

(12) STANDARD PATENT APPLICATION (11) Application No. AU 2013204096 A1
(19) AUSTRALIAN PATENT OFFICE

(54) Title
Barbeque with Rotating Grill

(51) International Patent Classification(s)
A47J 37/07 (2006.01)

(21) Application No: **2013204096** (22) Date of Filing: **2013.04.11**

(30) Priority Data

(31) Number	(32) Date	(33) Country
2012903205	2012.07.27	AU

(43) Publication Date: **2014.02.13**

(43) Publication Journal Date: **2014.02.13**

(71) Applicant(s)
Graeme John Ferguson

(72) Inventor(s)
Ferguson, Graeme John

(74) Agent / Attorney
Armour IP, PO Box 3099, Broadway Nedlands, WA, 6009

Abstract

2013204096 11 Apr 2013

5 A barbecue (10) including first and second side members (22, 24) located adjacent an upper surface (14). A plurality of elongate members (26) are supported between the first and second side members (22, 24) and a plurality of rotatable members (28) are supported from the first side member (22). A first connector is provided at a first end of each of the rotatable members (28) releasably engageable with a second connector provided on a first end of each of the elongate members (26) such that that rotation of the rotatable

10 members (28) causes rotation of the elongate members (26).

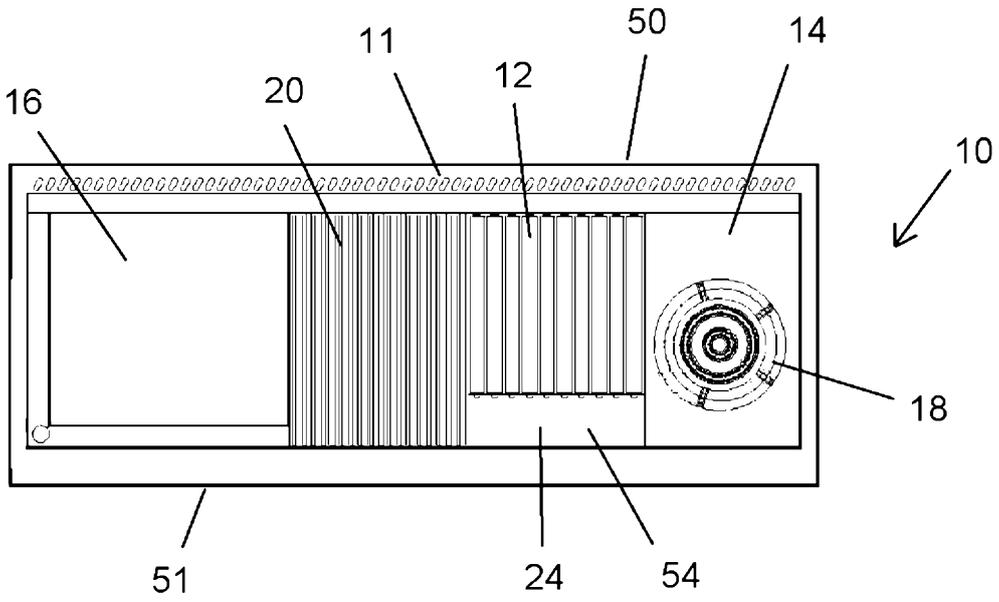


Fig 1a

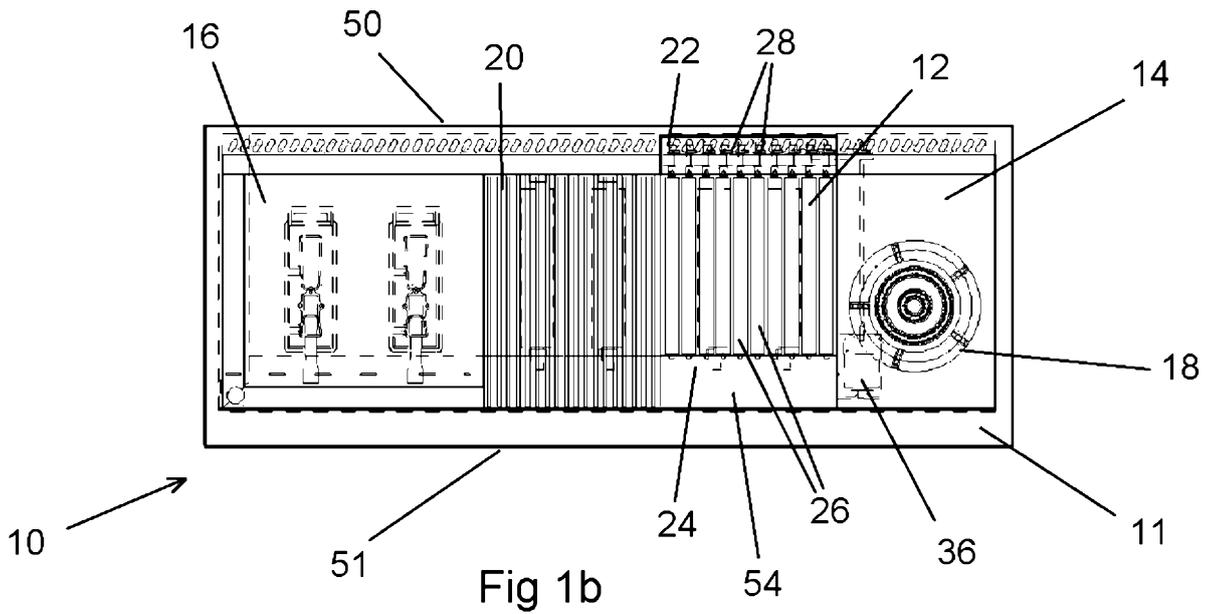


Fig 1b

AUSTRALIA

Patents Act 1990

COMPLETE SPECIFICATION

Invention title:

“Barbeque with Rotating Grill”

Applicant:

Graeme John Ferguson

Associated provisional applications:

Number 2012903205 filed 27 July 2013

The following statement is a full description of the invention, including the best method of performing it known to me:

“Barbeque with Rotating Grill”

Field of the Invention

[001] The present invention relates to barbeque having a grill with rotating members to allow even cooking of food items placed on the grill.

Background to the Invention

[002] The use of barbeques for outdoor cooking is becoming increasingly popular. With the increase in popularity, there has been an increase in the availability of different barbeque designs having varied configurations and functionality.

[003] The present invention relates to a barbeque design incorporating a rotating grill and to the arrangement of the rotating grill. The rotating grill comprises an improved design allowing for efficient cooking and operation in a number of cooking configurations.

