

(19)



(11)

EP 2 429 038 B1

(12)

EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention
of the grant of the patent:
20.02.2019 Bulletin 2019/08

(51) Int Cl.:
H01R 11/09 ^(2006.01) **F24C 15/10** ^(2006.01)
F24C 7/08 ^(2006.01) **H01H 1/58** ^(2006.01)
H01H 19/62 ^(2006.01)

(21) Application number: **11178404.7**

(22) Date of filing: **23.08.2011**

(54) **Electric switch and household appliance comprising electric switch**

Elektrischer Schalter und Haushaltsgerät mit einem elektrischen Schalter

Interrupteur électrique et appareil domestique avec un interrupteur électrique

(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: **27.08.2010 TR 201007172**

(43) Date of publication of application:
14.03.2012 Bulletin 2012/11

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

(72) Inventors:
• **Atalay, Engin**
59501 Tekirdag (TR)
• **Erbay, Metin**
59510 Cerkezköy (TR)
• **Gundogdu, Gurkan**
59500 Tekirdag (TR)
• **Uygun, Ramazan**
59850 Tekirdag (TR)

(56) References cited:
WO-A2-2007/013023 JP-A- H02 223 731
JP-A- S55 124 804 US-A- 3 736 390
US-A- 4 762 500

EP 2 429 038 B1

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).

Description

[0001] The present invention relates to electric switches and household appliances, in particular cookers, comprising an electric switch being designed to apply different commands to the household appliance through a single control knob, the switch being equipped with at least one branching piece which has a terminal holding part which provides connection with the switch's terminal, and which has at least two branching arms whereon the electrical cables arriving to the related loads are connected in order to multiplex the electrical signal exiting the switch's input terminal.

KNOWN STATE OF THE ART

[0002] A switch is an apparatus which provides applying and interrupting electrical current in an electrical circuit or which provides the changing of the connections of the circuit in an arrangement. When the shaft inside the switch is rotated around the own axis thereof and when it is brought to a certain position, it completes the circuit by means of the movable contacts and it matches the signal arriving to the switch with the corresponding terminal and it provides the required result. In other words, switches can also be defined as switches which provide the electrical circuits to reach a plurality of results. In more details, switches have a plurality of terminals whose contact with the input is controlled by a movable contact. In general, said terminals are connected through the electrical cables to the members which are desired to be controlled. Accordingly, for instance, in a cooker, the user turns the control knob step by step and he/she can operate the lower or upper heating resistances of the oven. When both lower and upper heating is desired, two resistances at the same time have to be actuated by means of one command. In such cases, branching pieces are fixed to the resistance terminals.

[0003] In the picture related to the prior art, the general view of such a branching piece is given. With reference to the structure of the branching piece, at the continuation of the terminal holding part (a) whereon the terminal is placed, a first branching arm (b) which extends upwardly can be seen. The second branching arm (c) is positioned at the rear part of the holding part (a).

[0004] In order to realize a household appliance, wherein the actuators behind the control knobs on the panel are easily adapted to the control knobs prior art document WO 2007/013023 A2 proposes to provide a mounting plate fixed to the actuator, providing the actuator to be mounted on the rear surface of the knob casing.

[0005] Prior art document US 4 762 500 A discloses an electric switch comprising a branching piece. Said electric switch is designed for use in establishing interconnections to a printed circuit board. The lower or female bus portion of said electric switch is formed of a pair of opposed plates 86 formed at their upper ends as springs 90, 92 (column 9, lines 2 to 4, Figures 1-3, 5, 6

of US 4 762 500 A).

[0006] In order to provide a terminal block in which an element carrying a drop wire can be pivoted in a direction to pivot the drop wire with a terminal, or in the disengaging direction, by a captive screw, prior art document GB 2 129 630 A discloses pivotally mounted elements (40) which are used to insert the wires into the connectors (cf Figures 4 and 7 of GB 2 129 630 A). Said pivotally mounted elements (40) are connectable to the terminal block by means of branching pieces (20) having each three connection points (cf. Figure 3 and page 2, lines 60 to 85, of GB 2 129 630 A).

