(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 2 343 484 B1

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention of the grant of the patent:
10.05.2017 Bulletin 2017/19

(51) Int Cl.:
F24C 15/16 *(2006.01)*

(21) Application number: **10194479.1**

(22) Date of filing: **10.12.2010**

(54) **Tray mechanism for an oven**

Trägereinheit für einen Ofen

Mécanisme de plateau pour un four

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

(30) Priority: **31.12.2009 TR 200910057**

(43) Date of publication of application:
13.07.2011 Bulletin 2011/28

(73) Proprietor: **BSH Hausgeräte GmbH**
81739 München (DE)

(72) Inventors:
- **Gürdal, Ihsan Caner**
  59850, Tekirdag (TR)
- **Kenar, Serdar**
  59690, Tekirdag (TR)
- **Usta, Sabri**
  59500, Tekirdag (TR)

(56) References cited:
EP-A2- 2 058 593
WO-A1-2005/009083
KR-B1- 100 826 702
US-A- 3 012 554
WO-A1-2005/006814
JP-A- 3 186 119
US-A- 1 380 078

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

EP 2 343 484 B1

Printed by Jouve, 75001 PARIS (FR)

Description

TECHNICAL FIELD

[0001] The present invention relates to cookers comprising a cooking chamber defined by an inner body, and a tray which is positioned in a rotatable manner on a tray carrier inside said cooking chamber.

KNOWN STATE OF THE ART

[0002] Ovens have cooking chambers which are defined by the inner body they comprise and wherein the products to be cooked are placed. Trays placed inside the cooking chambers are fixed. Since the trays do not rotate around the own axis thereof, all of the sides of the foodstuff inside the trays are not cooked homogeneously. In the present art, some studies are realized for providing the rotation of trays inside the cooking chambers and for increasing cooking performance.

[0003] In the present systems, the rotation of the tray inside the cooker by means of a mechanical force is a standard property. Besides, in the cookers, there are no embodiments for the rotation of the tray by means of magnetic forces.

[0004] For instance, in the patent application EP1148766, a magnetic coupling mechanism is disclosed which is driven by the microwave oven and which rotates the turntable inside the cooking chamber.

[0005] In the patent application GB2051344, a mechanism is disclosed which is driven by the tray rotation motor of a microwave oven through the belt-pulley mechanism and which transfers this drive to the rotating tray through natural magnets.

[0006] As can also be seen from the abovementioned patents, in the present art, the rotation of the microwave ovens' tray inside the cooking chamber by means of magnetic forces is known. However, there is no such embodiment regarding freestanding ovens in the prior art.

[0007] WO 2005/006814 A1 discloses an oven having a plurality of pivotable platform assemblies. Turntables can be arranged on the pivotable platform assemblies. The pivotable platform assemblies are supported on supporting structures which are provided each with at least four rollers, wherein one roller is activated.

[0008] As a result, because of the abovementioned problems, an improvement is required in the related technical field.

BRIEF DESCRIPTION OF THE INVENTION

[0009] An object of the subject matter invention is to provide an oven with a tray which can rotate around itself inside the cooking chamber.

[0010] Another object of the subject matter invention is to provide an oven with a tray which can be rotated around itself inside the cooking chamber of the oven by means of oven's present drive means.

[0011] Another object of the subject matter invention is to provide a freestanding oven comprising a tray which is rotated by a magnetic force.

[0012] Another object of the subject matter invention is to provide the cooking of all parts of the foodstuff inside the tray homogeneously.

[0013] In order to realize the abovementioned objects and all of the objects obtained from the detailed description below, the present invention relates to a cooker comprising a cooking chamber defined by an inner body, and a tray which is positioned inside said cooking chamber in a rotatable manner on a tray carrier. Said cooker comprises at least one rotating member which is coupled to said tray carrier so as to contact with the tray from the bottom surface thereof.

[0014] There is at least one idle rotating member which is connected to said tray carrier so as to contact to the tray from the bottom surface thereof.

[0015] In order to support the tray substantially, there are two idle rotating members and one actuated rotating member which are connected to said tray carrier so as to define the corner points of a triangle.

[0016] Said tray carrier comprises a frame which is formed by the bending of a wire so as to define a quadrangle.

[0017] Said frame comprises a connection rod whereon one each idle rotating member are positioned at two mutual ends thereof and which extends parallel to one edge of the frame in the inner part thereof.

[0018] The connection rod comprises a bending point whereon the idle rotating members are positioned in an angled manner.

[0019] In another preferred embodiment of the present invention, there is a drive means and there is a movement transferring mechanism which transfers the drive of said drive means to the tray in order to rotate said tray around itself.

[0020] In another preferred embodiment of the present invention, there is a cardan mechanism which connects said drive means' shaft and the actuated rotating member.

[0021] In another preferred embodiment of the present invention, said cardan mechanism comprises a connection shaft whereon the actuated rotating member is positioned, first and second cardan shaft which provide the transferring

of the rotation movement obtained from said drive means to the actuated rotating member, an interconnection piece which connects said cardan shafts to each other and at least one shaft bearing where the connection shaft is bedded from one end.