Summary of the Invention

[004] According to one aspect of the present invention there is provided a barbeque comprising:

first and second side members located adjacent an upper surface of the barbeque;

a plurality of elongate members supported between the first and second side members above a cooking element;

a plurality of rotatable members supported from the first side member;

a first connector provided at a first end of each of the rotatable members; and

a second connector provided on a first end of each of the elongate members;

wherein the first connector of each rotatable member is releasably engageable with the second connector on one of the elongate members such

that the elongate member may be engaged with the rotatable member when supported between the first and second side members such that rotation of the rotatable members causes rotation of the elongate members.

[005] Preferably the first connectors each comprise an opening and the second connectors each comprise an end portion of the elongate member having a shape complementary to that of the opening such that the end portion may be received in the opening.

[006] In a preferred embodiment the openings have a triangular shape and the end portions have a corresponding triangular shape to be received in the openings.

[007] Preferably each rotatable member comprises a cog located on a side of the first side member remote from the second side member and a shaft extending through an aperture in the first side member.

[008] In a preferred embodiment, the cog of the rotatable member is secured to a second end of the shaft and the first end of the shaft includes a widened distal end in which is provided the opening.

[009] Preferably the second side member includes a plurality of recesses in an upper edge thereof such that second ends of the elongate members may be received in the recesses for rotation therein.

[010] In one embodiment, the first side member is located parallel to a rear edge of the barbecue adjacent a raised edge frame and the second side member is located parallel to a front edge of the barbecue offset from the edge frame such that a recessed region is defined between the second side member and the edge frame. Preferably each of the cogs is located between the first side member and the rear edge.

