

(12) **UK Patent Application** (19) **GB** (11) **2 407 860** (13) **A**

(43) Date of A Publication **11.05.2005**

(21) Application No: **0316136.1**
(22) Date of Filing: **10.07.2003**

(71) Applicant(s):
Susan Ann Birkby
31 Braeburn Way, Kings Hill,
WEST MALLING, Kent, ME19 4BN,
United Kingdom

(72) Inventor(s):
Susan Ann Birkby

(74) Agent and/or Address for Service:
Susan Ann Birkby
31 Braeburn Way, Kings Hill,
WEST MALLING, Kent, ME19 4BN,
United Kingdom

(51) INT CL⁷:
D06F 58/10

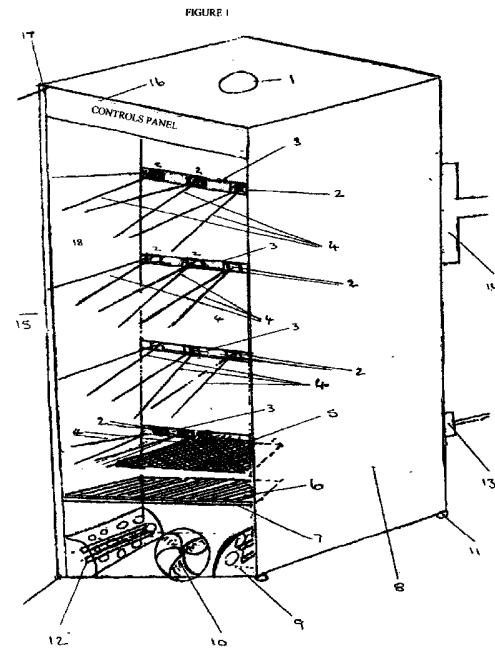
(52) UK CL (Edition X):
F4G GECA

(56) Documents Cited:
GB 2259356 A **GB 2172975 A**
GB 1136171 A **US 5755040 A**
US 4625432 A **US 3811198 A**

(58) Field of Search:
UK CL (Edition W) **F4G**
Other: **EPODOC, JAPIO, WPI**

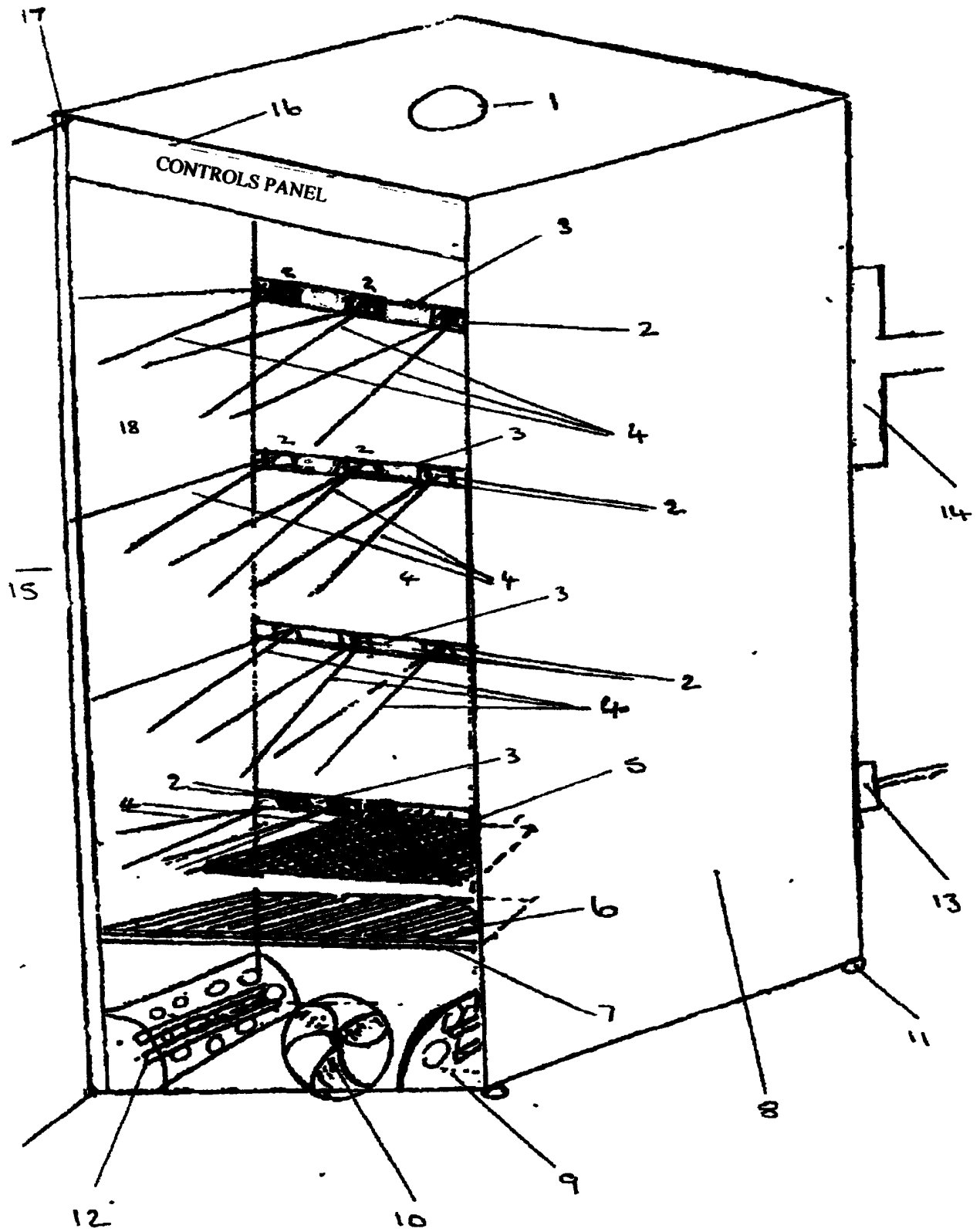
(54) Abstract Title: **Heated clothes drying cabinet**

