

[54] **KITCHEN RANGE WITH FOLDING
HEATER UNITS**

[76] Inventor: **Anthony J. Giannini**, 530 Wayne
Dr., King of Prussia, Pa. 19406

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[58] Field of Search ... 219/403, 404, 444, 445, 446,
219/447, 478, 479, 525, 539; 99/337, 378

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Primary Examiner—Volodymyr Y. Mayewsky

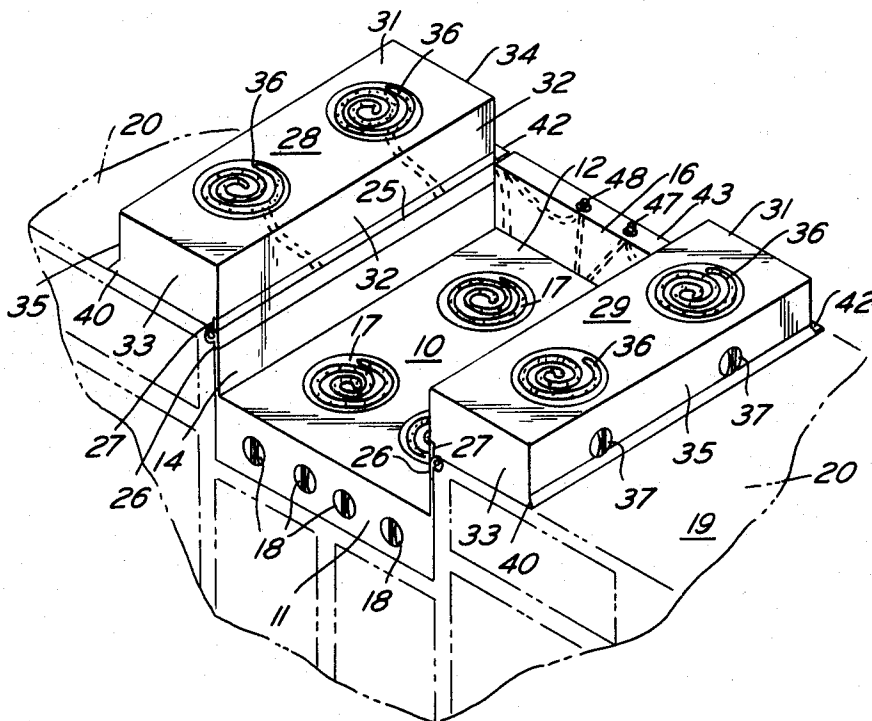
Attorney, Agent, or Firm—Zachary T. Wobensmith, II

[57]

ABSTRACT

A kitchen range is disclosed which includes a center section with a plurality of fixed electrical resistance heaters and side electrical resistance heater units hingedly connected to the center section for outward disposition for increased capacity and storable thereon in out of use position providing a flat work surface, with provisions for deactivation of all the heaters when the movable units are stored.