[011] In one embodiment, a drive motor is provided to rotate a drive chain which passes around the each of the cogs such that operation of the drive motor rotates each of the elongate members.

[012] Preferably a drive shaft connects the drive motor to the drive chain and the drive shaft is located below the first and second side members and offset away from a longitudinal end of the first and second side members such that the drive chain rotates in a vertical plane adjacent the rear edge of the barbeque.

[013] In a preferred embodiment, the elongate members include a widened portion between the first and second ends thereof such that the elongate members act as rollers.

[014] In a preferred embodiment, the elongate members each comprise a relatively thin shaft to act as a skewer. Preferably the elongate members include handles at the second ends thereof located in use in the recessed region between the second side member and the edge frame.

Brief Description of the Drawings

[015] The invention will now be described, by way of example, with reference to the following drawings in which:

[016] Figure 1a is a top view of a barbeque in accordance with the present invention;

[017] Figure 1b is a top view of the barbeque of Figure 1a showing internal features of the barbeque in dashed lines;

[018] Figure 2a is a front view of the barbeque of Figure 1 showing internal features;

[019] Figure 2b is a side cross sectional view of the barbeque of Figure 2a through the line W-W; and

[020] Figure 3 is an exploded view of the rotating grill of the barbeque of Figure 1.

Detailed Description of Preferred Embodiments

[021] Referring to Figures, there is shown a barbeque 10 incorporating a rotating grill 12. The barbeque 10 is of a generally standard configuration

having an upper surface 14 on which is provided a plurality of cooking areas. The upper surface 14 is bound on sides thereof by a raised edge frame 11.

[022] Each cooking area includes a cooking surface located above a cooking element for supplying heat to the cooking surface. In the embodiment shown, the barbeque 10 includes a cooking plate 16 adjacent a first end, a wok burner 18 adjacent a second end, a fixed grill 20 adjacent the cooking plate 16 and the rotating grill 12 adjacent the wok burner 18. It will be appreciated though that other configurations may be possible including other types of cooking areas.

[023] The rotating grill 12 comprises a first side member 22 located adjacent a first side of the barbeque 10 and a second side member 24 located adjacent a second opposed side of the barbeque 10. Each of the first and second side members comprises an elongate member secured adjacent the upper surface 14 of the barbeque 10. A plurality of elongate members 26 are provided to be supported between the first and second side members 22 and 24. The elongate members 26 form the grill cooking surface on which items of food are to be placed. A cooking element, such as a gas burner, is therefore located between the first and second side members 22 and 24 below the elongate members 26.

[024] The first side member 22 includes a plurality of rotatable members 28 supported along the length thereof at regular intervals. In the embodiment shown, each rotatable member 28 comprises a cog 30 located on a side of the first side member 22 remote from the second side member 24 and a shaft 32.

[025] Each shaft 32 extends through an aperture 34 provided in the first side member 22 such that a first end thereof is located on a side of the first side member adjacent the second side member 24 and a second end thereof is located on an opposite second side of the first side member 22. The cog 30 of the rotatable member 28 is secured to the second end of the shaft 32.

[026] The rotating grill 12 includes a drive motor 36 which is provided to connect to and rotate each of the cogs 30. The drive motor 36 includes a drive

shaft 38 having a drive cog 40 thereon. A drive chain 42 is provided to pass around the drive cog 40 and each of the cogs 30. Rotation of the drive shaft 38 by the drive motor 36 thereby rotates each of the cogs 30 and shafts 32 simultaneously.

[027] The first side member 22 is located parallel to a rear edge 50 of the barbeque 10 adjacent the edge frame 11. The second side member 24 is located parallel to a front edge 51 of the barbeque 10. The second side member 24 is located offset from the edge frame 11 such that a recessed region 54 is defined between the second side member 24 and the edge frame 11. The elongate members 26 extend perpendicular to the first and second side members 22 and 24 and therefore perpendicular to the rear and front edges 50 and 51 as can be seen in the Figures.

