IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application 392,317 having been rejected under Rule 47(2) of the Patent Regulations, the Applicant asked that the Final Action of the Examiner be reviewed. The rejection has consequently been considered by the Patent Appeal Board and by the Commissioner of Patents. The findings of the Board and the ruling of the Commissioner are as follows:

Agent for Applicant

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H3A 3C8

OBVIOUSNESS: Packaging container

Applicants container made from micro-undulated conogated paper between two smooth paper covering strips and covered with aluminum foil is shown in the cited art.

Final Action: Affirmed

This decision deals with Applicant's request for review by the Commissioner of Patents of the Final Action on application 392,317 (Class 190-150) assigned to Dr. Madaus & Co. entitled PACKAGING CONTAINER FOR SENSITIVE PRODUCTS. The inventors are Dr. G. Bruesewitz and Dr. R. Sieck. The Examiner in charge issued a Final Action on February 15, 1985, refusing to allow the application. A Hearing was held on July 13, 1988, at which Applicant was represented by his Patent Agent Mr. K. Murphy. Additional written arguments were presented on August 8, 1988.

The subject matter of the application relates to a packaging container for sensitive products such as agar housed in closed tubes. Figures 1 and 2 illustrate the invention.

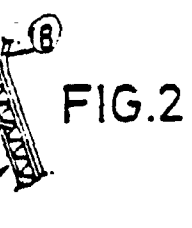


FIG.2

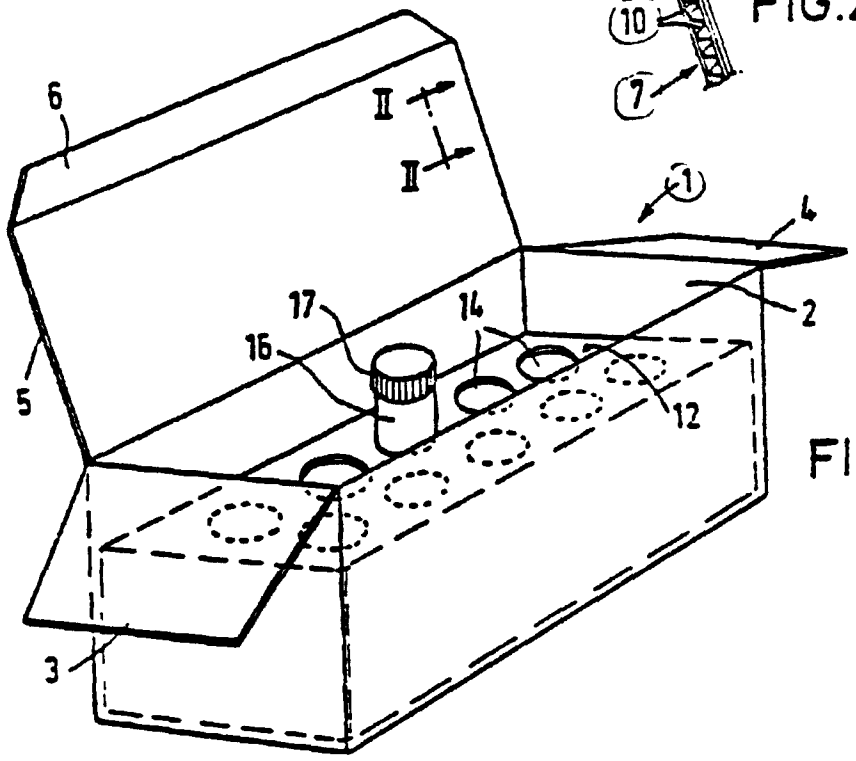


FIG.1

Packaging container 1 is made from a folding box blank made of double micro-undulating corrugated paper 7. The paper has small undulations creating air channels 10 between the two smooth paper covering strips 9. Aluminum foil 8 reduces the amount of heat entering or leaving the container.

