Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte LINNES M. WALDREP

Appeal No. 1998-0093
Application No. 08/459,301[1]

ON BRIEF

Before THOMAS, HAIRSTON, and MARTIN, Administrative Patent Judges.

MARTIN, Administrative Patent Judge.

DECISION ON APPEAL

This an appeal under 35 U.S.C. § 134 from the September 25, 1996, final Office action in which the examiner (a) rejected claims 1, 3 and 5-7 under the second paragraph of 35 U.S.C. § 112, (b) rejected claims 1, 6, and 7 under 35 U.S.C. § 103 for obviousness over Huie et al. (Huie) in view of Moffat et al. (Moffat), (c) rejected claims 2 and 3 under § 103 for obviousness over Huie, Moffat, and Alden, and (d)

[1] Application for patent filed June 5, 1995.

indicated that claims 4 and 5 are allowable over the prior art.

On December 18, 1996, appellant filed an amendment after final under 37 CFR § 1.116 proposing to cancel claims 3 and 5 and amend claim 1 to remove the terminology that the examiner considered to be indefinite, i.e., "conventional convection." In an advisory action dated December 31, 1996, the examiner indicated that the amendment after final would be entered upon the filing of an appeal, with the result that claim 4 would be allowed and claims 1, 2, 6 and 7 would remain rejected, presumably only on reference grounds.

In the Answer (at 3-4), the examiner repeated the rejection of claims 1, 6, and 7 based on Huie in view of Moffat, indicated that claim 2 would be allowable if rewritten in independent form, and added a new ground of rejection asserting that claims 1, 6, and 7 are unpatentable under § 103 for obviousness over either one of Forrer and Malick in view of Huie and Buckingham et al.

On June 6, 1997, appellant filed an amendment canceling claim 2 and rewriting it as new claim 8 and filed a Reply Brief responding to the new ground of rejection.

In the September 3, 1997, Supplemental Examiner's Answer, examiner indicated that the rejections of claims 1, 6, and 7 are being maintained and indicated that claims 4 and 8 are allowable.

We reverse and enter a new ground of rejection pursuant to 37 CFR § 1.196(b).

A. The invention

The invention is a low-temperature oven that is heated by electric light bulbs powered from a 110-volt outlet.

B. The claims

Claim 1, the sole independent claim on appeal, reads as follows:

1. A portable low temperature cooking oven comprising:

a housing constructed of laminated insulating panels having an opening therein;

a door constructed of laminated insulating panels[2] pivotally attached to said housing and disposed for selective sealed closing of said opening;

at least one electrical fixture attached within said housing;

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[2] The specification (at 4, ll. 1-3) likewise describes the door as being constructed of laminated insulating panels.

an electrical heat lamp attached to each said electrical fixture;

at least one dimming switch attached to said housing;

electrical circuit means connecting[3] each said dimming switch to an electrical power supply;

said electrical circuit means further electrically connecting each said dimming switch to at least one said electrical fixture.

C. The references and grounds of rejection

The examiner's rejections are based on the following U.S. patents and British patent:

Buckingham et al. (Buckingham)	2,056,156	Oct. 6, 1936
Forrer	2,864,932	Dec. 16, 1958
Malick	4,481,405	Nov. 6, 1984
Huie et al. (Huie)	5,375,511	Dec. 27, 1994
Moffat	GB 2 156 509A	Oct. 9, 1985

Claims 1, 6, and 7 stand rejected under 35 U.S.C. § 103 for obviousness over Huie in view of Moffat.

[3] In using the term "connecting" instead of "for connecting," the claim requires that the dimming switch be connected to the electrical power supply, which in the disclosed embodiment is a conventional 110 volt power supply (Spec. at 7, ll. 22).

Claims 1, 6, and 7 also stand rejected under 35 U.S.C. § 103 for obviousness over either one of Forrer and Malick in view of Huie and Buckingham.

D. The rejection based on Huie in view of Moffat

Huie discloses a food warming cabinet for holding previously cooked food near the preferred serving temperature for prolonged periods of time (col. 1, ll. 10-13). The chamber 14 defined by uninsulated aluminum cabinet 12 and two transparent doors 16 is heated by two heat bulbs 38, which are controlled by a rheostat 48 (col. 2, ll. 3-32).

Moffat discloses a food warming oven having laminated insulating walls and a laminated insulating door provided with a heat-sealing gasket 8a (Fig. 3) (p. 1, l. 120 to p. 2, l. 1). Rather than using heat lamps as sources of heat, as required by claim 1, Moffat uses a plurality of electric heating elements 12 to heat respective compartments 11 formed by shelves 10 and uses heating elements 13 and 14 to heat the top and bottom walls, respectively (p. 2, ll. 2-19). Moffat indicates that "[i]n particular, but not exclusively, the invention relates to a food heating apparatus in the form of a

food warming oven or cabinet for heating food, typically at least partly precooked food, from a chilled or frozen condition to a serving temperature, e.g., approximately 70EC" (p. 1, ll. 6-12).