9 Claims, 6 Drawing Figures



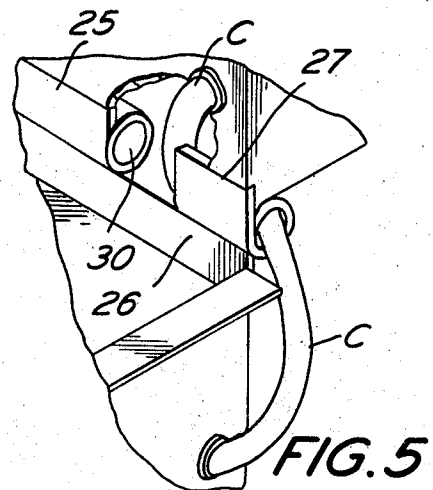
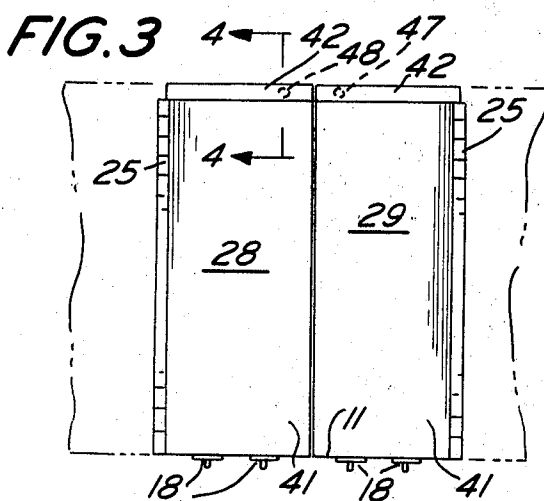
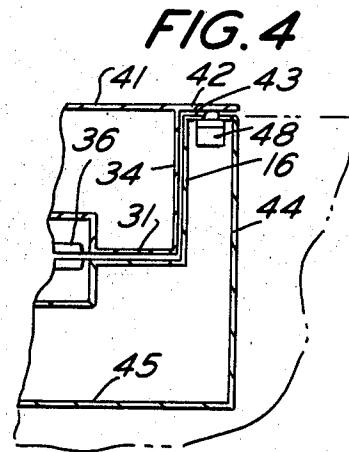
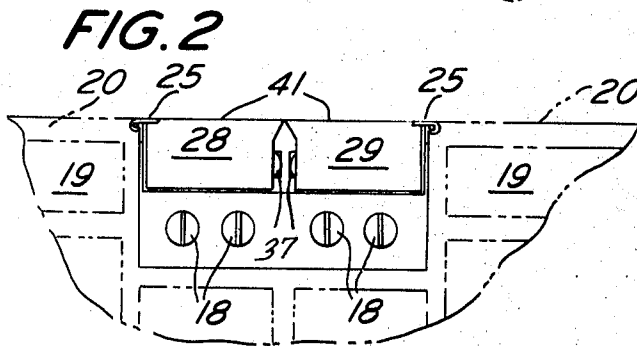
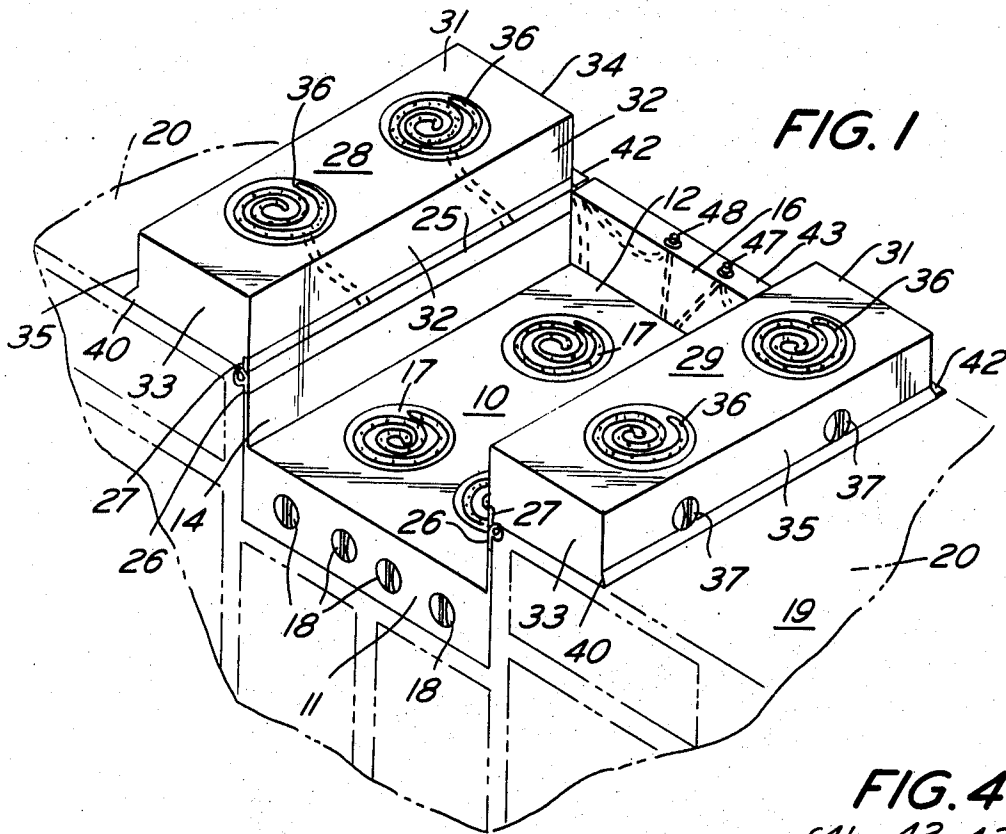
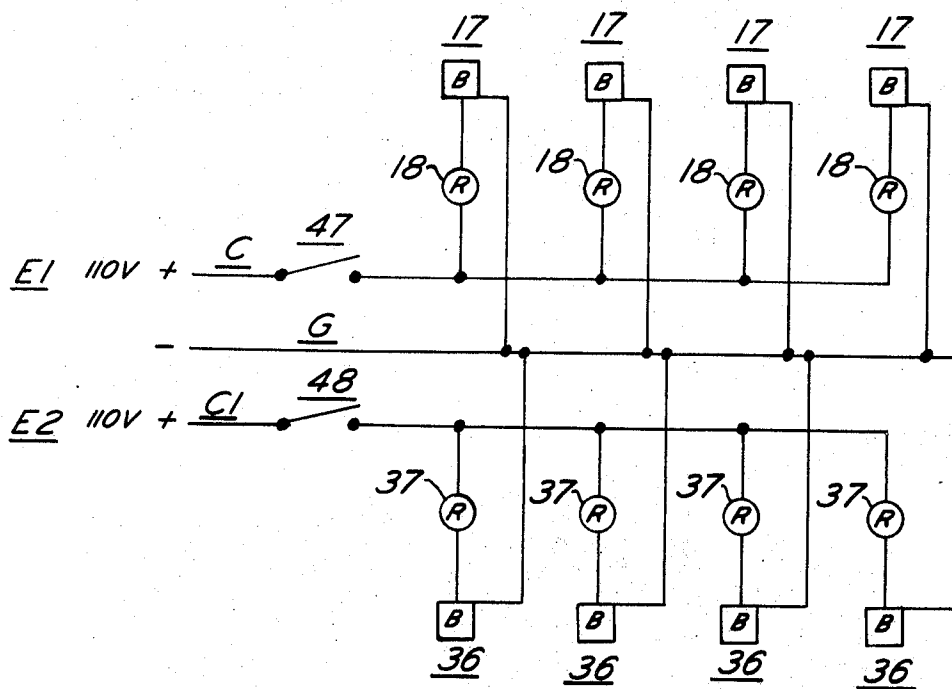