[0007] A connecting strip for telecommunication is disclosed in prior art document DE 102 36 114 A1. Said connecting strip comprises connecting members (2) having a body, a terminal holding part (5, 6) and two branching arms (cf. figure 5 of DE 102 36 114 A1).

BRIEF DESCRIPTION OF THE INVENTION

[0008] The present invention relates to branching arms added to the terminals inside the switch, in order to bring new advantages in the related technical field.

[0009] An object of the subject matter invention is to provide an electric switch for a household appliance comprising a branching piece for the electric switch, wherein the branching piece does not contact with the other switch terminal which is adjacent to the switch terminal whereon it is fixed.

[0010] In order to realize the abovementioned objects and all of the objects obtained from the detailed description below, the present invention relates to an electric switch for a household appliance, wherein the electric switch is equipped with a branching piece comprising a terminal holding part which provides connection to a switch output terminal; and at least two branching arms whereon the electrical cables arriving to the related loads are connected in order to multiplex the electrical signal exiting the input terminal of the switch. Said at least two branching arms are at a higher point than the switch terminals. Moreover, in the subject matter invention, the multiplexer can be at the same plane, or it may have arms at different planes which do not contact with the other switch terminal.

[0011] In a preferred embodiment of the present invention, said branching arms are in the same plane in the horizontal position and they are at the same height in the vertical position.

[0012] In another preferred embodiment of the present invention, said branching arms extend at the upward continuation of the holding part or of the body part at a certain angle so as to diverge from each other. The angle between the two branching arms can be narrow angle or wide angle or orthogonal angle.

[0013] In another preferred embodiment of the present invention, said branching arms are positioned symmetrically to each other.

[0014] In another preferred embodiment of the present

invention, said branching arms are positioned asymmetrically to each other.

[0015] In another preferred embodiment of the present invention, there is a hinge which provides the movement of at least one of said branching arms with respect to the holding part.

[0016] In a plurality of embodiments of the present invention, the body opening between said branching arms has a form similar to a "trapezoid", "isosceles trapezoid", similar to "V", similar to "U", similar to "T" or similar to "L".

[0017] In a preferred embodiment of the present invention, the branching piece comprise branching arms which are directed to different directions so as not to contact with the switch shaft.

BRIEF DESCRIPTION OF THE FIGURES

[0018] In Figure 1, the general structure of the switch and the assembled view of the piece are given.

[0019] In Figure 2a, 2b, 2c and 2d, perspective views of the different embodiments of the subject matter branching piece are given.

THE DETAILED DESCRIPTION OF THE INVENTION

[0020] In this detailed explanation, the subject matter branching piece is explained with references to examples 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 used in the switch of a cooker. However, the subject matter invention can also be used in any switch which provides applying different commands to the device through a single control knob.

[0021] In Figure 1, the perspective view of a switch is given. The switch comprises a protective chamber (10) whereon shaft housings (11, 12) are positioned and which protects the mechanism inside the switch. There is a switch shaft (20) which passes through the switch and which is related to the shaft housings (11, 12) which are positioned on the chamber (10). The switch shaft (20) can rotate around the own axis thereof. On the switch shaft (20), there is a shaft extension (21) where a control knob can be fixed in order to facilitate the rotation of the switch shaft (20) around the own axis thereof. Moreover, on the switch shaft (20), on the side of the switch shaft (21) extension, there is a adjustment part (22) ring which adjusts the rotation amount of the switch shaft (20) around the own axis thereof.

[0022] In the switch whose detailed figure is given, there is a switch group (30) which is placed inside the chamber (10) and whereon the circuit members are positioned. At the input of the switch group (30), there is a plurality of input terminals (31) and there are terminal housings (32). The terminals are placed into said terminal housings (32). On the output terminals (33), there are cable apertures (331) where the cables (not illustrated in the figure) can be connected through which signals are

transferred. The electrical connection between the output terminals (33) and the input terminals (31) preferably in electrical terminal form is controlled by movable contacts (35). There are tabs which are positioned in a certain arrangement on the switch shaft (20). Accordingly, when the switch shaft (20) is rotated around the own axis thereof, these tabs correspond onto the related movable contact (35), and they make said contact change position, accordingly, it brings the circuit between the input terminals (31) and output terminals (33) to the open or closed position. Since this embodiment is a known member in the art, it will not be given in detail here.