The examiner contends that "[i]t would have been obvious to one of ordinary skill in the art to adapt the insulated panels of Moffat et al to the food warmer of Huie et al to more efficiently warm food placed in the device" (Answer at 5) and that such a modification "would have been an obvious alternative where display of the contents was not necessary and merely efficient warming was desired (Answer at 7). While we agree that it would have been obvious to insulate Huie's cabinet walls with laminated insulating material in order to increase the oven's electrical efficiency, we are not persuaded of the obviousness of also replacing Huie's transparent doors with nontransparent, laminated, insulating and sealing doors, as proposed by the examiner. This modification, as appellant correctly observes, appears to be improperly based on knowledge of appellant's own specification and the requirements of claim 1. Accordingly, we are

reversing that ground of rejection with respect to each of the rejected claims, i.e., claims 1, 6, and 7.

E. The rejection based on either one of Forrer and Malick in view of Huie and Buckingham

Forrer and Malick each disclose infrared cooking ovens. Forrer's oven has an outer shell formed by panels 5-11 and a door 30. As shown in Figures 1 and 2, the side walls of the outer shell have holes 13 and 14 for allowing air to enter and exit the oven. An inner reflecting shell, formed by bottom pan 15, side pans 18 and 19, rear pan 20, and top pan 21 (there is no front pan), contains infrared heating lamps 17 and 40 and a glass shelf 25 for supporting the food to be heated, which is included in a cellophane wrapper 46.

Air circulates through the oven with sufficient rapidity that the air within it is never too hot to preclude the use of the operator's hands in placing and removing food (col. 3, ll. 11-14). This circulating air further carries away the heat from the inner reflecting chamber walls and protects the outer shell from having any dangerous rise in temperature (col. 3, ll. 14-17). With the exception of bottom panel 9, which may

be may of fiber, all of the panels are made of aluminum (col. 1, ll. 64-67).

The door of Forrer's oven is insulated to assist in keeping it as cool as possible (col. 2, ll. 43-46). Forrer further explains that "[t]he only other place in the oven at which I have found it expedient to use insulation is on the under surface of the top wall 8 where I employ a bat of insulation at 38 around the socket 39 for the upper heat lamp 40" (col. 2, ll. 48-51).

Malick's cooking oven likewise is of the infrared type. See column 2, lines 22-25: "In contrast to conventional ovens where the food is heated by hot air or long-wave infrared radiation, the present invention heats the food by short-wave infrared radiation." The infrared radiation is provided by four, 200-watt incandescent bulbs in the preferred embodiment depicted by Figures 1-6 and by a 30-watt lamp (presumably also incandescent) in the simplified Figure 7 embodiment.

The oven shown in Malick's Figures 1 and 2, on which the examiner relies (Answer at 6), is similar to Forrer's in that it is provided with vents (i.e., 60-62) for allowing air to

enter and exit the oven. The reasons for such venting are as follows:

> Further features of the invention include venting of the cooking compartment to permit its end panels to remain cool with a shorter overall length than is required when the cooking compartment is not ventilated. This permits the end panels to be formed from wood which provides a pleasing aesthetic appearance of the cooking appliance. Venting the compartment also lowers the temperature of the air, the lamp glass and the support grid and thereby improves reliability by reducing the possibility of damage to the plastic pouch. [Col. 2, ll. 1-10.]

Specifically, vent openings 60 "provide ventilation at the opposite ends of the cooking compartment to reduce the air temperature in the cooking compartment and to help prevent overheating of the wooden end walls 16 and 18 and the microswitch 50" (col. 3, ll. 38-42). Vent openings function as follows:

> Vent opening 61 provides ventilation of the space between wall 34 and the wooden end panel 16 and, therefore, cools the panel, the switch support wall 38, the microswitch and the lamp sockets. Vent opening 62 provides ventilation of the space between wall 36 and the wooden end panel 18 and, therefore, cools the panel and radiation shield 39 which is supported at its sides on wall 36. Vent 61 also permits the use of a microswitch 50 rated for low temperature operation as contrasted with the more expensive high temperature types. The switch is the most expensive single component in the oven; and a means for keeping it at lower temperatures is,

> therefore, of prime importance. [Col. 3, l. 66 to col. 4, l. 10.]

The examiner cites Buckingham as evidence of the obviousness of increasing the efficiency of the ovens of Forrer and Malick by replacing their outer walls with laminated insulating walls (Answer at 6). Buckingham's oven, like Malick's, employs infrared radiation provided by incandescent bulbs (16) (p. 2, 2d col., ll. 51-59). Buckingham's oven includes an outer heat-insulating box or wall 11 having a removable top cover 13, an inner, heat-attenuating box or wall 12 having a removable top cover 22, and eight incandescent light bulbs 16 located in the space between the inner and outer boxes (p. 2, 2d col., ll. 7-20). Buckingham's oven does not include any vents.