[028] Each of the cogs 30 are located between the first side member 22 and the rear edge 50. The drive shaft 38 is located below the first and second side members 22 and 24 and offset away from a longitudinal end of the first and second side members 22 and 24 as can be seen in Figure 3. A rear end of the drive shaft 38 is located adjacent the rear edge 50 of the barbeque 10 such that the drive chain 42 rotates in a vertical plane adjacent the rear edge 50. The drive shaft 38 extends parallel to the elongate members 26 such that the drive motor 36 is located adjacent the front edge 51 of the barbeque 10.

[029] The shafts 32 of each of the rotatable members 28 includes a first connector at the first end thereof provided to releasably engage with a second connector provided on a first end of the elongate member 26. In the embodiment shown, a widened distal end is provided on the shaft 32 and the first connector comprises an opening 44 therein. The second connectors each comprise an end portion 46 of the elongate member 26 having a shape complementary to the opening 44 such that the end portion 46 may be received in the opening 44. In the embodiment shown, the openings 44 have a triangular shape and the end portions 46 have a corresponding triangular shape to be received in the openings 44.

[030] The second side member 24 includes a plurality of recesses 46 in an upper edge thereof such that second ends of the elongate members 26 may be received in the recesses 46 for rotation therein.

[031] The elongate members 26 may be provided with varying shapes between the first and second ends thereof. In Figure 2 there is shown two configurations of elongate members 26. A first configuration, the elongate member 26' includes a widened portion between the first and second ends thereof such that minimal gap is provided between adjacent elongate members 26'. Each of the elongate members 26' therefore acts as a roller. Food items such as sausages may be placed on the rollers and will be rotated by the elongate members 26' in use.

[032] A second configuration of elongate member 26'' comprises a relatively thin shaft. The elongate members 26'' may therefore be used as skewers. Items of food to be cooked can be threaded onto the elongate members 26'' and are then rotated for cooking in use. The elongate members 26'' include also handles 48 at the second ends thereof such that elongate members 26'' may be removed by the handles 48 once the food items are cooked. The handles 48 are located in use in the recessed region 54 located between the second side member 24 and the edge frame 11.

The arrangement of the rotating grill 12 thereby allows the configuration to be easily changed by simply sliding out elongate members 26 of one configuration and inserting elongate members 26 of a different configuration to engage with the rotatable members 28.

[033] It will be readily apparent to persons skilled in the relevant arts that various modifications and improvements may be made to the foregoing embodiments, in addition to those already described, without departing from the basic inventive concepts of the present invention.

The claims defining the invention are as follows:

1. A barbeque comprising:
first and second side members located adjacent an upper surface of the barbeque;
a plurality of elongate members supported between the first and second side members above a cooking element;
a plurality of rotatable members supported from the first side member;
a first connector provided at a first end of each of the rotatable members; and
a second connector provided on a first end of each of the elongate members;
wherein the first connector of each rotatable member is releasably engageable with the second connector on one of the elongate members such that the elongate member may be engaged with the rotatable member when supported between the first and second side members such that rotation of the rotatable members causes rotation of the elongate members.
2. A barbeque in accordance with claim 1, wherein the first connectors each comprise an opening and the second connectors each comprise an end portion of the elongate member having a shape complementary to that of the opening such that the end portion may be received in the opening.
3. A barbeque in accordance with claim 2, wherein the openings have a triangular shape and the end portions have a corresponding triangular shape to be received in the openings.
4. A barbeque in accordance with any one of the preceding claims, wherein each rotatable member comprises a cog located on a side of the first side member remote from the second side member and a shaft extending through an aperture in the first side member.
5. A barbeque in accordance with claim 4, wherein the cog of the rotatable member is secured to a second end of the shaft and the first end of the shaft includes a widened distal end in which is provided the opening.

