

COMMISSIONER'S DECISION

Obviousness: The claims were refused for lack of patentable subject matter over the teachings of the prior art and common general knowledge.

The application relates to a stove having a pull-out oven, and a counter-ballast weight at the rear of the stove. The applicant did not rely on the pull-out oven for novelty. He overcame the instability of the stove by adding ballast in the same manner as is employed in any mechanical art.

FINAL ACTION: Affirmed. The Board also recommended the refusal of the application.

This decision deals with a request for review by the Commissioner of Patents of the Examiner's Final Action dated February 8, 1974, on application 103,770 (Class 312-78). The application was filed on January 27, 1971, in the name of Heinrich Detterbeck, and is entitled "Household Appliance Such As A Dishwasher, Cooking Stove Or The Like." The Patent Appeal Board conducted a Hearing on June 18, 1975, at which Mr. H. O'Gorman represented the applicant.

The application relates to a stove having a carriage including the oven door, slidable into and out of the oven, where the stove is provided with a ballast weight in the form of a flat rectangular member mounted between two upright frame members at the rear of the appliance.

In the Final Action the examiner refused the claims for failing to define a patentable advance in the art in view of common general knowledge and the following United States Patents:

2,701,728	February 8, 1955	Miller
3,029,088	April 10, 1962	Loef

In that action the examiner stated (in part):

In the letter of response dated August 28, 1973, applicant argues that applicant's use of ballast is unobvious in relation to the use of ballast in the structures shown in the aforesaid references. In reply to this, the use of ballast is known generally, and merely to specify a ballast for a particular device, such as a stove, is not invention. Again these two references are cited merely as examples of prior art

showing that idea of ballasting is old and well known. The idea of using weights on one side of a device, to keep the device from tipping, does not constitute patentable invention, and the structural details involved in implementing the idea, such as the channel-shaped element between structural members, etc., are merely a matter of structural design, obvious to any ordinary workman skilled in the art. Counterweights are used in a very great variety of devices: pedals, cranks, elevators, brackets, supports, beds, cranes, trucks, record players, weigh scales, etc. The function and use of counterweights are so very well known and so thoroughly widespread that any technician with ordinary skill in his art is expected to use a counterbalance if it serves his purpose better or more economically than the presumably numerous other obvious alternatives which may be resorted to in order to achieve the same effect. The idea of a ballast is not inventive, and if a ballast is to be used in any device, then as a matter of mere routine design some means will be provided to support the ballast; applicant has not disclosed any ballast supporting structure that is inventive.

In view of the foregoing, claims 1 to 9, which are directed to the idea of having a ballast and to the support means for the ballast, are rejected.

Claim 9 includes the feature whereby the ballast means comprises "a suitable heat reservoir", a phrase which recites a functional result only, rather than clear and explicit structure. Furthermore, this result is not novel or unexpected; any ballast or mass at the rear of a hot stove will store heat. Furthermore, if claim 9 is intended to be read as reciting some specific structural features for augmenting the heat storing capabilities of the ballast, then these structural features are not clearly and fully described and supported by the disclosure. Claim 9 is rejected as indefinite and as unsupported by the disclosure; Claim 9 fails to meet the requirements of Section 36 and Rule 25.

In summary, the idea of a ballast, the combination of a ballast with an appliance, and the structure provided to retain the ballast on the appliance, as disclosed or as claimed in claims 1 to 8, do not constitute anything that is new, useful and unobvious in relation to the cited prior art. As well, the heat storing feature, as recited in claim 9, is old, obvious, indefinite, and not clearly and fully supported by the disclosure. The application is again rejected.

In a response dated June 10, 1974 to the Final Action the applicant stated (in part):

Stoves were heretofore known with pull down doors allowing access to the oven portion. However, there were difficulties with pull down doors as will be readily confirmed by any user. Access to the food within the oven and removing the cooked food was difficult and awkward and a new technique was called for. The solution was a pull-out drawer which overcame these problems but, unfortunately, caused further difficulties because of the

large moment force which was applied when the pull out drawer was in its open position. Obvious solutions such as increasing the dead-weight of the stove or anchoring the stove to the floor were considered and rejected due to the increased manufacturing costs, and lack of portability in the case of added bulk, and a lack of positioning flexibility in the case of anchorage means.

The solution arrived at was ingenious. By providing a weight on the rear of the stove which could be readily removed, the remaining problems were overcome. The stove not only could be manufactured from previously used materials with a minimum of design modification, but it could also be positioned in a kitchen without regarding the limitations necessitated by anchorage modifications to the walls or floor.

...

