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(54) **METHOD OF COOLING AN OVEN TRAY, OVEN TRAY AND OVEN**

(57) An oven tray (100) can be cooled whilst in an oven (10). An input is received from a user at the oven (10) to initiate cooling of the oven tray (100) which is located in the oven (10). Following receipt of the user input, a cooling fluid is passed through at least one pipe (108, 30) which is located on or in thermal contact with the oven tray (100) to cool at least a portion of the oven tray (100). The cooling pipe (108, 30) may be provided on the oven tray (100) or within the oven (10).

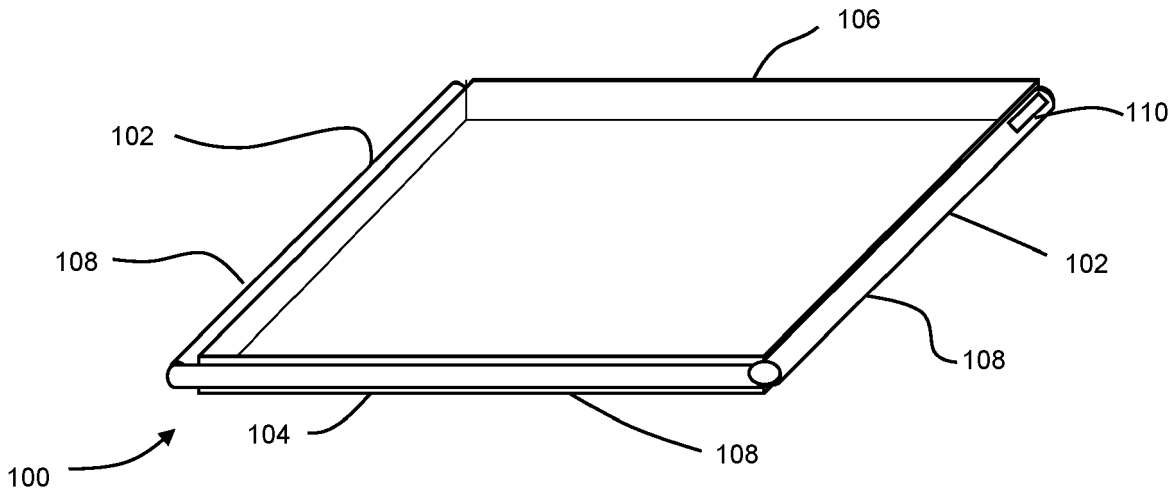

Fig. 3

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Description

Technical Field

[0001] The present disclosure relates to a method of cooling an oven tray, an oven tray and an oven.

Background

[0002] It is well known that oven trays become very hot during use when heating food items and the like in an oven. Users typically use insulating oven gloves or the like to hold the oven tray when the oven tray is to be removed from the oven. However, some oven gloves or the like are not always very effective at insulating the user from the hot tray. Further, the user may not have oven gloves or the like available or readily to hand, because for example the oven gloves or the like have been lost or misplaced.

Summary

[0003] According to a first aspect disclosed herein, there is provided a method of cooling an oven tray in an oven, the method comprising:

receiving, at the oven, an input from a user to initiate cooling of an oven tray which is located in the oven; and

following receipt of the user input, passing a cooling fluid through at least one pipe which is located on or in thermal contact with the oven tray to cool at least a portion of the oven tray.

[0004] In an example, the pipe is located on or in thermal contact with one or more edges of the oven tray so as to cool said one or more edges of the oven tray as the cooling fluid passes through the pipe.

[0005] In an example, the method comprises measuring the temperature of the cooling fluid as the cooling fluid passes beyond the oven tray after having cooled said portion of the oven tray to obtain a measure of the temperature of said portion of the oven tray.

[0006] In an example, the method comprises using a sensor in the oven to identify the location of the oven tray within the oven.

[0007] This can be used to identify whether there is an oven tray in the oven, and the location of that oven tray. For example, ovens commonly have a number of pairs of rails or the like for supporting shelves on which oven trays may be located. The particular location of the or each oven tray within the oven can therefore be identified.

[0008] In an example, the method comprises using a sensor in the oven to measure the distance between an edge of the oven tray and an adjacent wall of the oven.

[0009] This can be used to identify if an oven tray is hot and needs cooling, and/or whether the oven tray has cooled sufficiently. This is based on the fact that a hot tray will have expanded, and so the distance to the adjacent wall of the oven will be less than when the oven tray is cool.

[0010] In the case that the location of the oven tray within the oven is identified, the same or different respective sensors may be used for these two different purposes.

[0011] In an example, the pipe is fixed to or integrally formed with the oven tray and is in fluid communication with a fluid outlet and a fluid inlet of the oven such that the cooling fluid passes from the fluid outlet of the oven and into the pipe, through the pipe and out of the pipe into the fluid inlet of the oven.

[0012] In an example, the pipe is fixed to and located within the oven.

[0013] In such a case, the oven tray is brought into thermal contact with the pipe when the oven tray is located within the oven.