6. A barbeque in accordance with any one the preceding claims wherein the second side member includes a plurality of recesses in an upper edge thereof such that second ends of the elongate members may be received in the recesses for rotation therein.
7. A barbeque in accordance with any one of the preceding claims, wherein the first side member is located parallel to a rear edge of the barbeque adjacent a raised edge frame and the second side member is located parallel to a front edge of the barbeque offset from the edge frame such that a recessed region is defined between the second side member and the edge frame.
8. A barbeque in accordance with claim 7, wherein each of the cogs is located between the first side member and the rear edge.
9. A barbeque in accordance with claim 8, wherein a drive motor is provided to rotate a drive chain which passes around the each of the cogs such that operation of the drive motor rotates each of the elongate members.
10. A barbeque in accordance with claim 9, wherein a drive shaft connects the drive motor to the drive chain and the drive shaft is located below the first and second side members and offset away from a longitudinal end of the first and second side members such that the drive chain rotates in a vertical plane adjacent the rear edge of the barbeque.
11. A barbeque in accordance with any one of the preceding claims, wherein, the elongate members include a widened portion between the first and second ends thereof such that the elongate members act as rollers.
12. A barbeque in accordance with any one of claims 1 to 10, wherein the elongate members each comprise a relatively thin shaft to act as a skewer.
13. A barbeque in accordance with claim 12, wherein the elongate members include handles at the second ends thereof located in use in the recessed region between the second side member and the edge frame.