[0023] In Figure 2a, a general view of the branching piece (40) is given. The branching piece (40) comprises a body (44) and a terminal holding part (43) on the body (44), which provides holding onto the terminals (33). Moreover, on the branching piece (40), there are the first branching arm (41) and the second branching arm (42), which are preferably positioned in a symmetrical manner and which extend upwardly so as to make a certain angle with the terminal holding part (43). Again preferably the first and the second branching arm (41, 42) extend up to the same height with respect to each other. On the first and second branching arms (41, 42), there are cable connection apertures (411, 421) where the cable transferring the arriving signals can be connected as realized in the terminals (33). Between the first and second branching (41, 42), there is the body end part (441). Between the branching arms (41, 42), there is a body opening (45) where the body end part (441) forms a base. In the preferred embodiment in Figure 2a, the body opening (45) has a form similar to an "isosceles trapezoid". In different applications of the subject matter invention, the body opening (45) has a form similar to "V" and it forms a form similar to "Y" together with the body (44). As can be seen in Figure 2a, the first and the second branching arms (41, 42) can be in the same plane, or they can be embodied in different and parallel planes so as not to contact with the switch shaft (20).

[0024] Under the light of the abovementioned details and under the light of Figure 1, the operation of the subject matter invention is as follows. The branching piece (40) is connected on the upper part of the desired terminal (33), and the first and the second branching arm (41, 42) of the branching piece (40) is at a higher point than the other terminals. Since the branching arms (41, 42) are at a higher level, the cables connected to the branching piece (40) are at a higher level than the cables connected to the other terminals (33) and a contact between the cables is prevented. Preferably the first and the second branching (41, 42) arms at the same height and they are horizontally in the same axis. By means of this, the cables can be easily assembled.

[0025] With reference to Figure 2b, in an alternative embodiment of the subject matter invention, the first and the second branching arms (41, 42) which are the above parts of the branching piece (40) can extend perpendicular to the ground instead of extending in an angled man-

ner. In this embodiment, the body opening (45) has a form similar to "U". In another alternative embodiment of the subject matter invention, hinges can be added to the body end (441) or body opening (45) where they have an angle with the terminal holding part (43) and the extension angle of the branching arms (41, 42) can be changed and it can be fixed at a desired point. On the other hand, the branching arms (41, 42) may not be positioned symmetrical with respect to each other. Moreover, in the preferred embodiment, there may be more than two branching arms (41,42).

[0026] With reference to Figure 2c, in another alternative embodiment of the subject matter invention, the first and the second branching arms (41, 42) exist at a position which is in a direction intersecting the body (40) so as to be in a different plane from the holding part (43) and the body part (44). In a preferred embodiment, the first and the second branching arms (41, 42) extend in a parallel manner to the extension direction of the chamber (10). The body opening (45) existing between the two arms (41, 42) and the body end (441) in this embodiment form preferably a prismatic form or preferably a form similar to a rectangular prism.

[0027] With reference to Figure 2d, in another alternative embodiment of the subject matter invention, so as to define an L like shape, the second branching arm (42) extends perpendicular to the ground and it extends at the continuation of the holding part (43) upwardly, the first branching arm (41) extends outwardly from the chamber (10) and parallel to the ground.

REFERENCE NUMBERS

[0028]

10	Chamber
11	Shaft Housing
12	Shaft Housing
20	Switch Shaft
21	Shaft Extension
22	Adjustment part
30	Contact Group
31	Input Terminal
32	Terminal Housing
33	Output Terminal
331	Cable Connection Aperture
35	Movable Contact
40	Branching Piece
41	First Branching Arm
411	Cable Connection Aperture
42	Second Branching Arm
421	Cable Connection Aperture
43	Holding part
44	Body Part
441	Body End
45	Body Opening