[0014] According to a second aspect disclosed herein, there is provided an oven tray, the oven tray comprising:

at least one pipe for carrying a cooling fluid;

the pipe being connectable to a fluid outlet and a fluid inlet of an oven such that in use, when the oven tray is located within a said oven, cooling fluid can pass from the fluid outlet of the oven and into the pipe, through the pipe and out of the pipe into the fluid inlet of the oven to cool at least a portion of the oven tray.

[0015] In an example, the pipe is located on or in thermal contact with one or more edges of the oven tray such that said one or more edges of the oven tray are cooled in use as cooling fluid passes through the pipe.

[0016] According to a third aspect disclosed herein, there is provided an oven for use in cooling an oven tray, the oven comprising:

a heating chamber in which an oven tray can be located in use for heating the oven tray and contents of the oven tray;

an arrangement for causing a cooling fluid to pass through at least one pipe which is located on or in thermal contact with an oven tray located in use in the heating chamber so as to cool at least a portion of the oven tray.

[0017] In an example, the arrangement comprises a fluid outlet inlet and a fluid inlet to which a pipe fixed to or integrally formed with an oven tray can be connected such that in use the cooling fluid passes from the fluid outlet of the oven and into the pipe, through the pipe and out of the pipe into the fluid inlet of the oven.

[0018] In an example, said pipe is located within the oven such that an oven tray located within the heating chamber is in thermal contact with the pipe such that cooling fluid passing through the pipe in use cools at least a portion of a said oven tray.

[0019] In an example, the oven comprises an input device for receiving an input from a user to initiate cooling of an oven tray which is located in the oven, the oven being arranged to cause a cooling fluid to pass through said at least one pipe following receipt of a user input at the input device.

[0020] In an example, the oven comprises a temperature sensor for measuring the temperature of the cooling fluid as the cooling fluid passes beyond a said oven tray after having cooled said portion of the oven tray to obtain a measure of the temperature of said portion of the oven tray.

[0021] In an example, the oven comprises a sensor for at least one of identifying the location of an oven tray within the oven and measuring the distance between an edge of a said oven tray and an adjacent wall of the oven.

Brief Description of the Drawings

[0022] To assist understanding of the present disclosure and to show how embodiments may be put into effect, reference is made by way of example to the accompanying drawings in which:

Figure 1 shows schematically a perspective view of an example of an oven in which an example of an oven tray is located, generally according to the present disclosure;

Figure 2 shows schematically a perspective view of another example of an oven according to the present disclosure;

Figure 3 shows schematically a perspective view of an example of an oven tray according to the present disclosure, which is particularly suitable for use with the oven of Figure 2; and

Figure 4 shows schematically a perspective view of another example of an oven according to the present disclosure.

Detailed Description

[0023] As noted, oven trays become very hot during use when heating food items and the like in an oven. Whilst users typically use insulating oven gloves or the like to hold the oven tray when the oven tray is to be removed from the oven, such oven gloves or the like may not be very effective at insulating the user from the hot tray and in any event may not be available or readily to hand, because for example the oven gloves or the like have been lost or misplaced. A hot oven tray presents a serious risk of harm to a user.

[0024] Examples described herein enable at least a portion of an oven tray to be cooled whilst the oven tray is located within the oven and therefore before the user needs to grasp or hold the oven tray to remove it from the oven. In some examples, at least one or more edges of the oven tray are cooled. In use, a cooling fluid is passed around one or more pipes that are located on or in thermal contact with the oven tray to cool at least a portion of the oven tray. This may be done for example just prior to a user wanting to remove the oven tray from the oven. Various examples for achieving this will be described below.

[0025] In general, the term "oven tray" is used broadly herein to encompass any suitable container that can contain contents such as a food item or the like in an oven whilst the contents are heated by the oven. The "oven tray" may be for example a baking tray, a roasting tray, a cake or pudding tray, etc. Such trays are generally relatively wide and long with a short or shallow depth. Cake or pudding trays or the like typically have plural depressions, each for receiving a cake or pudding mixture or the like. The term "oven tray" is also used herein to encompass baking or oven dishes or the like, which are usually rather deeper. Oven trays are often formed of a metal or metals, including for example steel and aluminium, but may alternatively be formed of glass, ceramics, etc. Such items are all familiar in themselves.

[0026] Reference is now made to Figure 1, which shows schematically a perspective view of an example of an oven 10 and an example of an oven tray 100, generally according to the present disclosure. The oven 10 may in general be any type of oven, including for example an electric oven, a gas oven, an "AGA" type oven, etc.

[0027] The oven 10 has an internal heating chamber 12 in which the oven tray 100 is located in use. The heating chamber 12 is accessible by a door 14 which in this example is at the front of the oven 10 and can be pivoted open and closed to seal the heating chamber 12. Other arrangements and layouts for the door 14 and heating chamber generally are possible, as is well known in itself.