[0022] In another preferred embodiment of the present invention, said frame comprises a shaft support bar where said shaft bearing is placed substantially in the middle point thereof and which extends substantially parallel to the connection rod so as to be close to the front edge.

[0023] In another preferred embodiment of the present invention, said drive means is a chicken roasting motor.

[0024] In another preferred embodiment of the present invention, said actuated rotating member is a circular magnet.

[0025] In another preferred embodiment of the present invention, said idle rotating member is a circular magnet.

[0026] In another preferred embodiment of the present invention, said cooker is an oven.

[0027] The present invention also relates to a tray mechanism which is positioned into the cooking chamber of a cooker and which has a tray carrier whereon a tray is placed in a rotatable manner. Said tray mechanism comprises at least one rotating member which is connected to said tray carrier so as to contact to the tray from the bottom surface thereof.

[0028] The additional characteristics and advantages of the subject matter invention are disclosed from the example embodiments giving reference to the accompanied figures.

BRIEF DESCRIPTION OF THE FIGURES

[0029] The oven realized in order to achieve the object of the subject matter invention is illustrated in the annexed figures, from these figures;

In Figure 1, the representative perspective view of an oven where the subject matter invention is applied is given.
In Figure 2, the view of the tray carrier, cardan mechanism and the rotating tray positioned inside the cooking chamber is given.
In Figure 3, the solo view of tray carrier illustrated in Figure 2 is given.
In Figure 4, the dismantled view of the cardan mechanism is given.
In Figure 5, the detailed view of the cardan mechanism is given.

THE DETAILED DESCRIPTION OF THE INVENTION

[0030] In this detailed explanation, the subject matter invention is explained with references to figures without forming any restrictive effect in order to make the subject more understandable. Accordingly, in the detailed description below, the subject matter invention is assumed to be applied to an oven (10). However, with minor revisions, the subject matter invention can also be applied to household type or industrial type cookers with different properties.

[0031] With reference to Figure 1, an oven (10) where the subject matter invention is applied has a cooking chamber (14) which is accessed through a cover (11). With reference to Figure 2, said cooking chamber (14) is defined by an inner body (12) whose one lateral surface corresponding to the cover (11) is open and which is in the form of a rectangular prism. A front flange (13) is assembled to the circumference of said open surface.

[0032] With reference to Figure 2, a tray (20) in a rotatable manner is positioned onto a tray carrier (30) placed into said cooking chamber (14). In order to rotate said tray (20) around itself, there is a movement transferring mechanism which transfers the drive of a present drive mechanism to the tray (20). Said movement transferring mechanism is a cardan mechanism (40) and the drive mechanism is a chicken roasting motor.

[0033] With reference to Figure 3, said tray carrier (30) comprises a frame (31) formed by the bending of a wire in rectangular form; support bar (32) providing support to said frame (31); connection rod (33) carrying the shaft connected to the movement mechanism; and shaft support bar (34) carrying the shaft connected to the drive mechanism and carrying the actuated rotating member (47). Said frame (31) comprises lateral edge (313) extending on two lateral sides thereof and front and rear edges (311, 312) connecting the lateral edges (313) to each other.

[0034] Accordingly, there are preferably two support bars (32) and each support bar (32) extends between the front and rear (311, 312) edges and parallel to a lateral edge (313). Between the support bars (32), there is a connection rod (33) extending close to the front edge (312) and there is a shaft support bar (34) extending close to the rear edge (311). There are two bending points (331) on the connection rod (33). Two idle rotating members (35) are positioned to said bending points (331) so as to extend in an angled manner. The tray (20) rotates easily on the idle rotating members (35) and at the same time, the tray (20) is attracted by the magnets by means of the magnetic force so that it does not displace. The shaft support bar (34) extends along the front edge (311) at a place close to the front edge (311).

[0035] With reference to Figure 3 and 4, said actuated rotating member (47) takes the drive forces from the chicken roasting motor (not illustrated in the figure) by means of a cardan mechanism (40). Said cardan mechanism (40) comprises a connection shaft (45) to which a actuated rotating member (47) is connected; and the first and second cardan shafts (42, 43) which transfer the rotation movements of the motor connection and magnet connection shafts (41, 45) to each

other. Said cardan shafts (42, 43) are connected to each other by means of the interconnection piece (44).

[0036] Under the light of the abovementioned structural details, the operation of the subject matter invention is as follows. First of all, the drive force rotates the motor connection shaft (41). The first cardan shaft (42) at the end of the motor connection shaft (41) increases the rotation angle and it transfers the drive it obtains to the second cardan shaft (43) by means of the interconnection piece (44). The second cardan shaft (43) changes the rotation angle and it finally transfers the rotation movement to the connection shaft (45) which is connected to the actuated rotating member (47). The connection shaft (45) is in the form of a square bar. The hub space of said actuated rotating member (47) is in the form of a square which is compliant to the connection shaft (45) and they rotate together by forming shape coupling. The connection shaft (45) is fixed on the tray carrier (30) inside the shaft bearing (46). There are two shaft bearings (46) which are in semi-circular form and which are positioned mutually. One of said shaft bearings (46) is seated to the shaft bearing recess (341) on the shaft support bar (34) and the other one is seated to the shaft bearing recess (314) on the front edge (311). Between said shaft bearings, the connection shaft extends.