(57) A heated drying cabinet has rods 4 and shelves 5 to hang and lay wet clothes or fabrics. Heating is from two heating elements 12 with perforated covers 9 on either side of the base of the cabinet below a mesh safety floor 7. The elements 12 can be heated with gas, electricity or by attachment to a central heating system, and a fan 10 may be provided. The cabinet may have extraction direct to an outside wall or a condenser attached. A control panel (fig 2) has a delayed timer, colour-coded temperature dial, clock, temperature gauge and door releases, and controls the cabinet to a selected temperature for a selected time. A final cooling period may be provided by the heating/timing controls. The rods (fig 3) may be movable (eg. with a ball joint), and may be detached. The cabinet may be free standing or integrated into a kitchen or utility room.

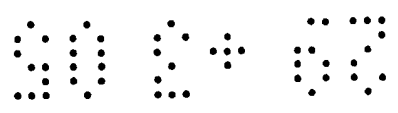


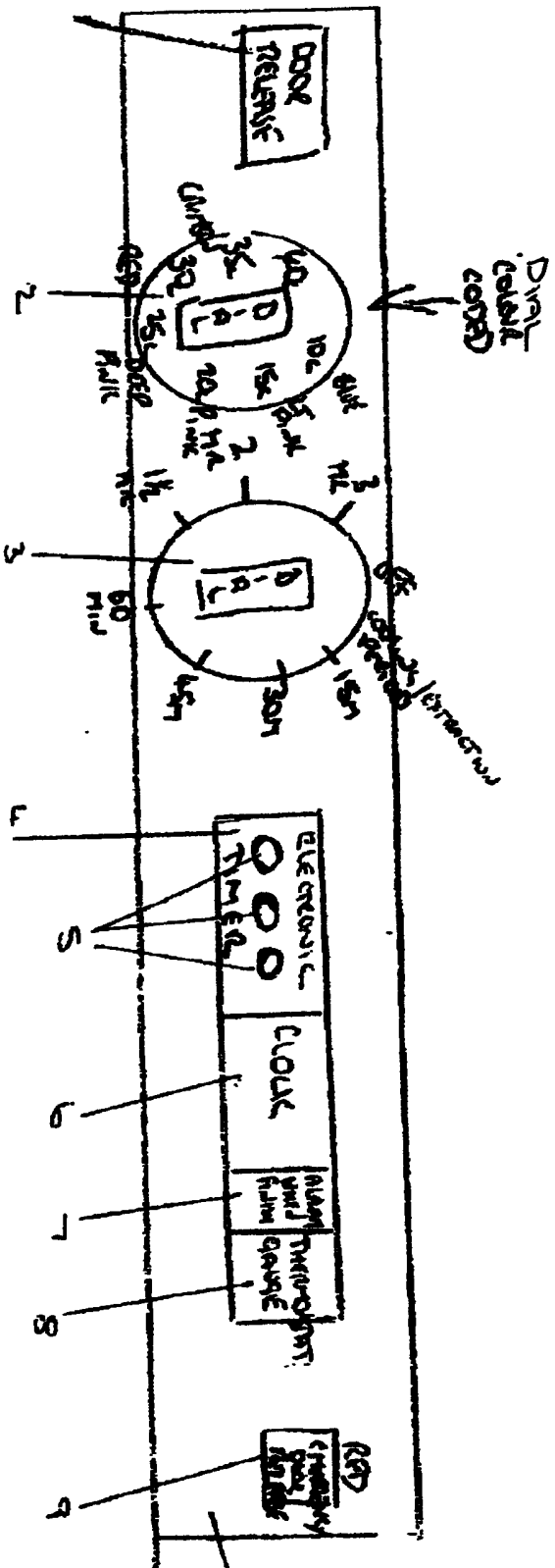
GB 2 407 860 A

FIGURE 1



DRIVING CABINET SI





COLOUR CODED CONTROL PANEL

FIGURE 2

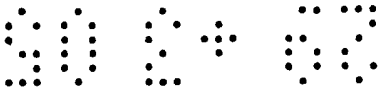
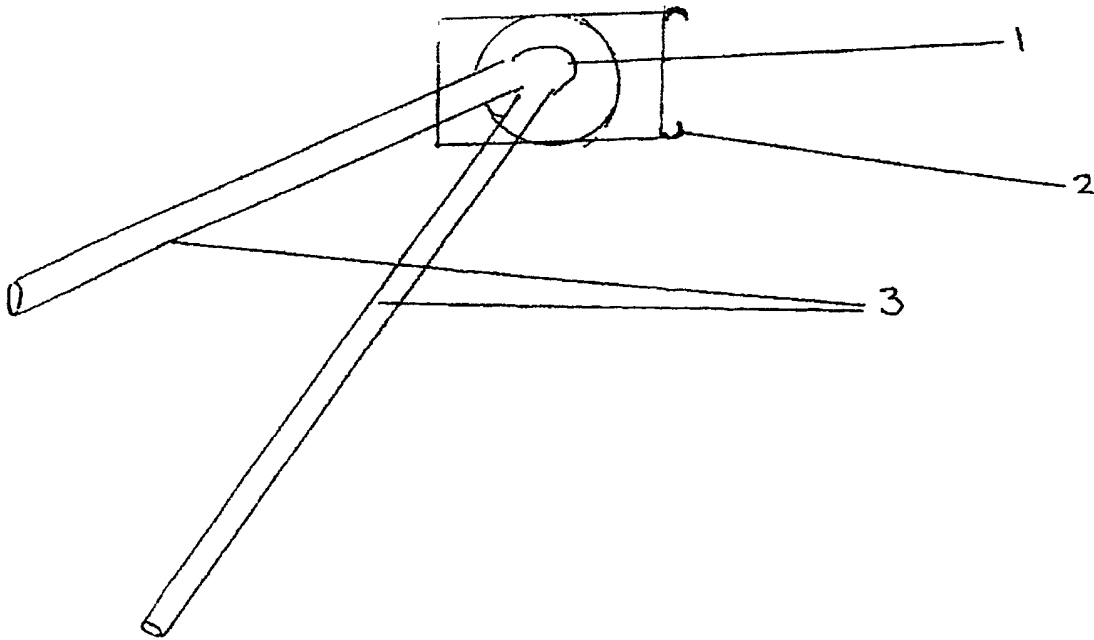


FIGURE 3
ARM / RODS



DRYING CABINET

This invention relates to a drying cabinet to which clothes may be hung on moveable detachable double armed units made of heat resistant plastic coated stainless steel rods supported by an inner stainless steel infrastructure within the cabinet. The cabinet also provides a detachable stainless steel plastic coated mesh tray for smaller articles or dry flat items.