[0028] In this example, the oven 10 has plural rails 16 at respective opposed side walls 18. Only one pair of rails 16 is shown in the drawing though there may be several pairs of rails 16 at different heights within the oven 10. The oven tray 100 may be sized and shaped so as to fit on and slide directly along the rails 16, with opposed side edges 102 of the oven tray 100 engaging the rails 16. Alternatively, an oven shelf (not shown) of a grill-like nature as is commonly used in ovens may be located on and supported by the rails 16 or otherwise fixed to the side walls 18, and the oven tray 100 is located on the oven shelf in use.

[0029] The oven 10 has a number of control knobs 20 or the like by which the user can control the temperature of the heating chamber 12 and of hobs (not shown) on an upper surface of the oven 10 if present. The oven 10 also has an input device 22 by which a user can initiate cooling of the oven tray 100, as will discussed further below. One or more of the control knobs 20 and input device 22 may be implemented as discrete mechanical or electromechanical buttons or switches, etc., or via an input panel, such as a touchscreen input panel, etc.

[0030] Reference is now made to Figure 2, which shows schematically a perspective view of a specific example of an oven 10 according to the present disclosure. The same reference numerals as used for the example oven 10 of Figure 1 are used for the example of Figure 2 and the description thereof will not be repeated. The example oven 10 of Figure 2 is particularly suitable for use with the example oven tray 100 of Figure 3, as will be explained.

[0031] In this example of the oven 10, the oven 10 has a fluid outlet 24 and a fluid inlet 26, which are located within the heating chamber 12. In use, cooling fluid can exit the fluid outlet 24 to pass into a pipe which is fixed to or integrally formed with an oven tray. The cooling fluid, having absorbed heat from the oven tray via the pipe, can then exit the pipe of the oven tray to return to the fluid inlet 26.

[0032] The fluid outlet 24 and the fluid inlet 26 may form a closed circuit, such that the cooling fluid can continuously circulate around without requiring topping up or replenishment, or at least only requiring topping up infrequently. In the case of a closed circuit, heat may be caused to be lost from the cooling fluid by some cooling arrangement provided by the oven 10 in order to lower the temperature of the cooling fluid after passing into the fluid inlet 26 and prior to it passing through the fluid outlet 24 to the pipe of the oven tray again. For example, the fluid outlet 24 and the fluid inlet 26 may be connected to a return pipe (not shown) at the rear of the oven which allows heat to be lost to the environment. The return pipe may have a serpentine or similar shape and/or may have plural cooling fins, in either case to promote heat loss. There may be one or more cooling fans to the rear of the oven 10, which blow air over the return pipe, again to promote heat loss. Alternatively or additionally, there may be some form of apparatus providing cooling of the cooling fluid using a refrigeration cycle or the like.

[0033] Referring now to Figure 3, this shows schematically a perspective view of an example of an oven tray 100. This example is particularly suitable for use with the example oven 10 of Figure 2, as mentioned.

[0034] The oven tray 100 has opposed side edges 102, which in use in one example engage the side rails 16 in the interior heating chamber 12 of the oven when the oven tray 100 is located in the heating chamber 12. The side edges 102 of the oven tray 100 may for example simply slide along the top of the side rails 16. As another example, the side edges 102 may have grooves running along their length which receive the slide rails 16 as the oven tray 100 is pushed into the hearting changer 12. Alternatively, as mentioned, an oven shelf (not shown) may be located on and supported by the rails 16, and the oven tray 100 is placed on the oven shelf. In any case, the oven tray 100 of this example is sized and shaped so that the side edges 102 of the oven tray are close to the rails 16. The oven tray 100 has a rear edge 104 which is placed first into the heating chamber 12 of the oven 10 so as to be at the rear of the heating chamber 12 when the oven tray 100 is located within the oven 10. The oven tray 100 has a front edge 106 which is at the front of the heating chamber 12 when the oven tray 100 is located within the oven 10.

[0035] In this example, the oven tray 100 has a pipe 108 which is fixed to or integrally formed with the oven tray 100 and which acts as a fluid transfer or transport pipe 108. In this example, the pipe 108 is in the form of a tube which extends along one side edge 102, along the front edge 104 and back along the second side edge 102. The ends of the pipe 108 towards the rear edge 106 are open. In use, when the oven tray 100 is located within the heating chamber 12 of the oven 10, the rear, open ends of the pipe 108 engage respectively with the fluid outlet 24 and the fluid inlet 26 of the oven 10. The ends of the pipe 108 and/or the fluid outlet 24 and the fluid inlet 26 may have engagement features, such as a tapered end and/or seals, etc., to ensure a good, fluid-tight fit between the pipe 108 and the fluid outlet 24 and the fluid inlet 26. The pipe 108 is a good thermal conductor so as to enable efficient heat transfer from the adjacent edges 102, 106 of the oven tray 100 to the cooling fluid as the cooling fluid flows through the pipe 108. The pipe 108 may be made of for example a metal or metals, including for example steel, aluminium, etc.