[0037] As a result, by means of the subject matter invention, the tray (20) which is positioned inside the cooking chamber (14) is rotated by the cardan mechanism (40) and the tray carrier (30). By means of this, all parts of the foodstuff inside the tray (20) are cooked homogeneously.

[0038] The protection scope of the present invention is set forth in the annexed Claims and cannot be restricted to the illustrative disclosures given above, under the detailed description. It is because a person skilled in the relevant art can obviously produce similar embodiments under the light of the foregoing disclosures, without departing from the main principles of the present invention.

REFERENCE NUMBERS

10 Oven	33 Connection rod
11 Cover	331 Bending point
12 Inner body	34 Shaft support bar
13 Front flange	341 Shaft bearing recess
14 Cooking chamber	35 Idle rotating member
20 Tray	40 Cardan mechanism
30 Tray carrier	41 Motor connection shaft
31 Frame	42 First cardan shaft
311 Front edge	43 Second cardan shaft
312 Rear edge	44 Interconnection piece
313 Lateral edge	45 Connection shaft
314 Shaft bearing recess	46 Shaft bearing
32 Support bars	47 Actuated rotating member

Claims

1. A tray mechanism having a tray carrier (30), wherein the tray mechanism is configured to be positionable inside a cooking chamber (14) of a cooker (10) and whereon a tray (20) is positioned so as to rotate around itself, wherein said tray carrier (30) comprises a frame (31) which is formed by the bending of a wire so as to define a quadrangle, **characterized in that** the tray mechanism comprises precisely three rotating members (35, 47) which are coupled to said tray carrier (30) so as to contact with the tray (20) from the bottom surface thereof, wherein, in order to support the tray (20) substantially, two idle and one actuated rotating members (35, 47) are provided which are connected to said tray carrier (30) so as to define the corner points of a triangle, wherein said frame (31) comprises a connection rod (33) whereon one each idle rotating member (35) are positioned at two mutual ends thereof and which extends parallel to one edge of the frame (31) in the inner part thereof, wherein the connection rod (33) comprises two bending points (331) whereon the idle rotating members (35) are positioned in an angled manner.

2. The tray mechanism according to claim 1, wherein a drive means is provided and a movement transferring mechanism is provided which transfers the drive of said drive means to the tray (20) in order to rotate said tray (20) around itself, especially wherein a cardan mechanism (40) is provided which connects said drive means' shaft and the actuated rotating member (47).

3. The tray mechanism according to claim 1 or 2, wherein an actuated rotating member (47) is a circular magnet, and/or an idle rotating member (35) is a circular magnet.

4. A cooker (10), especially an oven, having a cooking chamber (14) defined by an inner body (12), and a tray (20) which is positioned inside said cooking chamber (14) in a rotatable manner on a tray carrier (30), **characterized in that** the tray carrier (30) is provided with a tray mechanism according to anyone of the preceding claims.

5. The cooker (10) according to claim 4, wherein at least one idle rotating member (35) is provided which is connected to said tray carrier (30) so as to contact to the tray (20) from the bottom surface thereof.

6. The cooker (10) according to claim 4 or 5, wherein, in order to support the tray (20) substantially, two idle and one actuated rotating members (35, 47) are provided which are connected to said tray carrier (30) so as to define the corner points of a triangle.

7. The cooker (10) according to any of the preceding claims 4 through 6, wherein said tray carrier (30) comprises a frame (31) which is formed by the bending of a wire so as to define a quadrangle, especially wherein said frame (31) comprises a connection rod (33) whereon one each idle rotating member (35) are positioned at two mutual ends thereof, and which extends parallel to one edge of the frame (31) in the inner part thereof, especially wherein the connection rod (33) comprises a bending point (331) whereon the idle rotating members (35) are positioned in an angled manner.

8. The cooker (10) according to any of the preceding claims 4 through 7, wherein a drive means is provided and a movement transferring mechanism is provided which transfers the drive of said drive means to the tray (20) in order to rotate said tray (20) around itself.

9. The cooker (10) according to claim 8, wherein a cardan mechanism (40) is provided which connects said drive means' shaft and the actuated rotating member (47), especially wherein said cardan mechanism (40) comprises a connection shaft (45) whereon the actuated rotating member (47) is positioned, first and second cardan shaft (42, 43) which provide the transferring of the rotation movement obtained from said drive means to the actuated rotating member (47), an interconnection piece (44) which connects said cardan shafts (42, 43) to each other and at least one shaft bearing (46) where the connection shaft (45) is bedded from one end, especially wherein said frame (31) comprises a shaft support bar (34) where said shaft bearing is placed in the middle point thereof and which extends substantially parallel to the connection rod (33) so as to be close to the front edge.