The object of this invention is to manufacture a domestic appliance to house and dry clothes in a place and manner that is automated, regulated, and easy to use. Out of the public eye.

The disadvantage of a drier such as a tumble drier which is at present on the market is that clothes cannot normally be dried from wet without the clothes shrinking or distorting. Also clothes such as woollens or dry flat items cannot be dried in tumble driers or stored.

This invention can be a free standing unit of various colours or designs or can be integrated with kitchen utility colours / design.

This invention could be manufactured in metal or plastics with a cool outer wall facility with various gas or electrical heating components.

Air extraction can be made direct to outside wall or by condenser unit.

- Figure 1 Shows a Diagram of the drying cabinet from the front . Parts numbered
Figure 1A Description of numbered parts
Figure 2 Shows a Diagram of Control Panel . Parts Numbered
Figure 2A Description of numbered parts
Figure 3 Shows the arm/rods

2

CLAIMS

1. The Interior consists of horizontal interior framework which hold several units containing a support joint with a central bearing to support and vary the angle and degrees of two arm/rods per unit. The arm/rods can then be moved to various degrees to hold various size / weight of clothes. Each unit contains a pair of arm/rods. Fig3

The supports and interior can be made of stainless steel or similiar Metals or plastics. The rods / arms can be covered with a heat resistant plastic for easy cleaning purposes .