FIG. 6



KITCHEN RANGE WITH FOLDING HEATER UNITS

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to a kitchen range with a center section having fixed heaters and with side heater units hingedly connected to the center section wherein the movable heater units when stored on top of the fixed heaters provide a flat work surface and cause deactivation of all the heaters.

2. Description of the Prior Art

There has been considerable interest in developing kitchen ranges wherein a greater number of heaters are provided than presently available without increasing the size of the range and without decreasing the counter top work surface.

In the U.S. Pat. to Denlinger, No. 2,850,614, heater panel supports are provided which fold up from a horizontal position to a vertical position which causes the electrical current to be disconnected.

The U.S. Pat. to Fletcher, No. 2,004,437, shows the use of hinged wing heaters that fold up into the main body of the unit for storage.

The U.S. Pat. to Brentrup, No. 3,121,782, shows a stove with four heaters, two of which are fixed and two of which are hinged so that they may be folded out forwardly to a flat position.

The U.S. Pat. to Chambers, No. 3,023,747, illustrates a gas stove in which burner units are hinged to swing from a horizontal to a vertical position wherein the units are recessed.

The U.S. Pat. to Smith, No. 3,051,819, shows provisions for storage of a heater panel wherein it slides into a cabinet and the electrical current to the panel is thereby cut off.

None of the previously available structures shows the unique construction of my invention wherein there are provided fixed centrally located heaters with hinged side mounted heater units which can be stored on top of the fixed heaters, which storage cuts off electricity to all the heater units and provides a flat top work surface.

SUMMARY OF THE INVENTION

In accordance with the invention a kitchen range is provided which includes a plurality of center section carried fixed heaters and with two side heater units hingedly connected to either side of the center section, capable of folding for storage so that the side heater units cover the fixed heaters providing a flat work surface with automatic deactivation of the electric circuits to all the heaters.

The principal object of the invention is to provide a kitchen range which can include a large number of heaters in a compact unit.

A further object of the invention is to provide a kitchen range wherein a flat top work surface is provided when the movable heater units are stored.

A further object of the invention is to provide a kitchen range wherein the heaters are automatically deactivated upon folding of the side heater units for storage.

A further object of the invention is to provide a kitchen range of the character aforesaid which can be

used with conventional kitchen cabinets and counters.

Other objects and advantageous features of the invention will be apparent from the description and claims.

DESCRIPTION OF THE DRAWINGS

The nature and characteristic features of the invention will be more readily understood from the following description taken in conjunction with the accompanying drawings forming part hereof, in which:

FIG. 1 is a perspective view of a kitchen range in accordance with the invention showing the heaters in position for use;

FIG. 2 is a front elevational view of the range of FIG. 1 with the side heater units in stored position;

FIG. 3 is a top view of the kitchen range as shown in FIG. 2;

FIG. 4 is a vertical sectional view taken approximately on the line 4—4 of FIG. 3;

FIG. 5 is a rear perspective view in partial section illustrating the details of the side hinged heater unit connectors and the placement of the range electrical cables; and

FIG. 6 is a diagrammatic view of the electrical circuitry of the invention.

It should, of course, be understood that the description and drawings herein are illustrative merely and that various modifications and changes can be made in the structure disclosed without departing from the spirit of the invention.

Like numerals refer to like parts throughout the several views.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now more particularly to the drawings, the kitchen range of the present invention includes a box frame 10 having a vertical front control panel 11, a horizontal top panel 12, vertically upwardly extending side panels 14 and 15, and a vertical rear panel 16 connected to the top panel 12 and the side panels 14 and 15.