In the Final Action the Examiner refused allowance of the claims in view of the following patents:

British Patents			
(1)	694,307	July 15, 1953	Wexler
(2)	1,225,325	Mar. 17, 1971	Vaillant et al
United States Patents			
(3)	3,915,304	Oct. 28, 1975	Pasco et al
(4)	2,954,912	Oct. 4, 1960	Kauffeld
(5)	3,682,597	Aug. 8, 1972	Husch

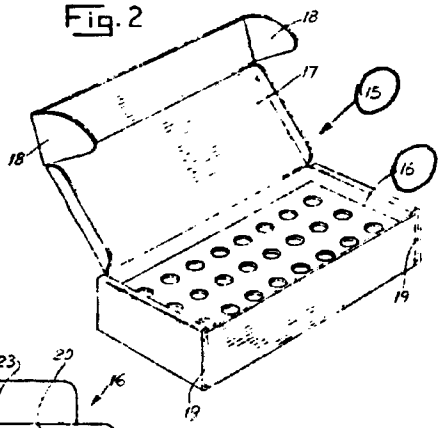
British Patent 694,307 describes a cover device for cooling milk bottles. This cover made of wet-strong paper with a reflecting metallic surface maintains a lower inside temperature than in the atmosphere.

British Patent 1,225,325 relates to an insulated tank construction for transcontinental transport by rail, air or sea.

Pasco et al uses a box made of plywood with a reflective metallic lining for insulating food.

Husch shows a cardboard box with a mounted-spacer insert having apertures to retain glass tubes in spaced relationship when the cover is closed. Figures 2, 3 and 4 are shown below:

Fig. 2



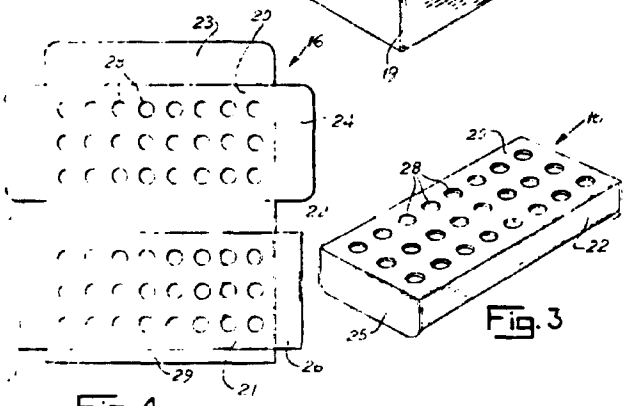


Fig. 3

Fig 4

Box 15 of cardboard construction has a mounted spacer insert 16 for retaining test tubes or vials.

United States 2,954,912 to Kauffeld is an insulated perishable food carton. Figures 1, 3 and 5 are shown below.

Fig.1

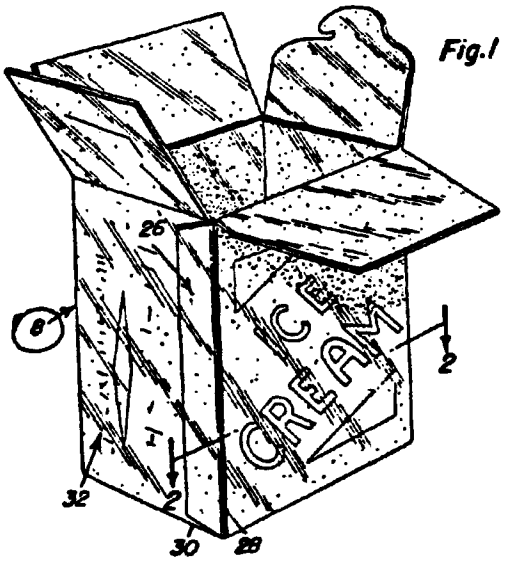


Fig.3

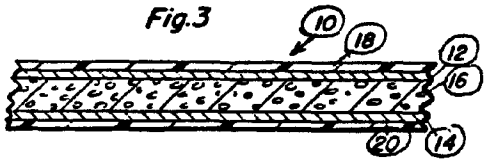
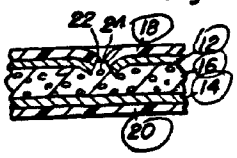


Fig.5



Carton 8 is made of material 10 which is characterized by an outer laminate of aluminum foil 12, insulating layer 16, inner layer 14 of aluminum foil and a film of plastic material 18 and 20 sandwiching the interior components.