Applicant recognizes that the prior art discloses the use of ballast in heavy construction vehicles intended for lifting and transporting loads. Nowhere, however, was prior art revealed showing the use of ballast on stationary objects, such as machines, furniture, and, in particular, stoves, and it is respectfully submitted that household appliances are remarkably different in purpose and design than heavy equipment.

When an article is intended to remain stationary, there is little objection to the use of bulky material to provide stability since the only portability considerations are those involved in moving the apparatus from its place of manufacture to its final position. Accordingly, devices such as machine tools or lathes are commonly manufactured from massively proportioned materials which allow stability. However, when the apparatus is adapted to be continuously mobile, different considerations prevail as is well stated in Miller, Col. 1, lines 29-44, and ballast may be very useful to give flexibility to the vehicle's operation. Where a device is not used under a variety of operating conditions, however, such as a stove, the use of ballast is simply not suggested either by the prior art or by common general knowledge. This is evidenced by the attempt to avoid ballast in stationary operations, such as working a backhoe, where, because of the disadvantages inherent in ballast use, extensible legs are used which provide the necessary stability without reducing the load-carrying capacity of the vehicle. Accordingly, applicant reiterates his argument that the use of ballast in stationary devices is not disclosed by the prior art and that the reason such devices are not shown is clearly evident because of the lack of need for flexibility in their operation.

...

Factors to consider in determining whether the invention is obvious in view of the prior art (i.e., the prior art must be that involving heavy equipment as no prior art concerning the use of ballast on any household appliance was found) include the following:

1. A long-felt want for the invention in question. Paper Sacs Proprietary Ltd. v. Cowper, 53 R.P.C. 31 at 54 (P.C. 1936).
2. An outstanding unsolved problem. The King v. Uhlmann Optical Co. 10 Fox 24 at 44 (Ex. Ct. 1949).
3. Commercial success. Spun Rock Wools Ltd. v. Fiberglas Ltd., 3 Fox 157 at 165 (S. Ct. 1943).
4. Displacement in the marketplace. Defrees and Betts v. Dominion Auto Acc. Ltd., 25 Fox 58 at 94 (Ex. Ct. 1963).
5. Adoption in improvement in the prior art. Clark et al v. R.J. McDermitt Co., 26 Fox 158 at 170 (Ex. Ct. 1964).

It has been demonstrated above that all of these conditions have been fulfilled by the present invention, save commercial success and displacement of other stoves in the marketplace. In fact, the commercial success of the stove has also been established. The applicant has sold approximately 80,000 of these stoves per year. This accounts for one fourth of the applicant's stove production and 6% of all stoves manufactured in West Germany. These figures become even more significant when it is realized that the stove is a luxury item and consequently has a much higher selling price than ordinary stoves.

The Miller citation relates to a weight selection mechanism for tractors and particularly to a combination weight box and bumper for mounting on the front end of agricultural type tractors. The Loeff citation deals with ballast weight added to a lifting and conveying vehicle. As mentioned the application relates to a stove having an oven which slides into and out of the stove, together with a ballast weight at the rear of the stove so it won't tip forward when the oven is pulled out.

The question to be considered is whether the applicant has made a patentable advance in the art.

The object of the invention was to design an appliance of the sliding door type in such a manner that "the stability thereof is ensured, without the need for anchoring it at the site of installation; even when the carriage is fully extended to a normal degree. This object is achieved, according to the invention, by providing a ballast weight in the form of a flat rectangular member located between upright frame members of a supporting frame at the rear of the appliance."

It is noted that the precise construction of the stove originally described was not important to the concept envisaged as inventive in the original disclosure. A pullout door and oven tray is shown merely schematically in figure 1.

The applicant stated "that a new technique was called for to make access to food in an oven more convenient. The solution was a pull-out drawer which overcame these problems but, unfortunately, caused further difficulties because of the large moment force which was applied when the drawer was in the open position." The applicant, however, stated at the Hearing that "he was not relying on the pull-out oven per se for novelty."

In other words when the applicant developed a pull-out oven drawer, which is substantially equivalent to pull-out drawers in dishwashers, he created the problem of instability. A designer of such a device, however, must from a consideration of the most elementary mechanics provide sufficient stability so the appliance will not tip over when the drawer is pulled out, otherwise, the appliance will not be satisfactory. Whether the structure provided to yield this result is described as a ballast or not, is of no consequence. The fact is that all the mass which remains to the rear of the front legs serves as ballast, whether it is so labelled or not.