10. The cooker (10) according to any of the preceding claims 4 through 9, wherein said drive means is a chicken roasting motor.

Patentansprüche

1. Brätermechanismus mit einem Bräterhalter (30), wobei der Brätermechanismus so konfiguriert ist, dass er sich in einem Garraum (14) eines Herds (10) positionieren lässt, und ein Bräter (20) so darauf positioniert ist, dass er sich um sich selbst dreht, wobei der Bräterhalter (30) einen Rahmen (31) umfasst, der durch derartiges Biegen eines Drahtes gebildet wird, dass dieser ein Viereck definiert, **dadurch gekennzeichnet, dass** der Brätermechanismus genau drei Drehelemente (35, 47) umfasst, die so mit dem Bräterhalter (30) verbunden sind, dass sie den Bräter (20) von seiner Unterseite her berühren, wobei zum maßgeblichen Tragen des Bräters (20) zwei nichtangetriebene und ein angetriebenes Drehelement (35, 47) bereitgestellt sind, die so mit dem Bräterhalter (30) verbunden sind, dass sie die Eckpunkte eines Dreiecks definieren, wobei der Rahmen (31) einen Verbindungsstab (33) umfasst, an dem an zwei gegenüberliegenden Enden davon jeweils ein nichtangetriebenes Drehelement (35) positioniert ist und der sich in dem Innenteil des Rahmens (31) parallel zu einer Kante davon erstreckt, wobei der Verbindungsstab (33) zwei Biegepunkte (331) umfasst, an denen die nichtangetriebenen Drehelemente (35) abgewinkelt positioniert sind.

2. Brätermechanismus nach Anspruch 1, wobei ein Antriebsmittel bereitgestellt ist sowie ein Bewegungsübertragungsmechanismus, der die Antriebskraft des Antriebsmittels auf den Bräter (20) überträgt, damit der Bräter (20) um sich selbst gedreht wird, wobei insbesondere ein Kardanmechanismus (40) bereitgestellt ist, der die Welle des Antriebsmittels und das angetriebene Drehelement (47) verbindet.

3. Brätermechanismus nach Anspruch 1 oder 2, wobei es sich bei einem angetriebenen Drehelement (47) und/oder bei einem nichtangetriebenen Drehelement (35) um einen ringförmigen Magneten handelt.

4. Herd (10), insbesondere Backofen, mit einem Garraum (14), der von einem Innenkörper (12) definiert ist, und einem Bräter (20), der auf einem Bräterhalter (30) drehbar in dem Garraum (14) positioniert ist, **dadurch gekennzeichnet, dass** der Bräterhalter (30) mit einem Brätermechanismus gemäß einem der vorhergehenden Ansprüche versehen ist.

5. Herd (10) nach Anspruch 4, wobei mindestens ein nichtangetriebenes Drehelement (35) bereitgestellt ist, das so mit dem Bräterhalter (30) verbunden ist, dass es den Bräter (20) von seiner Unterseite her berührt.

6. Herd (10) nach Anspruch 4 oder 5, wobei zum maßgeblichen Tragen des Bräters (20) zwei nichtangetriebene und ein angetriebenes Drehelement (35, 47) bereitgestellt sind, die so mit dem Bräterhalter (30) verbunden sind, dass sie die Eckpunkte eines Dreiecks definieren.

7. Herd (10) nach einem der vorhergehenden Ansprüche 4 bis 6, wobei der Bräterhalter (30) einen Rahmen (31) umfasst, der durch derartiges Biegen eines Drahtes gebildet wird, dass dieser ein Viereck definiert, wobei der Rahmen (31) insbesondere einen Verbindungsstab (33) umfasst, an dem an zwei gegenüberliegenden Enden davon jeweils ein nichtangetriebenes Drehelement (35) positioniert ist und der sich in dem Innenteil des Rahmens (31) parallel zu einer Kante davon erstreckt, wobei der Verbindungsstab (33) insbesondere einen Biegepunkt (331) umfasst, an dem die nichtangetriebenen Drehelemente (35) abgewinkelt positioniert sind.

8. Herd (10) nach einem der vorhergehenden Ansprüche 4 bis 7, wobei ein Antriebsmittel und Bewegungsübertragungsmechanismus bereitgestellt sind, der den Antrieb des Antriebsmittels auf den Bräter (20) überträgt, damit der Bräter (20) um sich selbst gedreht wird.

9. Herd (10) nach Anspruch 8, wobei ein Kardanmechanismus (40) bereitgestellt ist, der die Welle des Antriebsmittels und das angetriebene Drehelement (47) verbindet, wobei der Kardanmechanismus (40) insbesondere Folgendes umfasst: eine Verbindungswelle (45), an der das angetriebene Drehelement (47) positioniert ist, eine erste und eine zweite Kardanwelle (42, 43), die für das Übertragen der Drehbewegung von dem Antriebsmittel auf das angetriebene Drehelement (47) sorgen, ein Zwischenverbindungsstück (44), das die Kardanwellen (42, 43) miteinander verbindet, und mindestens ein Wellenlager (46), an dem die Verbindungswelle (45) von einem Ende aus gelagert ist, wobei der Rahmen (31) insbesondere eine Wellenträgerstange (34) umfasst, an deren Mittelpunkt das Wellenlager angeordnet ist und die sich im Wesentlichen parallel zu dem Verbindungsstab (33) erstreckt, so dass sie nahe an der Vorderkante liegt.