In the Final Action the Examiner stated (in part):

> The use of insulating material to keep the contents of a container hotter or colder than the local environment is shown in (2): -
>
> > "To keep the liquid transported at a constant temperature, the tank 2 is completely covered by an insulating cover 14 made up of a thick layer 15 of plastic foam, fibreglass or other heat-insulating material,...."
>
> see (2) and page 2 lines 5 to 9.
>
> and (4) (entire document) but especially
>
> > "As an entity, the material is denoted by the numeral 10. It is characterized by an outer or exterior ply or laminate of aluminum foil 12, by a corresponding inner laminate or layer of aluminum foil 14, and an intervening body layer or laminate 16. The latter is of paper stock, more specifically so-called blotter stock. Not only this, it is not standard or "ordinary" blotter stock, but a specially made product which is bulked-up to render it of proper tensile strength and to promote the multiplication of non-communicating air pockets or cells for insulation properties and also to promote the requisite compressibly resilient properties so needed in making it possible to produce a laminated material which may range from 18 points to 32 points and which, consequently, lends itself to folding, creasing and forming into containers."
>
> see column 3 lines 38 to 52.
>
> The combination of foil and insulating material is taught in (4).
>
> Internal spacers for shipping boxes are taught in (5) (Figs. 2, 3, 4).
>
> Thus the use of metal foil to reduce heat transfer is known (1), (3), (4), the use of cardboard or other insulating material to reduce heat transfer is known (2), (4) as is the combination (4). Use of a spacer in a box is known (5).
>
> Applicant has not achieved any new or unexpected result, because the result is well known from experience and known scientific principles.
>
> Additionally the combination of reflective surfaces (metal) and insulating layer (vacuum) is well known in thermos flasks.

All claims are refused for lack of invention.

Applicant argues since none of the citations teach the device of instant claim 1 including the preamble, anticipation does not exist. The examiner cannot agree, novelty of result is also expected. The use in this case is analogous reduction of heat flow entailing reduction of temperature variation.

In response to the Final Action the Applicant submitted additional claims 22 to 26 and stated (in part):

> ... The present invention is thus concerned with a specialized product which overcomes a problem experienced in a special field.
>
> In accordance with the present invention, it has been discovered that insulation alone, as previously employed, is not sufficient in order to obtain storage stability and prevent formation of water of condensation of the sensitive product. It has been found, in accordance with the invention, that heat radiation is also a significant factor in damaging the sensitive products. This heat radiation includes heat radiated from the walls of the storage room in which the packaging is contained. In the case of storage in a room subjected to temperature variations, the contents of the packaging container are exposed to radiation influences which can lead to a warming up of one side of the tubes in the packaging container so that condensation forms on the non-warmed side of the tube.
>
> Based on this discovery, the present invention has been developed and as has been particularly illustrated by reference to the table at page 8 of the disclosure, and the accompanying description, the packaging of the present invention enables the period of storage stability of immersion nutrient substrate carriers to be more than doubled as compared with packaging containers conventionally employed for this purpose.
>
> Thus the present invention resides not only in providing a solution to a problem, but <u>also</u> in recognizing the problem. Once the problem is recognized, the solution may be relatively simple, but it is first necessary to recognize the problem. ...
>
> ... None of the references are remotely suggestive of the present invention, and none of them is concerned with or recognizes the problem recognized and then solved by the present inventors. Absent the Applicant's disclosure, a reading of the five references alone or in combination would not result in identification of the problem solved by the present invention, nor would it lead to the particular structure which provides the solution to the problem. The references themselves are concerned with distinct areas of technology. One is directed to a tanker body in the transport of bulk liquids. Another is a cardboard cover for placing over a bottle of milk in a dish of water in order to effect a cooling of the milk. Another is an ice cream container. These diverse references were only assembled by working backwards after a reading of Applicant's disclosure. ...

The issue before the Board is whether or not the claims are allowable in view of the cited references. Claim 1 reads:

> A temperature-stabilizing packaging container for condensation-sensitive, water-containing products in closed tubes, comprising a strip-like, heat-insulating material forming the packaging container; and metallic covering means, at least on the outer surfaces of the container, adapted to repel heat-producing radiation, said heat-insulating material and metallic covering means being adapted to protect said condensation-sensitive, water-containing products against the influence of heat, and to inhibit condensate formation and drying out of said products.

At the Hearing Mr. Murphy emphasized that the present invention resides in recognizing the problem that insulation alone as previously employed is not sufficient to obtain storage stability and prevent formation of water of condensation of the sensitive product. He indicated that the present invention is concerned with packing containers for agar which is a strongly hydrophillic polysaccharide absorbing twenty times its weight of cold water with swelling to form a gel. Accordingly he stated that the packaging is intended to avoid frequent or large temperature fluctuations. Reference was made to page 8 of the disclosure where a table indicating temperature fluctuations of the Applicant's container and a conventional cardboard container are shown.