The applicant states that, "obvious solutions such as increasing the dead-weight of the stove or anchoring the stove to the floor were considered and rejected due to the increase manufacturing costs, and lack of portability in the case of added bulk, and a lack of positioning flexibility in the case of anchorage means." Here it is noted that the applicant considered that an obvious solution was to add "dead-weight to the stove." This of course is in reality what he has done, but in a particular manner.

When the applicant created the problem of instability, he selected one of the many obvious solutions to overcome that problem. It is a fact that both

simple and complex counterweights are used in nearly every mechanical art to provide stability. In our view therefore, any inventive step would have to reside in the use of inventive skill to overcome the installation problem.

We think it pertinent to refer to the reasoning of the Supreme Court in Crossley Radio v Canadian General Electric (1936) 551 at 559 where a test of obviousness was put forward, using the words of Lord Chelmsford in Penn v. Bibby, "...the design does not appear to me to be so much out of the track of the former use as not naturally to suggest itself to a person turning his mind to the subject." Or from the same case, using the words of Lord Shaw in London General Omnibus Company v. Bonnard, "...the design might have well occurred to an intelligent person without any exercise of that invention (degree of ingenuity) which is necessary as the ground of a patent."

Claim 1 reads:

A stove including a carrier member, a carrier member frame and guide members connected to said frame adapted to co-act with said carrier member to enable front loading of said stove, said carrier frame being provided with vertical support means at the rear side of said stove, adapted to seat and positively receive flat ballast means sufficient to impart stove stability.

In essence the claim is directed to any stove with an opening in the front, support means in the rear portion, and ballast means added to the support means. As mentioned the applicant stated it was obvious to increase the dead weight of the stove in order to solve the stability problem. This is specifically what this claim calls for, but in a specified manner. He has overcome the instability of the stove by adding ballast in the same manner as is employed in any mechanical art, and which was shown in the cited references. The function and use of counterweights are well known and any technician with ordinary skill in his art would use a counterbalance if it serves his purpose better or more economically than other obvious alternatives.

In our view therefore claim 1 does not cover a patentable advance in the art.

Claims 2 to 8, which depend directly or indirectly on claim 1, introduce securing arrangements and mere design features. There was obviously no inventive skill required in securing ballast to the frame of the stove. The reasons for refusing claim 1 apply equally to these claims.

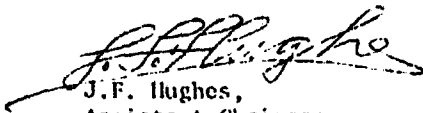
Claim 9, which depends on claim 1, characterizes the ballast as being a heat reservoir. It is known that any general mass will act as a heat sink. However, there is no structural features which would add patentability to rejected claim 1.

The applicant argues that there was "a long-felt want for the invention in question," and that the invention was a "commercial success." The applicant suggested at the Hearing that the pull-out oven feature would likely enhance the sales of the stoves. Commercial success, of course, may be dependent on many factors. In our view the appearance of the stove in general, color, lights, dials etc., and the pull-out oven feature would enhance the sale of the stove. It would not result from a concealed counter-weight, about which most buyers would be unaware. In any event the claims do not relate to a pull-out oven, nor does the applicant deem this a novel feature.

In our view, the claims lack patentable subject matter. As there is no further patentable subject matter disclosed in the application, the Board is satisfied that the solution to the newly created problem of instability does not lie so far outside the track of what was done by persons acquainted with the art that would not naturally occur or suggest itself to such persons thinking on the subject. It comes within the category of a matter to which the Supreme Court referred in Crossley Radio v Canadian General Electric, supra, 551 at 557, when it stated: "...we do not think the inventive element necessary to constitute subject matter is made sufficiently

evident." At page 555 of that decision it was pointed out that it must be kept in mind that while it is important to encourage inventions because of their possible influence upon trade and manufacture, it is equally important that manufacturers or traders of the public generally should not be hampered by the granting of patents where there has been no exercise of the inventive faculty.

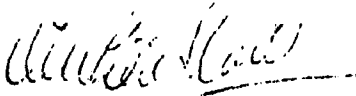
The Board therefore recommends that the Final Action to refuse the claims be affirmed, and that the application also be refused for failing to disclose any patentable subject matter.



J.F. Hughes,
Assistant Chairman,
Patent Appeal Board.

I concur with the findings of the Patent Appeal Board and refuse to grant a patent on this application. The applicant has six months within which to appeal this decision under the provision of Section 44 of the Patent Act.

Decision accordingly,



A.M. Laidlaw,
Commissioner of Patents.

Dated at Hull, Quebec
this 7th day of
July, 1975.

Agent for Applicant

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