Claims

1. An electric switch for a household appliance, in particular a cooker, wherein the electric switch is designed to apply different commands to the household appliance through a single control knob of the household appliance, the switch being equipped with a switch group (30) which is placed inside a chamber (10) and whereon circuit members are positioned, wherein at the input of the switch group (30), there are a plurality of input terminals (31) and there are terminal housings (32); wherein the input terminals (31) are placed in said terminal housings (32); wherein the electric switch moreover comprises output terminals (33) whose contact with the input is controlled by a movable contact; wherein said switch output terminals (33) are connectable through electrical cables to the members which are desired to be controlled; wherein on the output terminals (33), there are cable apertures (331) where the cables can be connected through which signals are transferred; wherein the electrical connection between the output terminals (33) and the input terminals (31) is controlled by movable contacts (35); wherein there are tabs which are positioned in a certain arrangement on a switch shaft (20); wherein when the switch shaft (20) is rotated around the own axis thereof, these tabs correspond onto the related movable contact (35), and they make said contact change position, accordingly, it brings the circuit between the input terminals (31) and output terminals (33) to the open or closed position; and wherein the switch is equipped with a branching piece (40) having

- a body (44),
- a terminal holding part (43) which provides connection to a desired output terminal of the switch output terminals (33), and
- at least two branching arms (41, 42) whereon the electrical cables arriving to the related loads are connected in order to multiplex the electrical signal exiting the input terminal (31) of the switch, **characterized in that**,
- the terminal holding part (43) is designed to provide connection in such way that said at least two branching arms (41, 42) are at a higher point than the switch output terminals (33),
- wherein the branching piece (40) is connected on the upper part of the desired output terminal (33), and the first and the second branching arm (41, 42) of the branching piece (40) is at a higher point than the other output terminals (33); wherein since the branching arms (41, 42) are at a higher level, the cables connected to the branching piece (40) are at a higher level than the cables connected to the other output terminals (33) and a contact between the cables is prevented and

- wherein said at least two branching arms (41, 42) are at a higher point than the switch terminals (33) and than the holding part (43) providing connection to these terminals (33).

2. An electric switch according to Claim 1, **characterized in that** said at least two branching arms (41, 42) are in the same plane in the horizontal position and they are at the same height in the vertical position. 5
3. An electric switch according to claim 1 or 2, wherein said branching arms (41, 42) extend at the upward continuation of the holding part (43) or of the body part (44) at a certain angle so as to diverge from each other, where said angle can be narrow angle or wide angle or orthogonal angle. 10
4. An electric switch according to any of the preceding claims, wherein said branching arms (41, 42) are positioned symmetrically to each other. 15
5. An electric switch according to any of the preceding claims, wherein said branching arms (41, 42) are positioned asymmetrically to each other. 20
6. An electric switch according to any of the preceding claims, wherein the body opening (45) between said branching arms (41, 42) has a form similar to a "trapezoid", "isosceles trapezoid", similar to "V", similar to "U", similar to "T" or similar to "L" or similar to a "prismatic" form. 25
7. A household appliance, in particular a cooker, comprising an electric switch according to any of the preceding claims. 30

Patentansprüche

1. Elektrischer Schalter für ein Haushaltsgerät, insbesondere einen Herd, wobei der elektrische Schalter so ausgelegt ist, dass er über einen einzelnen Drehknopf des Haushaltsgeräts verschiedene Befehle an das Haushaltsgerät ausgibt, wobei der Schalter mit einer Schaltergruppe (30) ausgestattet ist, die in einer Kammer (10) angeordnet ist und an der Schaltungselemente positioniert sind, wobei sich am Eingang der Schaltergruppe (30) mehrere Eingangsklemmen (31) und Anschlussklemmengehäuse (32) befinden, wobei die Eingangsklemmen (31) in den Anschlussklemmengehäusen (32) angeordnet sind, wobei der elektrische Schalter darüber hinaus Ausgangsklemmen (33) umfasst, deren Kontakt mit dem Eingang über einen beweglichen Kontakt gesteuert ist, wobei die Schalterausgangsklemmen (33) über elektrische Kabel mit den Elementen verbindbar sind, die gesteuert werden sollen, wobei sich an den 40