Appellant argues that

> [sic:the] modification of either Forrer or Malick in view of to Huie et al. and Buckingham et al. in the manner suggested by the examiner would require elimination of the vents of Forrer and Malick. . . . [T]he modifications suggested by the examiner would clearly be detrimental to the operation of the basic references. Stated another way, it would in each case be teaching away from the intended operation of the primary references. [Reply Brief at 7.]

The examiner's Supplemental Answer does not address this argument, which in our view has considerable merit. In both Forrer and Malick, cooking is accomplished using infrared radiation rather than heated air; in fact, the air is vented to the atmosphere in order to prevent the internal components from becoming too hot, as noted above. As a result, replacing the vented, uninsulated walls in the ovens of Forrer and Malick with unvented, insulated walls would fundamentally alter the manner of operation of those ovens, which undercuts the examiner's prima facie case for obviousness. Compare In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) ("if the French apparatus were turned upside down, it would be rendered inoperable for its intended purpose"); In re Schulpen, 390 F.2d 1009, 1013, 157 USPQ 52, 55 (CCPA 1968) ("Rather than being made obvious by the reference, such modification would run counter to its teaching by rendering the apparatus inoperative to produce the disclosed tire patches."). As a result, we are also reversing the rejection of claims 1-3 based on either one of Forrer and Malick in view of Huie and Buckingham.

F. New grounds of rejection pursuant to 37 CFR § 1.196(b)

Pursuant to our authority under 37 CFR § 1.196(b), claims 1, 6, and 7 are hereby rejected under 35 U.S.C. § 103(a) for obviousness over Nusbaum et al. U.S. Patent 4,675,506 (Nusbaum) in view of Huie.[4]

All of the elements of claim 1 with the exception of the recited dimming switch read on Nusbaum's oven as follows:

1. A portable low temperature cooking oven comprising:

a housing [10a-10e] constructed of laminated insulating panels [i.e., rigid, densified glass wool material 17 sandwiched between outer aluminum layer 18 and inner aluminum layers 16a-16e -- col. 6, ll. 1-6] having an opening therein;

a door [10f] constructed of laminated insulating panels[5] [i.e., rigid, densified glass wool material 17 sandwiched between outer aluminum layer 18 and inner aluminum layers 16f] pivotally attached [by piano hinge 19 -- col. 5, ll. 57-58] to said housing and disposed for selective sealed closing [i.e., loosely sealed even when designed to permit venting -- col. 3, ll. 30-34] of said opening;

at least one electrical fixture [socket 31] attached within said housing;

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[4] A copy of the Nusbaum patent, which issued June 23, 1987, is enclosed.

[5] The requirement that the door be formed of panels reads on Nusbaum's door 16F as well as it does on appellant's disclosed door 32.

an electrical heat lamp [incandescent bulb 30] attached to each said electrical fixture;

at least one dimming switch [not disclosed] attached to said housing;

electrical circuit means connecting each said dimming switch [not disclosed] to an electrical power supply [socket 31 is connectable to external power source -- col. 6, ll. 10-12];

said electrical circuit means further electrically connecting each said dimming switch [not disclosed] to at least one said electrical fixture.

In view of Nusbaum's observation that "[p]alatable cooked temperatures for meat, for example, range from about 140E F. (60E C.) for rare meat to about 190E F. (88E C.) for well done poultry" (col. 2, ll. 39-41), Nusbaum's explanation that increasing or decreasing the wattage of the bulb respectively increases or decreases the equilibrium oven temperature (col. 5, ll. 39-48), and Huie's disclosure of using rheostat 48 to adjust the flow of electrical current into the lamp sockets 36 in order to change the temperature within the chamber 14 (col. 2, ll. 28-
32), it would have been obvious to add a rheostat (or dimmer) to Nusbaum's oven to permit adjustment of the lamp wattage and thereby the equilibrium temperature.

Dependent claims 6 and 7 are satisfied by Nusbaum's oven thus modified, because Nusbaum's insulating panels are formed of rigid heat resistant insulation material sandwiched between layers of heat reflective and heat resistance aluminum (col. 4, ll. 46-59 and col. 6, ll. 1-6).

G. Appellant's options for responding to the 37 CFR § 1.196(b) rejection

This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides, "[a] new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings 37 CFR § 1.197(c) as to the rejected claims:

> (1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter

> reconsidered by the examiner, in which event the application will be remanded to the examiner . . . .
>
> (2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record . . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED; 37 CFR § 1.196(b)

JAMES D. THOMAS Administrative Patent Judge	)
KENNETH W. HAIRSTON Administrative Patent Judge	) BOARD OF PATENT) APPEALS AND) INTERFERENCES
JOHN C. MARTIN Administrative Patent Judge	)

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