

OPINION UNDER SECTION 74A

Patent	EP(UK) 1912515 B1
Proprietor(s)	Intercontinental Great Brands LLC
Exclusive Licensee	
Requester	Bailey Walsh & Co LLP
Observer(s)	Boult Wade Tennant (on behalf of the proprietor)
Date Opinion issued	24 May 2018

The request

1. The comptroller has been requested in a letter dated 26 February 2018 from Bailey Walsh & Co LLP "the requester" to issue an opinion as to whether EP (UK) 1912515 B1, "the patent" is invalid having regard to novelty and inventive step in light of the documents:

A1) US 6528104 published 4 March 2003

A2) European Parliament and Council Directive relating to Cocoa and Chocolate Products Intended for Human Consumption, 2000/36/36/EC dated 23 June 2000
<http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=Celex%3A32000L0036>

A3) Guidance on the Cocoa and Chocolate Products Regulations 2003 published 1 August 2003, revised June 2009
<https://www.food.gov.uk/sites/default/files/multimedia/pdfs/chocguidancejun2009.pdf>

A4) US 4610884 published 9 September 1986

A5) Print out of an article from world-grain.com, <http://.world-grain.com/News/Archive/Heating-up-flour.aspx> dated 1 March 2002

A6) Data Sheet for Aytex (RTM) P wheat starch, this document being made up of 2 portions:

A6a) A technical datasheet published 2 November 2003

A6b) A material safety datasheet published in November 2005

Documents A1-A3 are cited with regard to novelty or inventive step. The reason for

citing A4 is somewhat unclear in that page 12 of the requester's statement indicates they find "claim 1 lacks novelty over A4" and yet states in the observations in reply that A4 "was not cited for novelty in our request". For completeness I have analysed A4 as regards novelty and inventive step. A5 is cited to show aspects of the common general knowledge, whereas A6 is provided to demonstrate the composition of "Aytex" (RTM) which is referenced in an example set out in A4. However I note that whereas the example in A4 refers to Aytex, A6 refers to Aytex P, see paragraph 5 below.

Observations

2. Observations were received from Boulton Wade Tennant acting for the patent proprietor on 5 April 2018, they argued that the patent was novel and inventive and referred to the following document:

A7) Journal of Cereal Science vol.16, 1992, Rajagopalan et al, "Properties of Granular Cold-water-soluble Starches Prepared at Atmospheric Pressure", pages 29-40.

3. The observations disputed the publication date of the passages in A3 relied on by the requester. I have considered A3 and the references therein to updates made after the priority date of the patent. I conclude that the references to the passages in A3 relied on in the request have a publication date of 1 August 2003, so I will examine if they challenge the validity of the patent.
4. Observations in reply were subsequently filed on 19 April 2018 by the requester. In their observations in reply the requester made reference to additional documents including A8

A8) Journal of texture studies vol.13 1982 Bagley and Christianson "Swelling capacity of starch and its relationship to suspension viscosity-effect of cooking time, temperature and concentration, pages 115-126

5. A8 attests to the composition of "Aytex P" (RTM). However, I cannot be certain that "Aytex P" and "Aytex" share the same composition, therefore I cannot rely on A8 (or for that matter A6) to help me interpret the composition of the relevant example in A4. Therefore I will not examine A6 or A8 further. In their observations in reply the requester also included a reference to a trademark database entry for "Aytex", this is instructive and strictly in reply, I will consider it further below. Finally the observations in reply also included an excerpt of comments made by the US examiner of an equivalent application. I am not convinced these comments are strictly in reply insofar as they invite me to consider an assessment made in another jurisdiction, on which the proprietor has had no opportunity to comment. Accordingly I will not examine them further.
6. The observer submitted a letter on 14 May 2018, almost a month after the deadline for submission of their observations. I cannot consider these further as there is no additional opportunity for the observer(s) to make a response after the deadline has passed.

The Patent

7. The Patent is entitled, "Butterfat filling or imitation chocolate for cereal cooking products", it was filed on 7 August 2006 with a priority date of 10 August 2005, and is currently in force. The 17 claims comprise 2 independent claims that I reproduce below
 1. Fat filling or chocolate substitute constituted by a suspension of solid particles in a continuous fat phase, said suspension comprising less than 33% edible fats (EF) and 3% to 40% of at least one native and/or overdried starch, these percentages being expressed as weight for weight.
 2. Fat filling or chocolate substitute constituted by a suspension of solid particles in a continuous fat phase, said suspension comprising less than 33% edible fats (EF) and 3% to 30%, preferably 3% to 20%, and more preferably 5% to 17% and more advantageously 8% to 13% by weight with respect to the total weight of the fat filling or of the chocolate substitute of a flour, preferably cereal, uncooked, optionally overdried and/or heat-treated.
8. The description of the patent is in French, I have used the US equivalent as an aid in translating the French description to contextualise the claims. The background section of the patent explains the challenge of reducing the fat and/or sugar content of fat fillings for baked goods whilst maintaining the organoleptic properties (e.g. mouth feel) of the composition. Reducing the fat content (typically 31-40%) conventionally requires a concomitant increase in sugar content which is also undesirable from a health perspective.
9. Against this background the patent states (paragraphs 20 and 21) that it is possible to replace a significant amount of sugar, conventional in fat fillings or chocolate substitutes with native or physically modified starch, without affecting sweetness (or organoleptic properties). The addition of starch also allows a reduction in edible fat content. Paragraph 23 states that "native", that is to say uncooked starch can be used and has certain advantages. Whereas wheat starch is preferred (paragraph 28), also contemplated are overdried starches that is to say uncooked starch or mixtures of native and overdried starches – these being heat treated starches (typically to reduce microbial load) without gelatinizing the starch. Paragraph 33 provides that in certain fat fillings according to the invention all or part of the starch can be provided in the form of uncooked native flour rich in starch for example cereal flour such as wheat, rice or maize flour. In paragraph 37 the patent indicates that it was not obvious that it would be possible to add non-overdried starch (or flour) since starch contains water at a level expected to [have a negative effect] such as causing "solidification" of the filling ... and softening of the biscuit.
10. So I take it that the invention concerns the finding that it is possible to reduce the fat and/or sugar content of fat fillings in baked goods, by replacing fat and/or sugar with uncooked flours or starches, and that the resulting fat filling does not have an impaired the taste, mouth feel or texture.