[0036] In this way, just prior to the oven tray 100 being removed from the oven 10, the cooling fluid can be caused to flow through the pipe 108 in order to cool at least the side edges 102 and front edge 104 of the oven tray 100 in this example. This reduces the temperature of the side edges 102 and front edge 104 of the oven tray 100 to a much lower temperature than a typical oven temperature and indeed to a much safer temperature for the user. A typical oven temperature may for example be anywhere from 100°C to 200°C. Through use of the cooling fluid, the temperature of at least the side edges 102 and the front edge 104 of the oven tray 100 can be reduced to be much lower than this, such as for example below 50°C and perhaps human body temperature or even lower. Cooling the side edges 102 and the front edge 104 of the oven tray 100 is particularly beneficial as in practice it is these edges that tend to be grasped or held by a user when removing the oven tray 100 from the oven 10 and then serving food or the like from the oven tray 100.

[0037] For all of the examples described herein, the cooling fluid may in general be any fluid, including in particular a liquid, that is suitable for absorbing heat from the oven tray. A particularly suitable example is water as water has a high specific heat capacity and is inexpensive and readily available.

[0038] As an alternative (not shown) to the closed circuit arrangement for the flow of the cooling fluid described above, an open circuit arrangement may be used. Instead of the pipe 108 on the oven tray 100 being in the form of a tube, the pipe 108 may be in the form of an open gully or channel which has its open side uppermost. Rather than the cooling fluid flowing round in a closed

circuit, the cooling fluid is simply caused to flow into the gully-like pipe 108, from where it evaporates into the body of the heating chamber 12 as it absorbs heat from the oven tray 100. Further, as another variant in this case, rather than the pipe 108 extending continuously around the side edges 102 and the front edge 104 of the oven tray 100 as shown for the closed circuit example of Figure 3, there may be separate gully-like pipes 108 that only run along the side edges 102, or that respectively run along one side edge 102 and partially along the front edge 104, for example to the centre of the front edge so that the pipes 108 meet at the centre of the front edge 24. In any case, in this open circuit arrangement, each of the parts 24, 26 of the oven 100 in Figure 2 may be fluid outlets, which pass cooling fluid to the respective connected gully-like pipe 108 when cooling is required: no return of the cooling fluid is provided. The fluid outlets 24, 26 may each be connected to a source of the cooling fluid, which may be for example a mains cold water supply.

[0039] Referring now to Figure 4, this shows schematically a perspective view of another example of an oven 10 according to the present disclosure. The same reference numerals as used for the example ovens 10 of Figure 1 and Figure 2 are used for the example of Figure 4 and the description thereof will not be repeated. The example oven 10 of Figure 4 is particularly suitable for use with a more conventional oven tray, in particular an oven tray that does not have one or more integral or fixed fluid transfer pipes. In particular, in this example, one or more fluid transfer pipes 30 are provided integrally with the oven 10, and it is not necessary for the oven tray itself to have cooling pipes.

[0040] In the example shown, there is a single fluid transfer pipe 30 which is arranged similarly to the closed circuit arrangement discussed above for the previous examples. That is, the pipe 30 is in the form of a tube which extends along one side wall 18 of the oven 10, across the open front of the heating chamber 12, and back along the second side wall 18 of the oven 10. The pipe 30 is shown in the drawing mounted on and supported by internally projecting ledges 32 of the side walls 18 of the oven 10, but may alternatively be fixed directly to the side walls 18 or located within grooves in the side walls 18, etc. The pipe 30 may extend rearwardly of the oven 10 to form a return pipe at the rear of the oven 10, or may be connected to a return pipe (not shown) at the rear of the oven 10, which allows heat to be lost to the environment. Again, the return pipe may have a serpentine or similar shape and/or may have plural cooling fins, in either case to promote heat loss. Also again. there may be one or more cooling fans to the rear of the oven 10, which blow air over the return pipe, again to promote heat loss. Alternatively or additionally, there may be some form of apparatus providing cooling of the cooling fluid using a refrigeration cycle or the like. In use, when cooling of an oven tray located in the heating chamber 12 is required, a cooling fluid is caused to flow through the pipe 30 to absorb heat from the oven tray, in this example particularly from the side and front edges of the oven tray.

[0041] As an alternative (not shown) to the closed circuit arrangement for the flow of the cooling fluid described above for the example of Figure 4, an open circuit arrangement may be used. Similarly to the above-described open circuit arrangement, instead of the pipe 30 being in the form of a tube, the pipe 30 may be in the form of an open gully or channel which has its open side uppermost. Rather than the cooling fluid flowing round in a closed circuit, the cooling fluid is simply caused to flow into the gully-like pipe 30, from where it evaporates into the body of the heating chamber 12 as it absorbs heat from the oven tray 100. Further, as another variant in this case, rather than the pipe 30 extending continuously around the side walls 18 and the front of the oven 10 as shown for the closed circuit example of Figure 4, there may be separate gully-like pipes 30 that only run along the side walls 18, or that respectively run along one side wall 18 and partially along the open front of the heating chamber 12, for example to the centre of the open front of the oven so that the pipes 30 meet at the centre of the open front. Cooling fluid is passed into the pipes 30 at the rear of the oven 10 when cooling is required: no return of the cooling fluid is provided. The pipes 30 may each be connected to a source of the cooling fluid, which may be for example a mains cold water supply.