Ausgangsklemmen (33) Kabelöffnungen (331) befinden, an die Kabel, über die Signale übertragen werden, angeschlossen werden können, wobei die elektrische Verbindung zwischen den Ausgangsklemmen (33) und den Eingangsklemmen (31) über bewegliche Kontakte (35) gesteuert ist, wobei Streifen vorhanden sind, die in einer bestimmten Anordnung an einer Schalterwelle (20) positioniert sind, wobei diese Streifen, wenn die Schalterwelle (20) um ihre eigene Achse gedreht wird, dem jeweiligen beweglichen Kontakt (35) entsprechen und dafür sorgen, dass der Kontakt seine Position ändert und der Stromkreis zwischen den Eingangsklemmen (31) und den Ausgangsklemmen (33) entsprechend in die geöffnete oder die geschlossene Position gebracht wird, und wobei der Schalter mit einem Verzweigungsstück (40) ausgestattet ist, das Folgendes aufweist:

- einen Hauptteil (44),
- einen Anschlussklemmenhalteteil (43), der für eine Verbindung mit einer gewünschten Ausgangsklemme unter den Schalterausgangsklemmen (33) sorgt, und
- mindestens zwei Verzweigungsarme (41, 42), an die die zu den jeweiligen Verbrauchern führenden elektrischen Kabel angeschlossen sind, damit das von der Eingangsklemme (31) des Schalters abgehende elektrische Signal multiplexiert wird,

dadurch gekennzeichnet, dass

- der Anschlussklemmenhalteteil (43) so ausgelegt ist, dass er auf eine solche Weise für eine Verbindung sorgt, dass sich die mindestens zwei Verzweigungsarme (41, 42) an einer höheren Stelle befinden als die Schalterausgangsklemmen (33),
- wobei das Verzweigungsstück (40) am oberen Teil der gewünschten Ausgangsklemme (33) angeschlossen ist und sich der erste und der zweite Verzweigungsarm (41, 42) des Verzweigungsstücks (40) an einer höheren Stelle befinden als die anderen Ausgangsklemmen (33), wobei sich die an das Verzweigungsstück (40) angeschlossenen Kabel, da sich die Verzweigungsarme (41, 42) auf einer höheren Ebene befinden, auf einer höheren Ebene befinden als die an die anderen Ausgangsklemmen (33) angeschlossenen Kabel und ein Kontakt zwischen den Kabeln verhindert wird, und
- wobei sich die mindestens zwei Verzweigungsarme (41, 42) an einer höheren Stelle befinden als die Schalteranschlussklemmen (33) und der Halteteil (43), der für eine Verbindung mit diesen Anschlussklemmen (33) sorgt.

2. Elektrischer Schalter nach Anspruch 1, **dadurch gekennzeichnet, dass** sich die mindestens zwei Verzweigungsarme (41, 42) in horizontaler Position in der gleichen Ebene und in vertikaler Position in der gleichen Höhe befinden. 5
3. Elektrischer Schalter nach Anspruch 1 oder 2, wobei die Verzweigungsarme (41, 42) an der nach oben führenden Verlängerung des Halteteils (43) oder des Hauptteils (44) in einem bestimmten Winkel so verlaufen, dass sie auseinandergehen, wobei es sich bei dem Winkel um einen spitzen oder einen stumpfen oder einen rechten Winkel handeln kann. 10
4. Elektrischer Schalter nach einem der vorhergehenden Ansprüche, wobei die Verzweigungsarme (41, 42) symmetrisch zueinander positioniert sind. 15
5. Elektrischer Schalter nach einem der vorhergehenden Ansprüche, wobei die Verzweigungsarme (41, 42) asymmetrisch zueinander positioniert sind. 20
6. Elektrischer Schalter nach einem der vorhergehenden Ansprüche, wobei die Hauptteilöffnung (45) zwischen den Verzweigungsarmen (41, 42) eine ähnliche Form wie ein "Trapez", ein "gleichschenkliges Trapez", ein "V", ein "U", ein "T" oder ein "L" oder wie eine "prismatische" Form aufweist. 25
7. Haushaltsgerät, insbesondere Herd, mit einem elektrischen Schalter nach einem der vorhergehenden Ansprüche. 30

