN	
GB 2461402	A 06-01-2010	GB 2461402 A WO 2010001135 A1	06-01-2010 07-01-2010
DE 20306625	U1 28-08-2003	GEEN	
WO 2010000111	A1 07-01-2010	GEEN	

## WRITTEN OPINION

File No. SN67595	Filing date (day/month/year) 01.09.2016	Priority date (day/month/year)	Application No. NL2017404
International Patent Classification (IPC) INV. A47J37.07			
Applicant Mohammad Charif Soubra			

This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the application
- Box No. VIII Certain observations on the application

Examiner Klntebäck, Daniel
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## WRITTEN OPINION

Application number  
NL2017404

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### Box No. I Basis of this opinion

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1. This opinion has been established on the basis of the latest set of claims filed before the start of the search.
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - a sequence listing
    - table(s) related to the sequence listing
  - b. format of material:
    - on paper
    - in electronic form
  - c. time of filing/furnishing:
    - contained in the application as filed.
    - filed together with the application in electronic form.
    - furnished subsequently for the purposes of search.
3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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### Box No. V Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

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#### 1. Statement

Novelty	Yes: Claims	2-6, 10, 11, 17
	No: Claims	1, 7-9, 12-16, 18
Inventive step	Yes: Claims	2-6, 10, 11, 17
	No: Claims	1, 7-9, 12-16, 18
Industrial applicability	Yes: Claims	1-18
	No: Claims	

#### 2. Citations and explanations

**see separate sheet**

**WRITTEN OPINION**

Application number  
NL2017404

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**Box No. VII Certain defects in the application**

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see separate sheet

**Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Reference is made to documents D1 and D2:

- |    |   |
|----|---|
| D1 | DE 20 2009 004311 U1 (KNAPPE & LEHBRINK PROMOTION GM [DE])<br>12 augustus 2010 (2010-08-12) |
| D2 | US 4 471 749 A (GALDES EMANUEL [US]) 18 september 1984<br>(1984-09-18)                      |

2. The closest prior art is found to be document D1 (paragraphs [0017] - [0027]; figures 1-3) disclosing a portable barbecue, the portable barbecue comprising: a firebox (4), a grate (3), and a cover (1); wherein the cover is substantially U-shaped; wherein the firebox and the cover are adapted to be coupled in a portable configuration, in which the cover functions as a cover of the firebox, and in a barbecue configuration, in which the cover functions as a stand of the firebox.

The subject matter of claim 1 of the present application can therefore not be considered as being novel.

3. Document D2 (kolom 2, regel 23 - kolom 4, regel 22; figuren 1-3) discloses also the same technical features. D2 does not explicitly disclose that the firebox can be placed on top of the cover; however nothing prevents for the firebox to be placed on top of the cover if so wished.

4. The method for installing a barbecue comprising the steps of carrying the barbecue, removing the cover and mounting the firebox onto the cover according to independent claim 18, is also disclosed in D1, and can therefore not be considered as being novel..

5. The dependent claims 7-9, 12-16 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, over documents D1, D2, meet the requirements of novelty and/or inventive step.

6. The combination of the features of dependent claim 2 is neither known from, nor rendered obvious by, the available prior art.

**Item VII**

**Certain defects in the application**

7. The relevant background art disclosed in D1 is not mentioned in the description, nor is this document identified therein.

8. Independent claim 1 is not in the two-part form, which in the present case would be appropriate, with those features known in combination from the prior art being placed in the preamble and the remaining features being included in the characterising part.

9. The features of the claims are not provided with reference signs placed in parentheses.