[0042] In any of the examples described above, the passing of the cooling fluid into the or each pipe 108, 30 may be initiated by the user providing an input via the input device 22 when cooling of the oven tray 100 is desired. This acts as a switch to start cooling. Depending on the specific arrangement of the oven 10 and the oven tray 100, operation of the input device 22 may cause valves to open and close to allow fluid flow into the or each pipe 108, 30 as necessary to provide the desired cooling of the oven tray 100. In some examples, the oven 10 may include a pump (not shown) to drive the cooling fluid through or into the or each pipe 108, 30, and operation of the pump is again controlled by the input device 22. The arrangement may be such that cooling fluid is caused to flow for a specific time period following first operation of the input device 22. In another example, particularly in any of the closed circuit arrangements, one or more temperature sensors may be provided to monitor the temperature of the cooling fluid as it passes out of the cooling pipe 108, 30, and the flow of the cooling fluid is ceased when the temperature has dropped to a suitable and safe low level. Some or all of this control may be implemented using one or more processors, suitable digital or electrical logic circuitry, etc.

[0043] Further, in any of the examples described above, the oven 100 may have one or more internal fans within the heating chamber 12 to promote heat loss from the oven tray. For example particularly for the open circuit arrangements, one or more fans may blow air over the upper open sides of the gully- or channel-like cooling pipe

to promote evaporation of the cooling fluid. Such fans may be controlled to operate via the input device 22 as discussed above.

[0044] Further, in any of the examples described above, the oven 10 may have one or more sensors to detect the presence of and location of an oven tray 100 within the oven 10. This may be particularly useful if there are plural pairs of rails 16 within the heating chamber 12. In that case, the user can simply operate the input device 22 and the oven 10 then identifies which rails 16 have oven trays 100 located on them and initiates flow of the cooling fluid through the corresponding heat transfer pipes 108, 30 as necessary. Such sensors in the oven may be located for example towards the rear of the heating chamber 12, for example towards and near the rear end of at least one of the rails 16 of each opposed pair of rails 16. The sensors may for example be in the form of a mechanical limit switch. As another example, the sensors may for example be in the form of an optical detector arrangement which transmits light towards and receives reflected light from the oven tray 100. In such a case, the oven tray 100 may have one or more light reflectors 110 (Figure 3) on one more sides of 102 and towards the rear edge 106 for reflecting the light back to the light detector.

[0045] In another variant, a sensor in the oven 10 may measure the distance between a an edge (such as a side edge 102) of the oven tray 100 and an adjacent wall (such as a side wall 18) of the oven 10. This can be used to identify which oven tray 100 is hot and needs cooling, and/or whether the oven tray 100 has cooled sufficiently. This is based on the fact that a hot tray 100 will have expanded, and so the distance to the adjacent wall of the oven 10 will be less than when the oven tray 100 is cool. In the case that the location of the oven tray 100 within the oven 10 is identified as described above, the same or different respective sensors may be used for these two different purposes.

[0046] It will be understood that the processor or processing system or circuitry referred to herein may in practice be provided by a single chip or integrated circuit or plural chips or integrated circuits, optionally provided as a chipset, an application-specific integrated circuit (ASIC), field-programmable gate array (FPGA), digital signal processor (DSP), graphics processing units (GPUs), etc. The chip or chips may comprise circuitry (as well as possibly firmware) for embodying at least one or more of a data processor or processors, a digital signal processor or processors, baseband circuitry and radio frequency circuitry, which are configurable so as to operate in accordance with the exemplary embodiments. In this regard, the exemplary embodiments may be implemented at least in part by computer software stored in (non-transitory) memory and executable by the processor, or by hardware, or by a combination of tangibly stored software and hardware (and tangibly stored firmware).

[0047] The examples described herein are to be understood as illustrative examples of embodiments of the invention. Further embodiments and examples are envisaged. Any feature described in relation to any one example or embodiment may be used alone or in combination with other features. In addition, any feature described in relation to any one example or embodiment may also be used in combination with one or more features of any other of the examples or embodiments, or any combination of any other of the examples or embodiments. Furthermore, equivalents and modifications not described herein may also be employed within the scope of the invention, which is defined in the claims.

Claims

1. A method of cooling an oven tray in an oven, the method comprising:

   receiving, at the oven, an input from a user to initiate cooling of an oven tray which is located in the oven; and
   following receipt of the user input, passing a cooling fluid through at least one pipe which is located on or in thermal contact with the oven tray to cool at least a portion of the oven tray.