Revendications 35

1. Commutateur électrique pour un appareil ménager, en particulier une cuisinière, dans lequel le commutateur électrique est prévu pour appliquer différentes commandes à l'appareil ménager par un seul bouton de commande de l'appareil ménager, le commutateur étant équipé d'un groupe de commutateurs (30) qui est placé à l'intérieur d'une chambre (10) et sur lequel des éléments de circuit sont positionnés, dans lequel l'entrée du groupe de commutateurs (30) comporte une pluralité de bornes d'entrée (31) et des logements de borne (32); dans lequel les bornes d'entrée (31) sont placées dans lesdits logements de borne (32); dans lequel le commutateur électrique comprend en outre des bornes de sortie (33) dont le contact avec l'entrée est contrôlé par un contact mobile; dans lequel lesdites bornes de sortie de commutateur (33) peuvent être connectées par des câbles électriques aux éléments qu'on souhaite contrôler; dans lequel les bornes de sortie (33) comportent des orifices pour câbles (331) où les câbles peuvent être raccordés, par lesquels des signaux sont transférés; dans lequel le raccord électrique entre 40 45 50

les bornes de sortie (33) et les bornes d'entrée (31) est contrôlé par des contacts mobiles (35); dans lequel il existe des languettes positionnés dans une certaine disposition sur un arbre de commutateur (20); dans lequel quand l'arbre de commutateur (20) tourne autour du propre axe de celui-ci, ces languettes correspondent au contact mobile relatif (35), et elles font que ledit contact change de position en fonction, il amène le circuit entre les bornes d'entrée (31) et les bornes de sortie (33) dans la position ouverte ou fermée; et dans lequel le commutateur est équipé d'une pièce de ramification (40) présentant

- un corps (44),
- une pièce de maintien de la borne (43) qui fournit le raccord à une borne de sortie souhaitée des bornes de sortie de commutateur (33), et
- au moins deux bras de ramification (41, 42) sur lesquels les câbles électriques arrivant aux charges relatives sont raccordés afin de multiplexer le signal électrique sortant de la borne d'entrée (31) du commutateur, **caractérisé en ce que**

- la pièce de maintien de la borne (43) est prévue pour fournir un raccord de telle façon que lesdits au moins deux bras de ramification (41, 42) sont à un point plus élevé que les bornes de sortie de commutateur (33),
- dans lequel la pièce de ramification (40) est raccordée sur la partie supérieure de la borne de sortie souhaitée (33), et le premier et le deuxième bras de ramification (41, 42) de la pièce de ramification (40) est situé à un point plus élevé que les autres bornes de sortie (33); dans lequel comme les bras de ramification (41, 42) sont situés à un niveau plus élevé, les câbles raccordés à la pièce de ramification (40) sont à un niveau plus élevé que les câbles raccordés aux autres bornes de sortie (33) et un contact entre les câbles est empêché, et
- dans lequel lesdits au moins deux bras de ramification (41, 42) sont à un point plus élevé que les bornes de commutateur (33) et que la pièce de maintien (43) fournissant la connexion à ces bornes (33).

2. Commutateur électrique selon la revendication 1, **caractérisé en ce que** lesdits au moins deux bras de ramification (41, 42) sont dans le même plan en position horizontale et ils sont à la même hauteur en position verticale.
3. Commutateur électrique selon la revendication 1 ou 2, dans lequel lesdits bras de ramification (41, 42) s'étendent en continuation vers le haut de la pièce de maintien (43) ou de la pièce de corps (44) à un certain angle de manière à diverger l'un par rapport 55

à l'autre, où ledit angle peut être un angle étroit ou un angle large ou un angle orthogonal.

4. Commutateur électrique selon l'une quelconque des revendications précédentes, dans lequel lesdits bras de ramification (41, 42) sont positionnés symétriquement l'un par rapport à l'autre. 5
5. Commutateur électrique selon l'une quelconque des revendications précédentes, dans lequel lesdits bras de ramification (41, 42) sont positionnés asymétriquement l'un par rapport à l'autre. 10
6. Commutateur électrique selon l'une quelconque des revendications précédentes, dans lequel l'orifice de corps (45) entre lesdits bras de ramification (41, 42) présente une forme "trapézoïdale", "trapézoïdale" isocèle, une forme similaire à un "V", similaire à un "U", similaire à un "T" ou similaire à un "L" ou similaire à une forme "prismatique". 15 20
7. Appareil ménager, en particulier, cuisinière, comprenant un commutateur électrique selon l'une quelconque des revendications précédentes. 25