2. The double mesh floor on base of interior drying section enables the protection of the heating components from water droplets or falling clothing.
- 2a A heat resistant plastic tray with perferations can be placed beneath the double mesh floor for added protection if required by manufacturers.
3. **The interior of the heating cabinet can be produced in various structural and interior designs** to hold clothes for the same purpose, drying.
The arm/rod units could be fixed or moveable/detachable if required.
The Illustration and description is a recommended design.
4. **The heating components can be of various designs.**
The illustrations shows two electric elements. Two on each side of cabinet each with a heat resistant plastic cover containing large holes to allow heat to circulate and rise. A small slow fan is situated on the base between the heating components to assist in the rise of heat.
This is a recommended design

You could have variations of heating components i.e. electric fan heaters without central fan. Gas Components or attached to central heating components.

5. The front vision of heating components is covered for safety reasons
6. The heat is driven into the heating cabinet on a **regulated, automated basis**. The temperature can be set and timed and also a delayed timing can be set by the controls panel.

7. The control panel consists of various controls as fig.2 Easy to see and easy to use. The temperature colour coded control shows the heat from blue for cold to various colours pink red crimson for very hot for easy regulated use. The timer control includes a compulsory cooling period which activates a extraction unit to extract damp / hot air from unit to allow clothes to cool and temperature to drop for safety, hygenic reasons, before door release is activated by the control panel.
8. An emergency colour coded door release button featured on the control panel can release the door in a emergency.
9. The extraction unit can be direct to outside wall or via a condenser Unit or similar.
10. The unit can be free standing in various designs or integrated into Kitchen utility units.
11. An interior light is included in specification activated by door release on control panel . This can be varied.

1. Interior Light
2. Moveable joint component
3. Stainless Steel support frame housing moveable units
approx 4 to frame
4. Stainless Steel heat resistant covered plastic moveable arm/rods
5. Detachable mesh tray. various size
6. Double stainless steel mesh floor protection of electric components
7. Plastic Perforated tray for extra protection if required by
manufacturers
8. Side Panel
9. Heat Resistant holed plastic covering to heating components if
required
10. Fan
11. Feet adjustments
12. Heating components Electric Elements
or 12a ** Gas variation
or 12b ** Fan Assisted Heaters variation
13. Electrical cable
14. Condenser Unit / Extractor Unit
15. Door panel
16. Control panel see separate listing
17. Cool wall outer exterior
18. Interior

***Stainless Steel can be substituted with similar metal / plastics**

**** Heating variation**

Interior could be of various designs with fixed or detachable arm/rods

CONTROL PANEL

- 1 Door release
- 2 Colour coded temperature dial
- 3 Timing control dial
- 4 Plastic panel
- 5 Timer controls
- 6 Clock
- 7 Alarm
- 8 Thermostat gauge
- 9 Red Colour coded Emergency door release

1. BALL JOINT OR SIMILAR MOVEABLE JOINT TO ADJUST ANGLE/AXIS OF RODS.
2. ATTACHABLE TO MAIN INTERIOR SUPPORT FRAME OR CAN BE FIXED TO INTERIOR FRAME
3. STAINLESS STEEL OR SIMILAR METAL COATED HEAT RESISTANT PLASTIC FOR SAFETY + CLEANING PURPOSES.



INVESTOR IN PEOPLE

Application No: GB 0316136.1
Claims searched: -

Examiner: Terence Newhouse
Date of search: 12 January 2004

Patents Act 1977 : Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X		GB 2259356 A (Liang), see for example figs 1 & 2 noting fan 252, electric heater 332, condenser 21 and control panel
X		GB 2172975 A (Macintosh), see for example fig 2 noting fan 19 grill 17 and connection to central heating
X		GB 1136171 A (Martin), see for example page 1 lines 38-49
X		US 5755040 (Ou), see for example column 2 lines 22-44 and fig 1 noting grill 61
X		US 4625432 (Baltes), see for example figs 1 & 3-7 noting cooled walls 7, fan 13, heater 14 & hanger 101
X		US 3811198 (Baltes), see for example figs 2 & 5 noting folding hanger rods 14

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art
Y	Document indicating lack of inventive step if combined with one or more other documents of same category	P	Document published on or after the declared priority date but before the filing date of this invention
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^w:

F4G

Worldwide search of patent documents classified in the following areas of the IPC⁷:

The following online and other databases have been used in the preparation of this search report:

EPODOC, JAPIO, WPI