14. A barbeque substantially as hereinbefore described with reference to the accompanying drawings

Graeme John Ferguson
by his Patent Attorneys
Armour IP

2013204096 11 Apr 2013

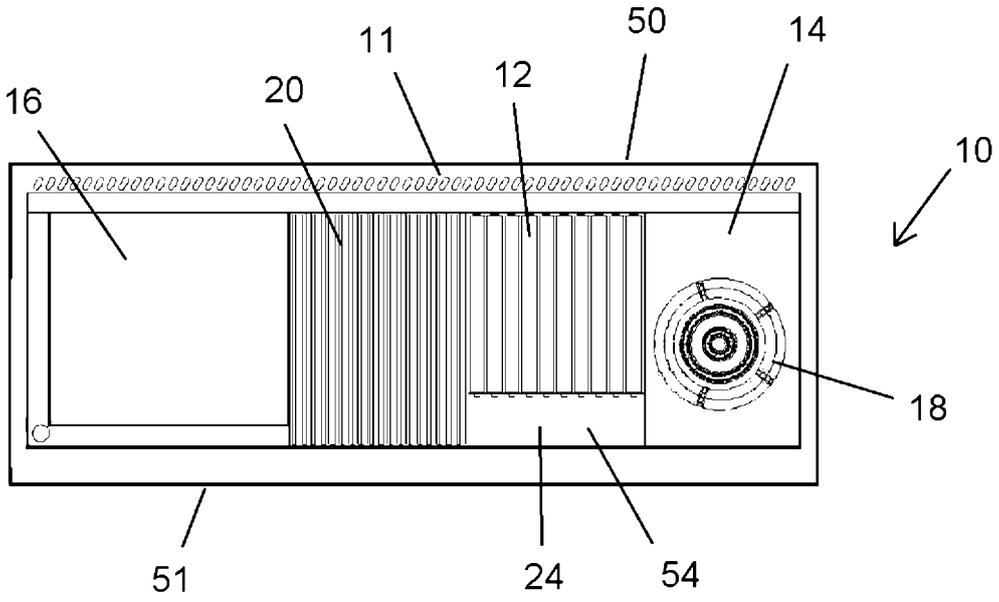