30

35

40

45

50

55

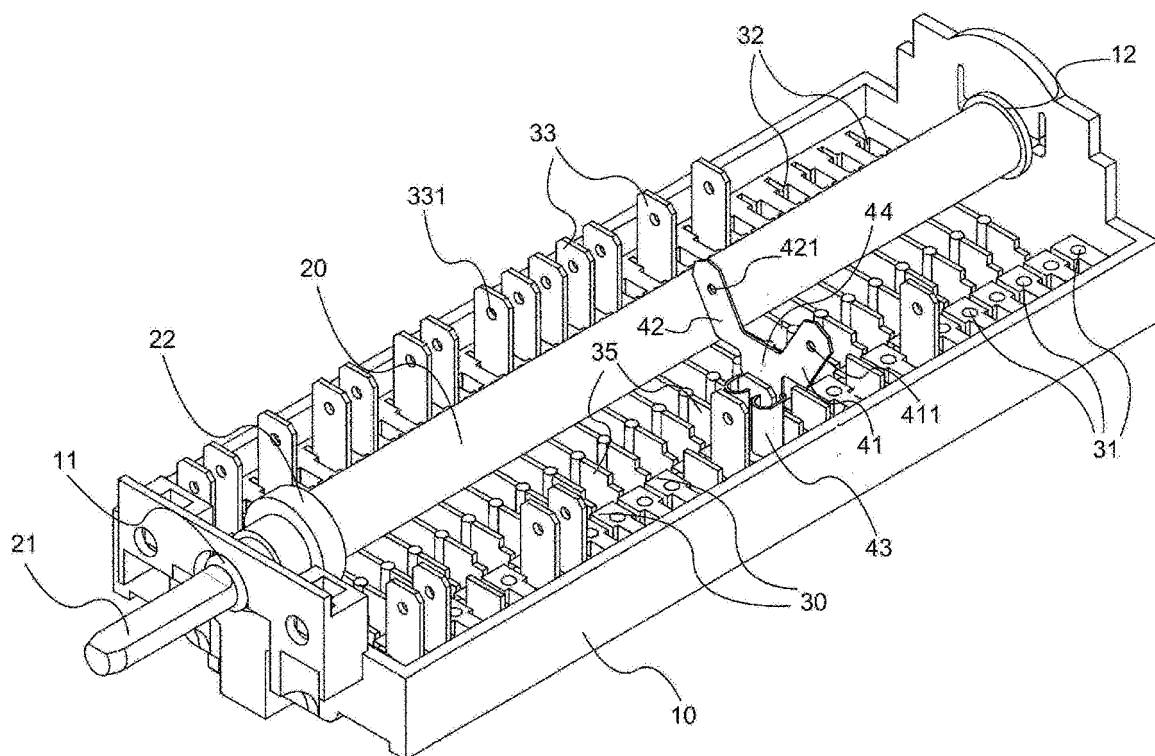


FIG. 1

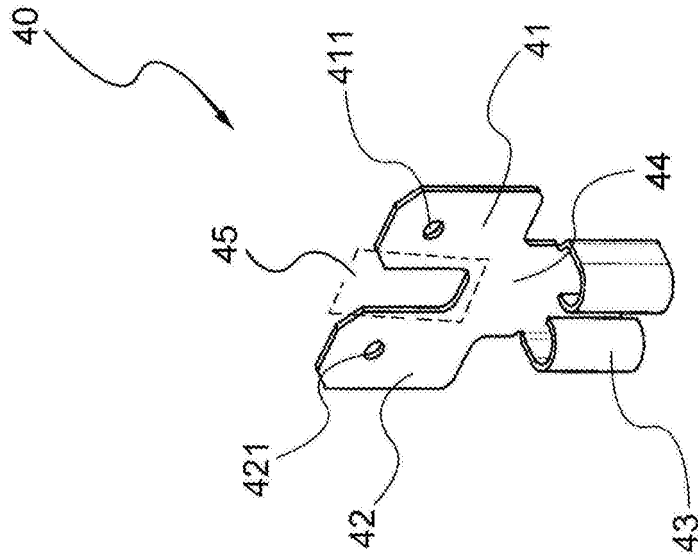


FIG. 2b

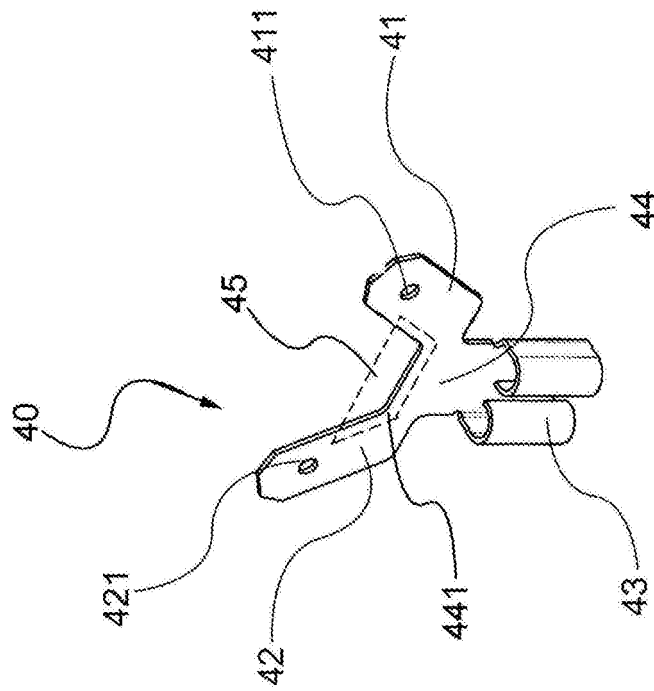


FIG. 2a

