

Dr Ferdinand
3746

PATENTS ACT 1977

IN THE MATTER OF an application under Section 72 by General Mills Inc for the revocation of Patent Number GB 2221374B in the name of Leng-D'or SA

11/2/94

Herbert

11/3/94

Revocation

DECISION

The patent in suit was filed on 4 August 1988 as application number GB 8818525.1 and was granted on 20 May 1992 in the name of Leng-D'or SA (the Patentee).

On 3 July 1992, General Mills Inc (the applicants) filed an application for revocation on the grounds that the invention claimed is not a patentable invention within the terms of Section 72(1)(a) since it does not involve an inventive step in accordance with Section 1(1)(b), and under Section 72(1)(c) that the specification does not disclose the invention clearly enough and completely enough for it to be performed by a person skilled in the art.

The matter proceeded through the evidence stages, albeit accompanied by some delay, and the date of 30 June 1994 was agreed for the substantive hearing. Before the hearing could take place, however, the agents acting for the patentee wrote to the Patent Office on 10 May 1994 stating that they had been instructed by their Spanish associates that the proprietor had given instructions to them to allow the patent to lapse and presuming that the proprietor would not be taking any further action in these proceedings.

The Office subsequently wrote to both parties on 1 June 1994 explaining that the application for revocation was still active and that the Comptroller was minded to revoke the patent on the basis of the papers on file and make an award of costs to the applicants for revocation unless either side commented or asked to be heard within 28 days of the letter. The applicant's letter of 1 June (which crossed in the post with the Office's letter of that date)

indicated their agreement with this course of action and the agents for the patentee have made only a brief submission on costs.

Unlike revocation, the allowance of the patent to lapse would not take place retrospectively and I must therefore consider whether it is appropriate to accept the patentee's proposal or to order the revocation of the patent. When a patentee offers to surrender, it is the practice to consider the matter as though no counterstatement had been filed, that is, as if each specific fact set out in the statement had been conceded except in so far as it is contradicted by other documents before the Office and I shall approach the patentee's offer in this case to allow the patent to lapse on the same basis.

The patent in suit relates to a method of making an edible sheet of potato dough and claim 1 reads as follows:-

"A method of making an edible sheet of potato dough, using newly lifted and washed potatoes, with impurities removed, which are sliced, boiled in water, kneaded and dehydrated to form a potato flour which is then mixed with natural potato starch and modified potato starch which has been previously submitted to a phosphating treatment, cooked and dehydrated."

The stated object of the patent is to provide a method of making an edible sheet from potato dough, which can be presented in the form of discs or other shapes which are dimensionally stable until eventually cooked in hot oil or otherwise. It is clear that the ability to store the dough for a significant period prior to cooking is an important object and overcomes problems associated with seasonal variations in the quality and availability of potatoes and with their storage; indeed the specification at page 2 line 25 to page 3 line 4 states that "An object of this invention is to provide manufacturers of snack foods with ready-to-fry potato sheets, allowing for up to a two year storage period between production and the eventual cooking operation before packaging".

The application under Section 72(1)(a) is based on the following documents:

Document 1 GB 1484455 published on 1 September 1997 (TOM'S FOODS Ltd)

Document 2 "Potato Chip Industry's Research Group Conference, Wageningen Netherlands, 26-28 November 1984" (PCIRG)

Document 3 "Survey of Avebe Food Starches", Avebe Veendam-Holland, Product Information, Ref No HZ 121 02 EP, Published June 1984 (AVEBE)

Document 4 US 3297450 published 10 January 1967 (LOSKA)

It is argued by the applicants that the method of claim 1 is entirely conventional except in so far as it involves the use of modified potato starch which has previously been submitted to a phosphating treatment, and that the properties of, and use of, such modified starch were well known at the time of filing of the patent.

In Document 1 (Tom's Foods) it is stated on page 1 lines 16 to 34 that many methods have been proposed for producing expanded snack products based mainly on potato or cereal products and that "In essence, the majority of such methods involve the basic steps of forming a dough of suitable composition, extruding the dough and cutting the extruded dough into piecelets (generally after a drying operation) to form a so-called 'half-product'. This half-product can be cooked immediately to effect expansion of the product and thereby form a crispy expanded snack food product or it can be stored and/or transported (provided appropriate precautions are taken against moisture absorption) if it is not desired to effect immediate expansion."