Considerable discussion with respect to the Kauffeld reference took place at the Hearing. This reference which is a temperature-stabilizing packaging container also has a sheet of heat-insulating material and an outer surface provided with radiation repelling metallic covering. Kauffeld states in column 2 at line 33 that "the value of the exteriorly covered laminate using foil resides in its ability to radiate heat."

Mr. Murphy argued that Kauffeld was concerned with maintaining ice cream in a freezer, however we note from column 2 at line 8 of the patent where "the invention under advisement falls in the semi-rigid group and relates, as already stated, to a carton and although the idea involves protecting hot, cold and frozen food products, it will simply .... be hereinafter referred to as an ice cream container." We believe that the Kauffeld

packaging container deals with condensation and reflection of radiant heat to maintain the product at a constant temperature as does the Applicant's container.

With regard to the table referred to on page 8 of the disclosure, we note that the temperature comparison indicated is between the Applicant's packaging container versus a packaging container "consisting of simple cardboard." We think that if a packaging container using the Kauffeld arrangement was used for the comparison instead of the cardboard container, the temperature variations would be equivalent in view of the sameness of the Applicant's laminated wall structure and that of the Kauffeld container.

We agree that recognition of a problem is germane in providing a solution, whether it be simple or not, or inventive or not. In the case before us however, we are unable to distinguish between the problems faced by Kauffeld as compared to those faced by the Applicant. Each has sought to maintain constant temperature by resisting radiation and using heat insulation.

The Applicant states in his response to the Final Action that the claims issued in the United States are broader than claims presented in this application. Also five claims have issued in the corresponding British application. He states that both "Britain and the U.S.A. are strong examining Countries and both Countries examine for obviousness." We agree with the observation made by the Applicant but it must be pointed out that United States patent 2,954,912 to Kauffeld may not have been included as a reference considered by the Examiner in either the United States or Great Britain.

In the Applicant's written arguments presented on August 8, 1988 reference is made to the Supreme Court decision in Shell Oil Co. v. Commissioner of Patents 67 CPR (2d) 1 with respect to the discovery of a new use for an old compound. It is contended by the Applicant that his situation is analagous since his invention "may be considered to reside in a new use for a laminate of an old kind".

We are unable to concur with that view since Kauffeld was concerned with a container to maintain contents with minimum temperature fluctuations when compared to the temperature of the adjacent environment. This is the field of use that the Applicant is concerned with. In any event, we are satisfied that the solution provided by Kauffeld meets the same needs encountered later in time by the Applicant. The Applicant has done no more, in our opinion, than to re-invent Kauffeld's insulated carton when faced with the situation Kauffeld experienced.

Claim 1 specifies a temperature-stabilizing packaging container comprising a strip-like heat-insulating material and at least on the outer surfaces of the Applicant's container, metallic covering means to repel heat-producing radiation. Kauffeld does show components to perform similar functions and in our view claim 1 does not recite a patentable advance in the art. Features found in dependent claims 2 to 18 do not add anything of patentable significance to rejected claim 1.

The method set forth in claim 19 and claims 20 and 21 dependent thereon do not differentiate from the Kauffeld citation and we recommend their refusal.

Claims 22 to 26 were added in response to the Final Action. These claims specify a package container in the form of a box comprising a folded sheet of heat-insulating material in the form of corrugated paper and an outer surface of said sheet provided with a radiation-repelling, metallic covering. We do not find any novelty in the box construction over that shown by Husch. Combining the heat insulating and radiation repelling material taught by Kauffeld with the well known box structure does not present any patentable feature. Consequently we do not recommend acceptance of claims 22 to 26.

In summary we recommend that the decision in the Final Action to refuse claims 1 to 21 be affirmed and that the acceptance of claims 22 to 26 be refused.

M.G. Brown
Acting Chairman
Patent Appeal Board

S.D. Kot
Member

I concur with the findings and recommendations of the Patent Appeal Board. Therefore I affirm the refusal of claims 1 to 21 and I refuse entry of claims 22 to 26. The applicant has six months within which to appeal my decision under the provisions of Section 44 of the Patent Act.

J.H.A. Gariépy
Commissioner of Patents

Dated at Hull, Quebec
this 21 day of November 1988

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