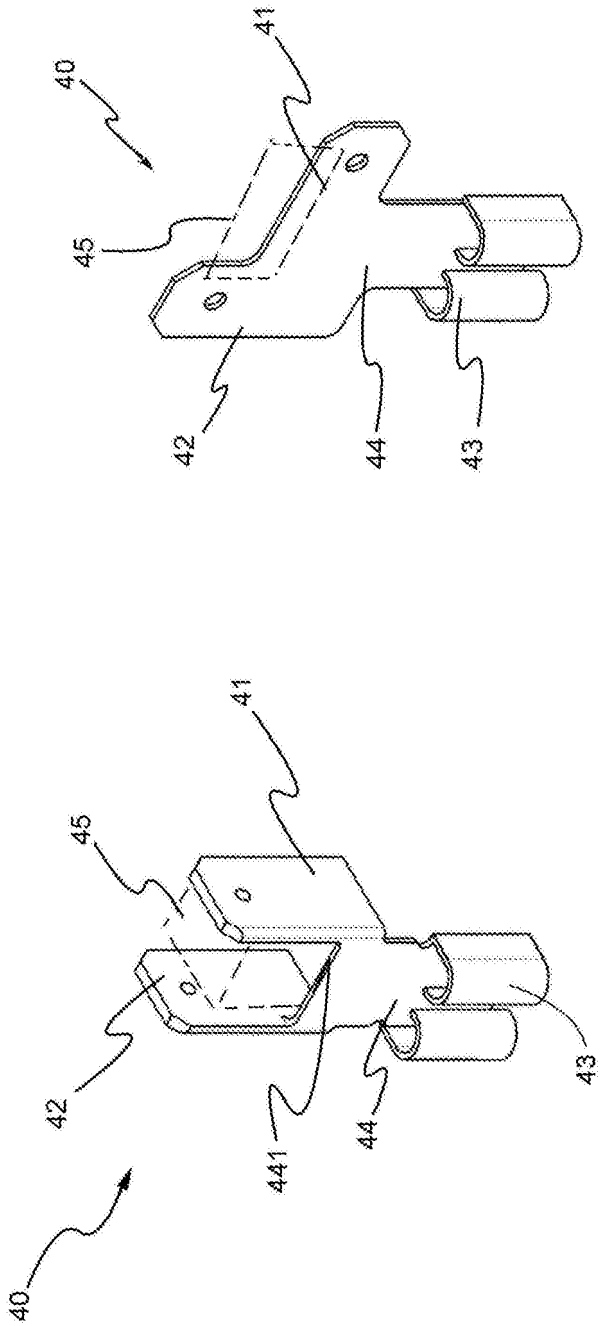


FIG. 2d

FIG. 2c

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

- WO 2007013023 A2 [0004]
- US 4762500 A [0005]
- GB 2129630 A [0006]
- DE 10236114 A1 [0007]