2. A method according to claim 1, wherein the pipe is located on or in thermal contact with one or more edges of the oven tray so as to cool said one or more edges of the oven tray as the cooling fluid passes through the pipe.

3. A method according to claim 1 or claim 2, comprising measuring the temperature of the cooling fluid as the cooling fluid passes beyond the oven tray after having cooled said portion of the oven tray to obtain a measure of the temperature of said portion of the oven tray.

4. A method according to any of claims 1 to 3, comprising using a sensor in the oven to identify the location of the oven tray within the oven.

5. A method according to any of claims 1 to 4, comprising using a sensor in the oven to measure the distance between an edge of the oven tray and an adjacent wall of the oven.

6. A method according to any of claims 1 to 5, wherein the pipe is fixed to or integrally formed with the oven tray and is in fluid communication with a fluid outlet and a fluid inlet of the oven such that the cooling fluid passes from the fluid outlet of the oven and into the pipe, through the pipe and out of the pipe into the fluid inlet of the oven.

7. A method according to any of claims 1 to 5, wherein

the pipe is fixed to and located within the oven.

8. An oven tray, the oven tray comprising:

at least one pipe for carrying a cooling fluid;
the pipe being connectable to a fluid outlet and a fluid inlet of an oven such that in use, when the oven tray is located within a said oven, cooling fluid can pass from the fluid outlet of the oven and into the pipe, through the pipe and out of the pipe into the fluid inlet of the oven to cool at least a portion of the oven tray.

9. An oven tray according to claim 8, wherein the pipe is located on or in thermal contact with one or more edges of the oven tray such that said one or more edges of the oven tray are cooled in use as cooling fluid passes through the pipe.

10. An oven for use in cooling an oven tray, the oven comprising:

a heating chamber in which an oven tray can be located in use for heating the oven tray and contents of the oven tray;
an arrangement for causing a cooling fluid to pass through at least one pipe which is located on or in thermal contact with an oven tray located in use in the heating chamber so as to cool at least a portion of the oven tray.

11. An oven according to claim 10, wherein the arrangement comprises a fluid outlet inlet and a fluid inlet to which a pipe fixed to or integrally formed with an oven tray can be connected such that in use the cooling fluid passes from the fluid outlet of the oven and into the pipe, through the pipe and out of the pipe into the fluid inlet of the oven.

12. An oven according to claim 10 or claim 11, wherein said pipe is located within the oven such that an oven tray located within the heating chamber is in thermal contact with the pipe such that cooling fluid passing through the pipe in use cools at least a portion of a said oven tray.

13. An oven according to any of claims 10 to 12, comprising an input device for receiving an input from a user to initiate cooling of an oven tray which is located in the oven, the oven being arranged to cause a cooling fluid to pass through said at least one pipe following receipt of a user input at the input device.

14. An oven according to any of claims 10 to 13, comprising a temperature sensor for measuring the temperature of the cooling fluid as the cooling fluid passes beyond a said oven tray after having cooled said portion of the oven tray to obtain a measure of the temperature of said portion of the oven tray.

15. An oven according to any of claims 10 to 14, comprising a sensor for at least one of identifying the location of an oven tray within the oven and measuring the distance between an edge of a said oven tray and an adjacent wall of the oven.