The top panel 12 has four coil type heaters 17 of conventional type mounted in it. The heaters 17 are illustrated as being of the electrical resistance heater type and are provided with control switches 18 mounted in the front panel 11. A different number of heaters 17 can be provided in the panel 11 as space permits and/or as desired.

The kitchen range is shown as being recess mounted in the top of a row of typical base kitchen cabinets 19 illustrated in phantom with the top of the side panels 14 and 15 and the rear panel 16 terminating slightly below the top surface 20 of the cabinets 19.

Hinges 25 are connected to each of the side panels 14 and 15 and extend therealong from front to rear.

The hinges 25 have leaf elements 26 connected to the side panels 14 and 15 and leaf elements 27 connected to side heater units 28 and 29. The elements 26 and 27 which are meshed together to form the hinges 25 provide a hollow central portion 30 for carrying electrical supply cables C to the side heater units.

The side heater units 28 and 29 which are of rectangular hollow box-like construction each has a bottom plate 31, a left side plate 32, front and rear plates 33 and 34, and a control carrying side plate 35. The bot-

tom plates 31 are illustrated with two heaters 36 mounted therein, however a different number of heaters could be included if desired.

The heaters 36 are illustrated as being of the conventional coiled electrical resistance heater type with a control switch 37 for each heater mounted in the side plate 35.

The side plates 32 each has an outwardly extending portion 40 which is joined to the top plate 41 so that a substantially continuous flat top surface level with the top 20 of cabinets 19 is provided by the top plates 41 when the side heater units 28 and 29 are stored as shown in FIG. 2.

The top plates 41 each has a rear flange 42 which extends above the rear plate 34 in stored position. A horizontal plate 43 is joined to the rear plate 34 and to a vertical plate 44 which is secured to the bottom plate 45 of the range. Switches 47 and 48 of conventional push button type are provided mounted in the plates 43.

The circuit diagram for the range is shown in FIG. 6 and includes a source of electrical energy with positive leads E and E1 which preferably are each of 115 volts AC and a common ground G, connected to the heaters 17 and 36.

The source E has a conductor C connected thereto and to the control switches 18 of the fixed heaters 17 with the switch 47 interposed therebetween for deactivation upon folding of the heater units 28 and 29 onto the central 17 and contact by the flange 42 with the switch 47.

The source E1 has a conductor C1 connected thereto and to the control switches 37 of heaters 36 by way of the hollow portion 30 as shown in FIGS. 1 and 5. The switch 48 is interposed between the switches 37 and the source E1 for deactivation of the movable heaters 36 by contact of the flange 42 with switch 48 upon folding of the units 28 and 29 for storage.

It will thus be seen that apparatus has been provided with which the objects of the invention are achieved.

I claim:

1. A kitchen range which comprises a frame, said frame having a fixed horizontal top panel, at least one fixed upright side panel extending upwardly from said top panel and a fixed horizontal frame portion offset from said top panel, at least one electrical resistance type heater carried in said top panel, at least one side heater unit hingedly connected to said side panel and movable to a horizontal position sidewise and supported by said horizontal

frame portion with respect to said top panel and to a horizontal position overlapping said top panel for storage,

said side heater unit having at least one heater carried thereby and exposed for use in said first mentioned horizontal position, electrical supply connections connected to a source of electricity and to said heaters, and control members connected to said supply connections for controlling the activation of said heaters.

2. A kitchen range as defined in claim 1 in which circuit control members are provided for rendering at least some of said heaters inactive when said side heater unit is in storage position.

3. A kitchen range as defined in claim 1 in which an additional fixed upright side panel is provided, spaced from said first mentioned side panel, and extending upwardly from said top panel, an additional fixed horizontal frame portion is provided spaced from said first mentioned frame portion,

an additional side heater unit is provided hingedly connected to said additional side panel for support by said additional frame portion and at least one electrical resistance type heater is carried by said additional side heater unit.

4. A kitchen range as defined in claim 3 in which said side heater units in storage position substantially cover said top panel and provide a work surface spaced thereabove.

5. A kitchen range as defined in claim 3 in which circuit control members are provided for rendering the heaters on said side heater units inactive in the storage positions of said side heater units.

6. A kitchen range as defined in claim 3 in which circuit control members are provided for rendering all said heaters ineffective in the storage positions of said heater units.

7. A kitchen range as defined in claim 1 in which said frame has a rear upright panel, and said side heater unit has a portion engaging said rear panel in the storage position of said side heater unit.

8. A kitchen range as defined in claim 1 in which said frame has a front panel on which heater control switches are carried.

9. A kitchen range as defined in claim 1 in which said side heater unit has a side wall portion with a heater control switch carried thereby which is inaccessible when said side heater unit is in a storage position.

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