10. Herd (10) nach einem der vorhergehenden Ansprüche 4 bis 9, wobei es sich bei dem Antriebsmittel um einen Hühnchengrillmotor handelt.

Revendications

1. Mécanisme de plateau présentant un porte-plateau (30), dans lequel le mécanisme de plateau est configuré pour pouvoir être positionné à l'intérieur d'une enceinte de cuisson (14) d'une cuisinière (10) et sur lequel un plateau (20) est positionné de manière à tourner autour de lui-même, ledit porte-plateau (30) comprenant un cadre (31) qui est formé par la courbure d'un fil de manière à définir un quadrilatère, **caractérisé en ce que** le mécanisme de plateau comprend précisément trois éléments rotatifs (35, 47) qui sont couplés audit porte-plateau (30) de manière à venir en contact avec le plateau (20) depuis la surface inférieure de celui-ci, dans lequel, afin de supporter sensiblement le plateau (20), deux éléments rotatifs libres et un actionné (35, 47) sont prévus et sont reliés audit porte-plateau (30) de manière à définir les points d'angle d'un triangle, ledit cadre (31) comprenant une tige de liaison (33) sur laquelle chacun des éléments rotatifs libres (35) sont positionnés aux deux extrémités mutuelles de celle-ci et qui s'étend parallèlement à un bord du cadre (31) dans la partie intérieure de celui-ci, la tige de liaison (33) comprenant deux points de courbure (331) sur lesquels les éléments rotatifs libres (35) sont positionnés de manière inclinée.

2. Mécanisme de plateau selon la revendication 1, dans lequel un moyen d'entraînement est prévu et un mécanisme de transfert de mouvement est prévu pour transférer l'entraînement dudit moyen d'entraînement vers le plateau (20) afin de faire tourner ledit plateau (20) autour de lui-même, en particulier dans lequel un mécanisme de cardan (40) est prévu et relie l'arbre dudit moyen d'entraînement et l'élément rotatif actionné (47).

3. Mécanisme de plateau selon la revendication 1 ou 2, dans lequel un élément rotatif actionné (47) est un aimant

circulaire, et/ou un élément rotatif libre (35) est un aimant circulaire.

4. Cuisinière (10), en particulier un four, présentant une enceinte de cuisson (14) définie par un corps intérieur (12), et un plateau (20) qui est positionné à l'intérieur de ladite enceinte de cuisson (14) de manière rotative sur un porte-plateau (30), **caractérisée en ce que** le porte-plateau (30) est doté d'un mécanisme de plateau selon une quelconque des revendications précédentes.

5. Cuisinière (10) selon la revendication 4, dans laquelle au moins un élément rotatif libre (35) est prévu, qui est relié audit porte-plateau (30) de manière à venir en contact avec le plateau (20) depuis la surface inférieure de celui-ci.

6. Cuisinière (10) selon la revendication 4 ou 5, dans laquelle afin de supporter sensiblement le plateau (20), deux éléments rotatifs libres et un actionné (35, 47) sont prévus, qui sont reliés audit porte-plateau (30) de manière à définir les points d'angle d'un triangle.

7. Cuisinière (10) selon l'une quelconque des revendications précédentes 4 à 6, dans laquelle ledit porte-plateau (30) comprend un cadre (31) qui est formé par la courbure d'un fil de manière à définir un quadrilatère, en particulier dans laquelle ledit cadre (31) comprend une tige de liaison (33) sur laquelle chacun des éléments rotatifs libres (35) sont positionnés aux deux extrémités mutuelles de celle-ci, et qui s'étend parallèlement à un bord du cadre (31) dans la partie intérieure de celui-ci, en particulier dans laquelle la tige de liaison (33) comprend un point de courbure (331) sur lequel les éléments rotatifs libres (35) sont positionnés de manière inclinée.

8. Cuisinière (10) selon une quelconque des revendications précédentes 4 à 7, dans laquelle un moyen d'entraînement est prévu et un mécanisme de transfert de mouvement est prévu, qui transfère l'entraînement dudit moyen d'entraînement vers le plateau (20) afin de faire tourner ledit plateau (20) autour de lui-même.