Fig 1a

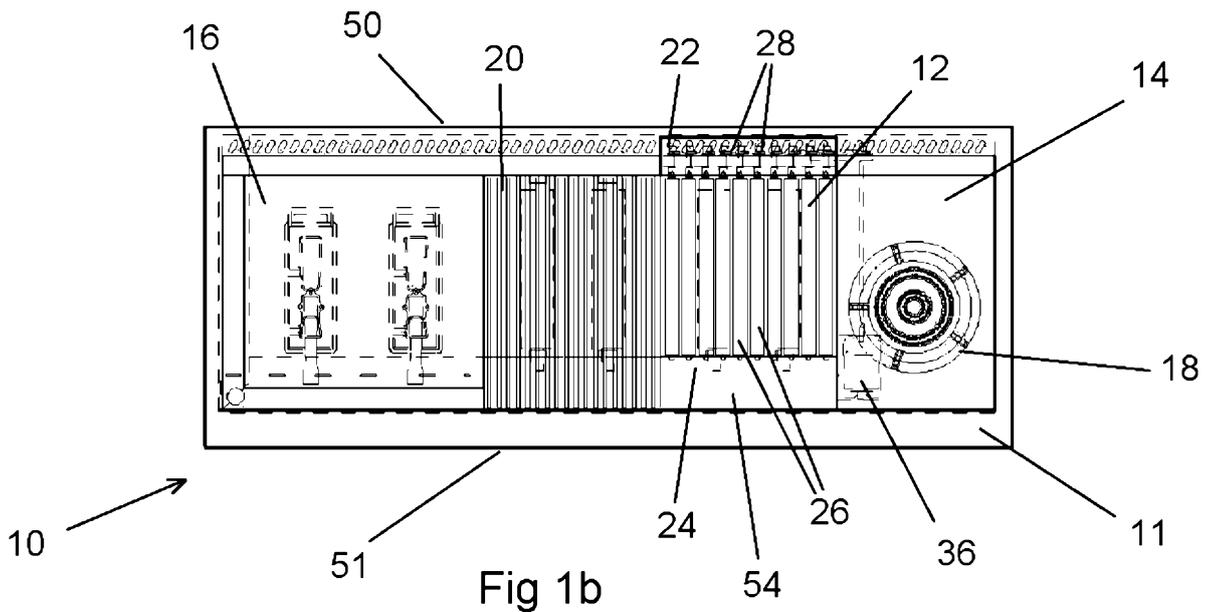


Fig 1b

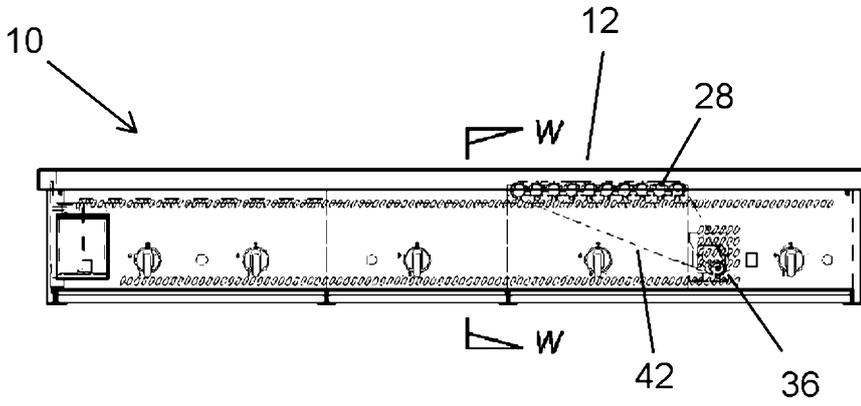


Fig 2a

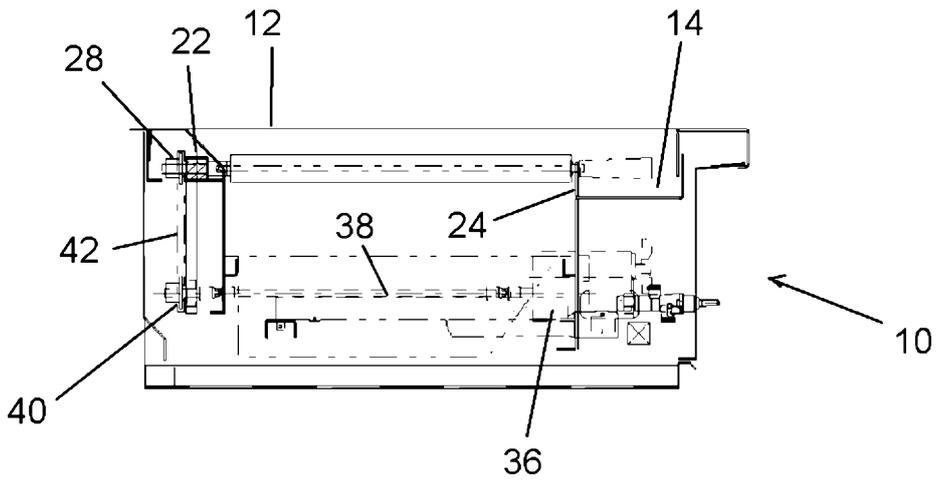


Fig 2b

3/3

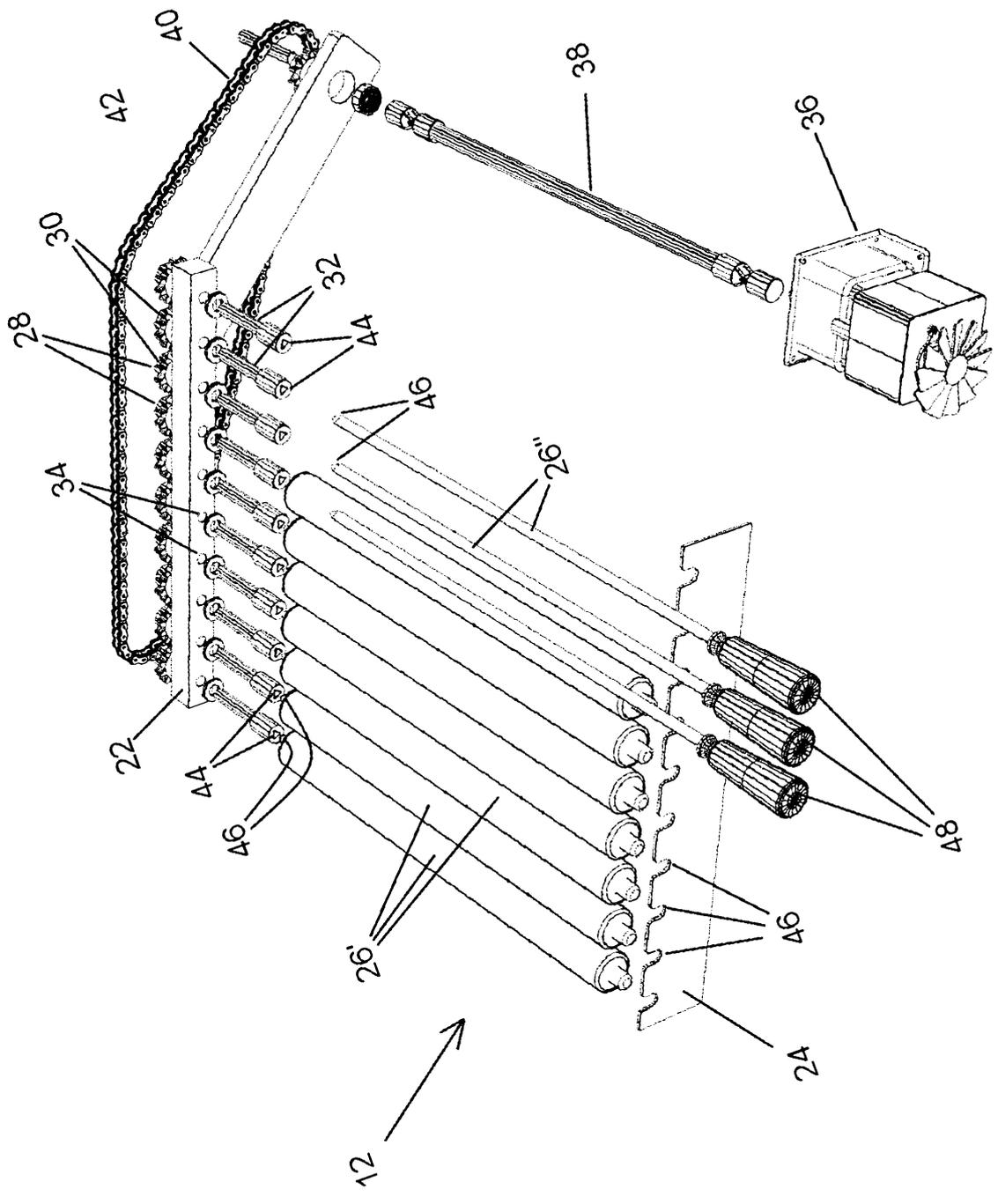


Fig 3