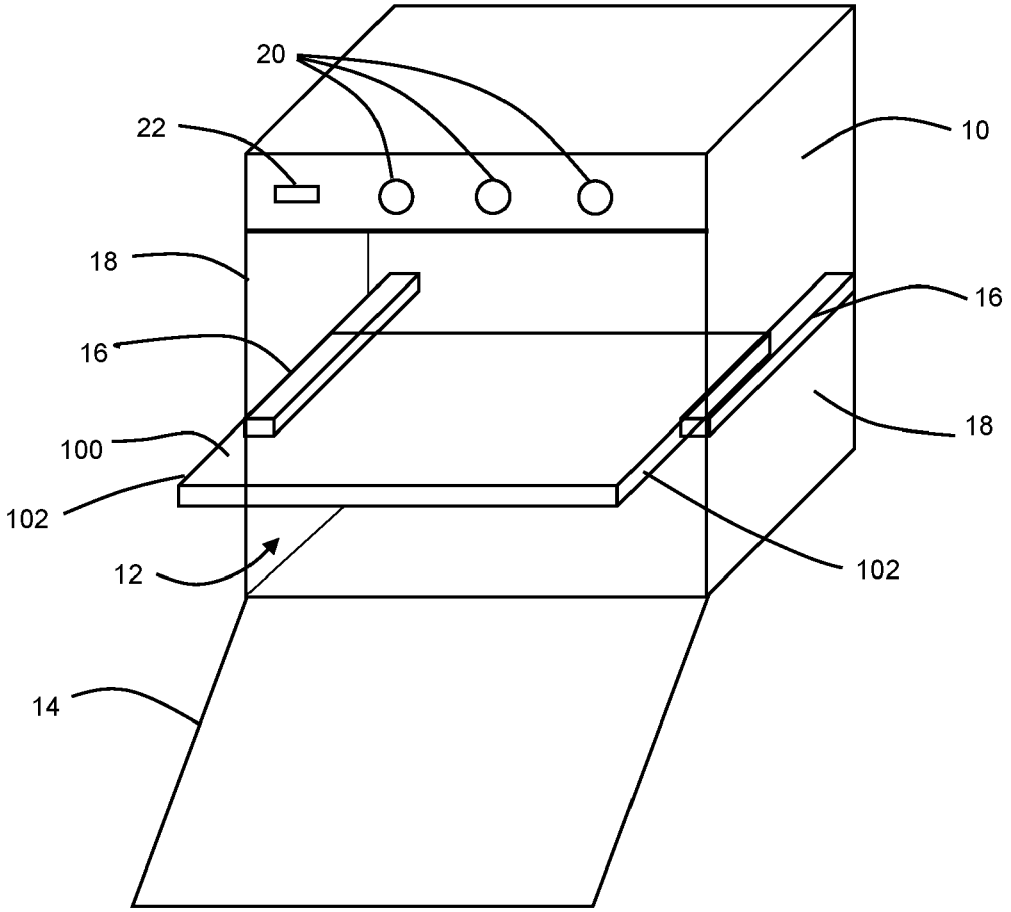

Fig. 1

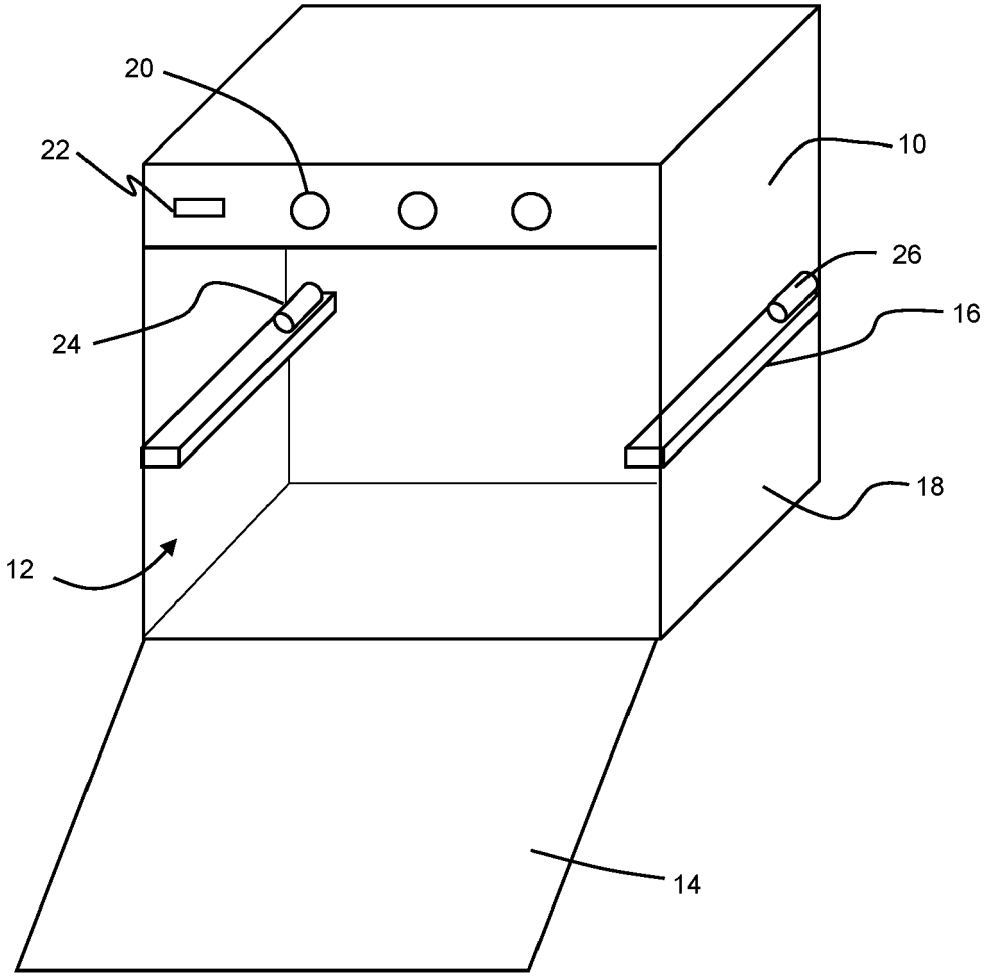

Fig. 2

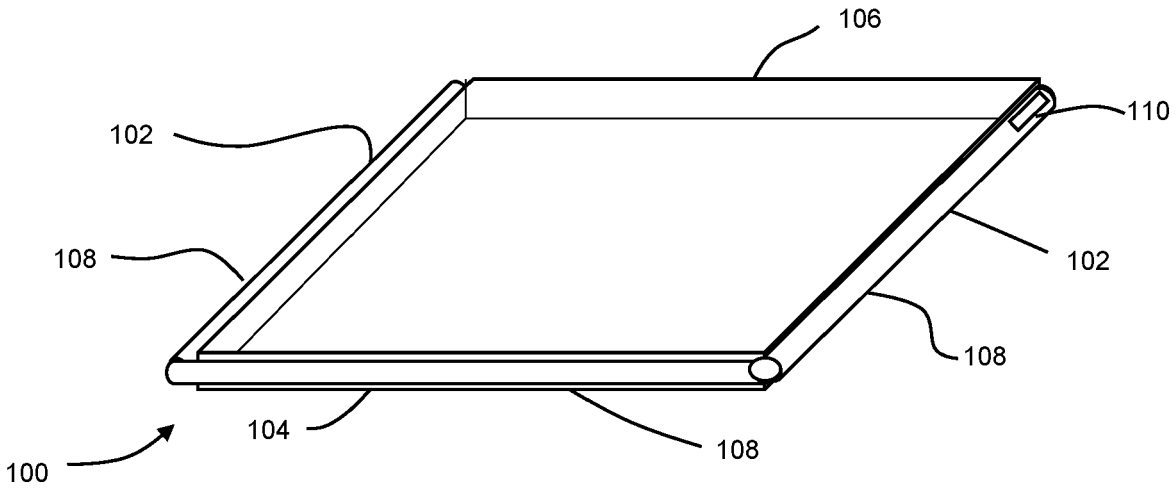

Fig. 3

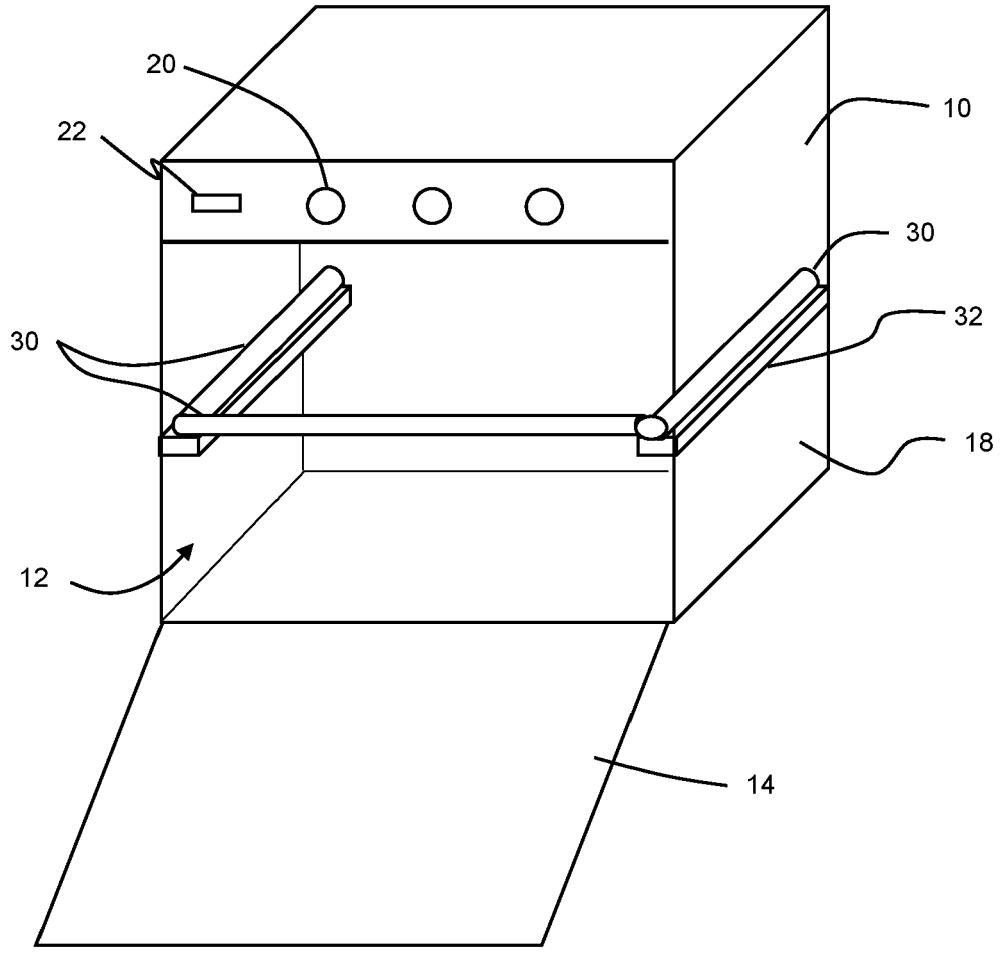

Fig. 4

Europäisches Patentamt
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EUROPEAN SEARCH REPORT

Application Number
EP 20 20 9195

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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Place of search	Date of completion of the search	Examiner
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