The invention of Tom's Foods is defined in claim 1 of that patent as follows:

"A method of preparing a simulated pasta snack product, or a half-product therefor which includes the steps of (a) admixing with water a dry mix of 20-77.5% by weight of a dehydrated potato product wherein the starch cells contained in said product are substantially unbroken; 20-77.5% by weight of ungelatinised starch (as herein defined); 2-20% by weight of pregelatinised starch; 0.5-3.5% by weight of sodium

chloride to form a dough having a moisture content of 25-45% by weight; (b) passing the said dough through an extruder under conditions of pressure and temperature such as to effect partial gelatinisation of the starch contained in the dough and to produce an extruded semi-translucent product; (c) cutting the extruded product into piecelets of a predetermined shape or configuration immediately or shortly after extrusion; and (d) drying the cut piecelets at a temperature of up to 60°C to a moisture content of 9-13% by weight to form a half-product and, if desired, effecting cooking of said half-product."

On page 2 lines 23 to 33, it is stated that "The dehydrated potato product is generally a conventional dehydrated product prepared from cooked potatoes The product may be in the form of for example mashed potato powder" and it would appear that this corresponds to the potato flour of the patent in suit. Further it would appear from the description on page 2 lines 35 to 52 of Tom's Foods that the ungelatinised starch corresponds to the natural potato starch of the patent in suit and that pregelatinised starch is a modified starch. Thus, Tom's Foods would appear to show that it was known to produce an edible potato dough from potato flour, potato starch and modified potato starch. In this respect the patent in suit and Tom's Foods differ only in that the modified starch in the patent in suit is a modified starch which has previously been submitted to a phosphating treatment and the modified starch in Tom's Foods is a pregelatinised starch, and that subject to this difference, the "half-product" of Tom's Foods corresponds to the storable dough of the patent in suit.

With regard to the stated object of the patent in suit to provide a product which allows for up to a two year storage period between production and eventual cooking, Tom's Foods refers to a dough half-product which can be stored and/or transported prior to cooking (page 1, lines 30-34) and at page 3 lines 16 to 19 states that "The half-product can be stored for prolonged periods in sealed containers." It is clear from page 8 lines 12 to 17 of the patent in suit that the product of the patent must be stored in containers" to protect it against changes in environmental humidity". Accordingly it would appear that the storage stability of the "half-product" of Tom's Foods and the dough of the patent-in-suit are not significantly different.

The use of salt in the dough mix appears to be well known, for example from docs 2 and 4, and thus the question of inventive step would appear to hinge on a consideration of whether the use of a modified starch which has previously been submitted to a phosphating treatment is obvious in the light of the known use of modified starches in such products at the time of filing of the patent in suit.

Document 2 (PCIRG) is entitled "Potato starch products in extruded foods" and refers to the functional properties of potato starch products at page 20; a table on that page lists potato starch products with their corresponding properties and functions in extruded snack foods. Both phosphated and pregelatinised potato starches are listed which supports the applicants' contention that their use and interchangeability in such products was well known. Furthermore PCIRG at page 29 makes reference to dehydrated potatoes, potato starch and modified starches as basic ingredients in snack food formulations and includes a table which lists starch products for extruded snacks including phosphated starches, and at page 30 discloses a recipe for the manufacture of potato based snack pellets which specifies as an ingredient "pregelatinised potato starch or phosphated potato starch".

Thus on the basis of documents 1 and 2 I conclude that it would be obvious to the skilled man to substitute the pregelatinised starch employed in Tom's Foods with a modified starch which has previously been submitted to a phosphating treatment and that claim 1 of the patent in suit is lacking in inventive step. I have not found anything in the documents before the Office which might contradict this finding, nor anything to contradict the applicants contention that the sub-claims all relate to commonplace features and add nothing to the technical solution outlined by the proprietor in the specification of the patent in suit. I therefore order the revocation of UK Patent No 2221374B.

Since the applicants for revocation have succeeded in this action, they are entitled to an award of costs. In their agent's letter to the Office of 9 June 1994 the patentees argue that these proceedings could have been avoided if the proprietor had been given reasonable notice before the application was filed. I cannot accept this argument because the patentees have not proposed any amendment of the patent at any stage of these proceedings and they have

sought to defend the patent up to the point at which reply evidence was lodged and a substantive hearing to determine the matter was appointed.

I therefore order that the applicants for revocation, General Mills Inc, are entitled to an award of £400 (four hundred pounds) as a contribution towards their costs and direct that this sum be paid by the patentees, Leng D'or SA.

Dated this 11th day of August 1994

P. J. Herbert

P J HERBERT
Superintending Examiner, acting for the Comptroller



THE PATENT OFFICE