9. Cuisinière (10) selon la revendication 8, dans laquelle un mécanisme de cardan (40) est prévu, qui relie l'arbre dudit moyen d'entraînement et l'élément rotatif actionné (47), en particulier dans laquelle ledit mécanisme de cardan (40) comprend un arbre de liaison (45) sur lequel l'élément rotatif actionné (47) est positionné, des premier et second arbres de cardan (42, 43) qui permettent le transfert du mouvement de rotation obtenu dudit moyen d'entraînement vers l'élément rotatif actionné (47), un élément d'interconnexion (44) qui relie lesdits arbres de cardan (42, 43) l'un à l'autre et au moins un palier d'arbre (46) où l'arbre de liaison (45) est logé à partir d'une extrémité, en particulier dans laquelle ledit cadre (31) comprend une barre de support d'arbre (34) où ledit palier d'arbre est placé dans le point médian de celle-ci et qui s'étend sensiblement parallèlement à la tige de liaison (33) de manière à être proche du bord frontal.

10. Cuisinière (10) selon l'une quelconque des revendications précédentes 4 à 9, dans laquelle ledit moyen d'entraînement est un moteur de tournebroche.

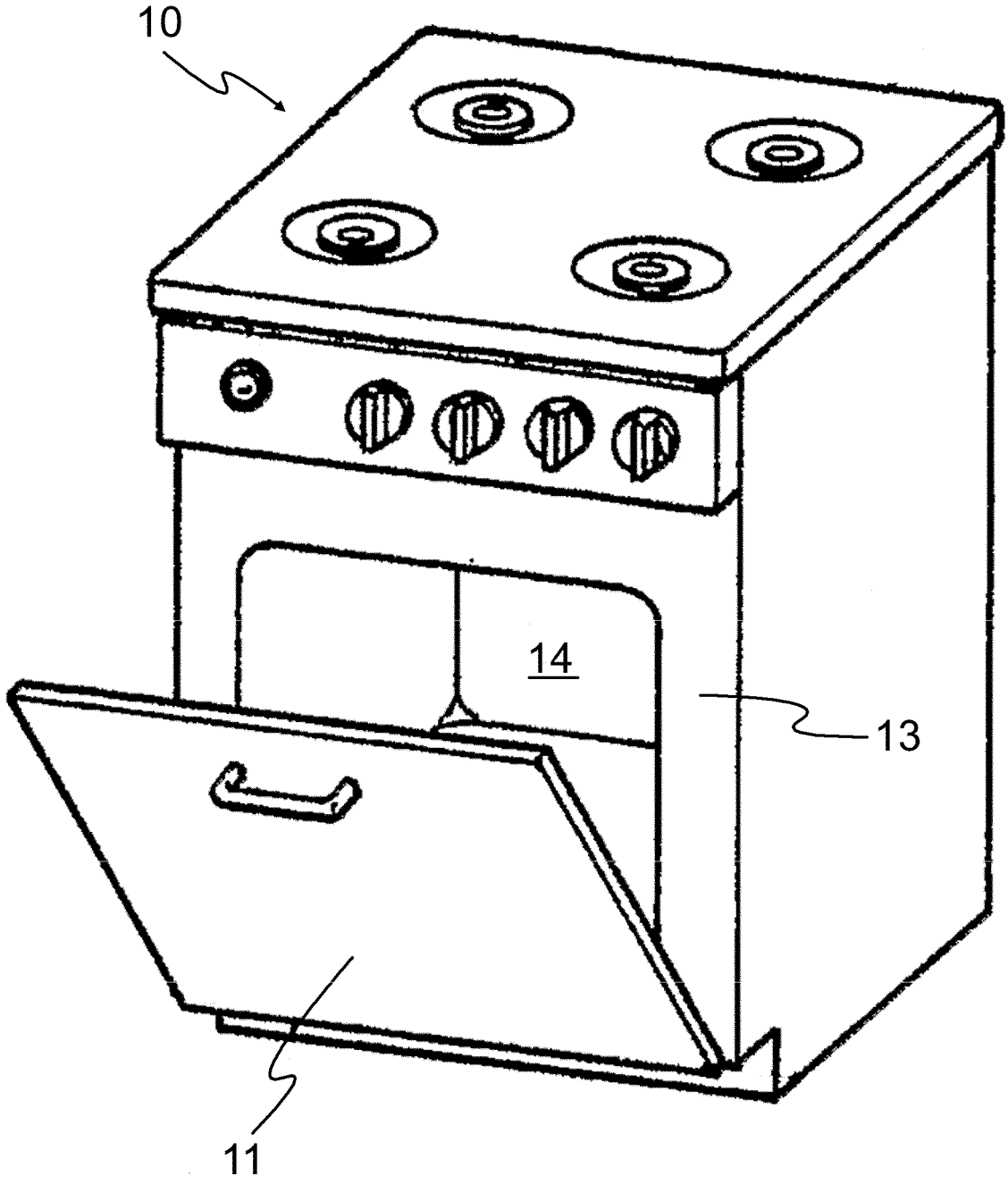


Fig. 1

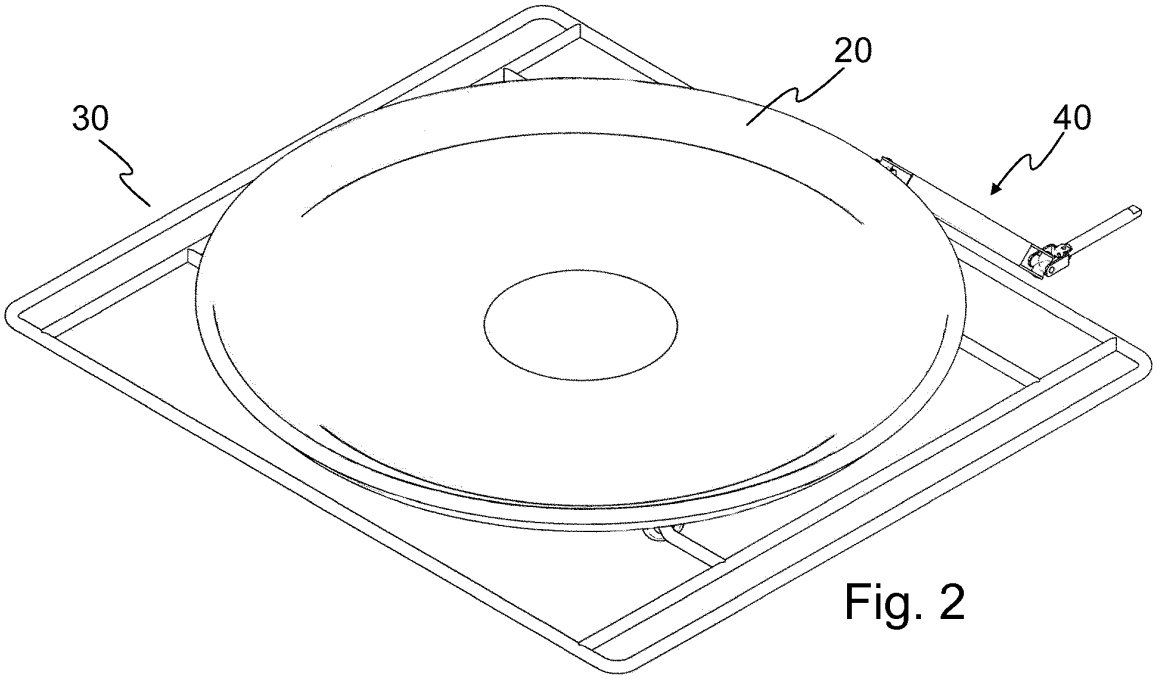


Fig. 2

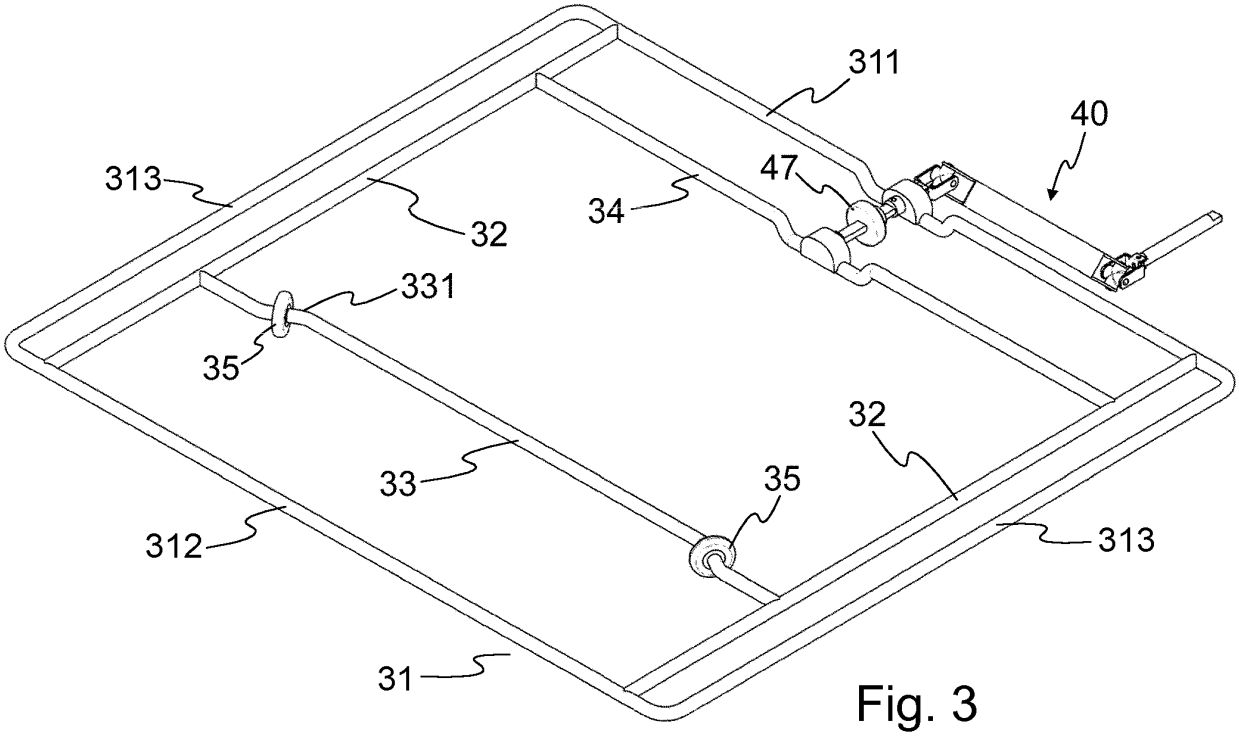


Fig. 3

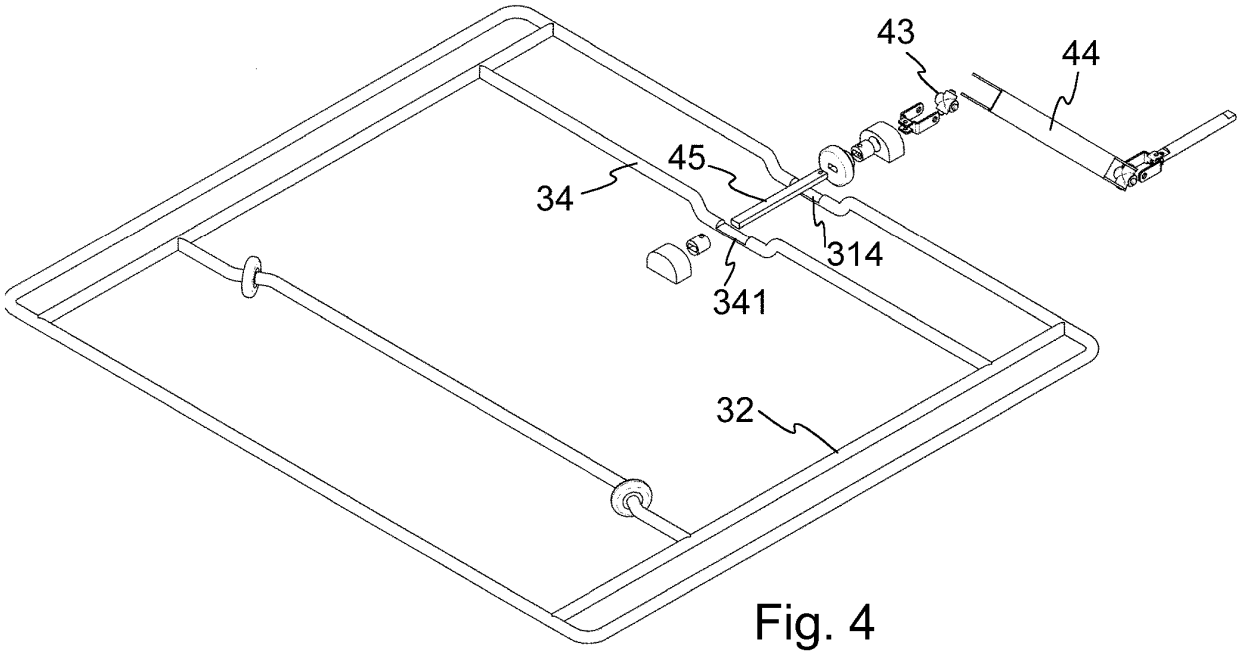


Fig. 4

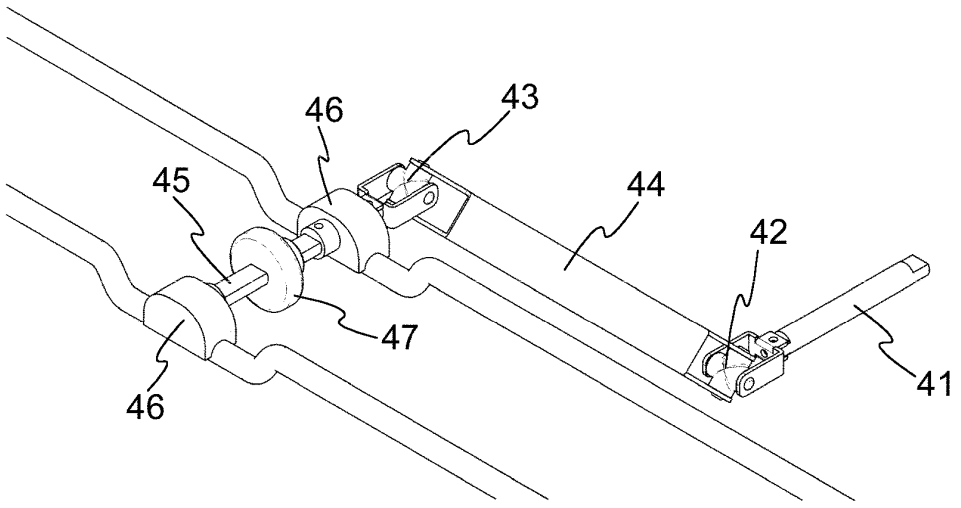


Fig. 5

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- EP 1148766 A **[0004]**
- GB 2051344 A **[0005]**
- WO 2005006814 A1 **[0007]**