Clarifying the meaning of certain terms

11. In order to more clearly interpret the patent and the prior art I will set out what I think the skilled person would understand certain terms (underlined) in the art to mean:

Native is synonymous with natural, it is used in connection with starches and flours that are unmodified i.e. minimally changing the chemical structure of the starch grains.

Flours and starches are used largely interchangeably in the art, nonetheless the conversion of flour to a starch will involve some processing, but this processing does not modify the chemical structure or "cook" the flour.

overdried or heat treated flour, this is flour that is dried without modifying the chemical structure of the starch, such as has been done in the prior art to reduce the microbial load of flours.

pregelatinized also termed instant starches these are starches wherein the starch granules are broken down such as may be done by dissolving in hot water before drying to render the starch "instant", i.e. it will gel in cold water. I consider these starches are partially cooked and importantly lie outside the scope of claims 1 and 2 of the patent.

12. The observer does not consider that the word natural as it is used in A1 has the meaning above, I will consider this further when I examine A1 in more detail below.
13. Furthermore, I consider that the skilled person would understand that where a reference is made to flours or starches, especially cereal flours or starches, without qualification as to any pre-treatment, they would understand the flour to be uncooked i.e. native.
14. It is not clear from the patent what is meant by a "continuous fat phase", or to put the question another way what proportion of fat in the composition will be continuous in the composition? The observer does not clearly indicate how much fat is continuous other than in connection with A1 stating that the high water content of the examples would render them water in oil emulsions, however, to my mind a water in oil emulsion is a continuous oil phase. The requester states that the term continuous fat phase "should be construed broadly as the claims encompass very low amounts of fat relative to the amount of solid particles embodied therein", the patent provides fat contents as low as 20% I will take this percentage as the minimum that can constitute a continuous fat phase.

Claim construction

15. Before considering the validity of the patent I need to construe its independent claims, that is to say I must interpret them in light of the description and drawings as instructed by Section 125(1). In doing so I must interpret the claims in context, through the eyes of the person skilled in the art as recently confirmed^{1 2} having

¹ Generics UK Ltd (t/a Mylan) v Yeda Research and Development Co. Ltd & Anor [2017] EWHC 2629 (Pat)

² Actavis Group & Ors v ICOS Corp & Eli Lilly & Co. [2017] EWCA Civ 1671

regard to the judgment in *Actavis v Eli Lilly* [2017] UKSC 48. Ultimately the question is what would the person skilled in the art have understood the patentee using the language of the claims to mean.

16. Applying this to the claims of the patent I consider the skilled person would construe the independent claims 1 and 2 as protecting a fat filling or chocolate substitute comprising a continuous fat phase comprising less than 33% w/w edible fats and 3-40% w/w uncooked starch such as a cereal flour and/or overdried starch. In the case of claim 2, a similar fat filling or chocolate substitute is protected having the same fat content but comprising 3-30% flour that is preferably uncooked cereal flour but may comprise heat treated or overdried flour.

Consideration of ranges in the patent

17. Before I examine the documents and their bearing on the validity of the patent it is worth setting out how I interpret the ranges set out in the cited documents and their relevance to novelty and inventive step of the patent. This is particularly relevant in the present case in respect of the relevance of partially overlapping ranges in the prior art generic disclosures with ranges in the patent claims. To be clear when I refer to generic disclosures I am considering those passages of the description that indicate broad ranges of ingredients that can notionally be used according to the invention, wherein examples by contrast provide more detailed and specific recipes for fat fillings that may be within the scope of the invention. The requester suggests I should interpret ranges largely by reference to EPO examination guidelines, and finds that generic disclosures are citable for novelty particularly wherein the end points or specifically mentioned intermediate values are in the scope of the claims. Whereas the EPO guidelines are instructive I am not bound to follow them. The observer on the contrary gives little weight to the generic disclosures and is informed by what they call the "unambiguous" disclosures of ranges such as found in the examples. In respect of taking end points of ranges as point disclosures the observer proposes that this does not automatically disclose combinations of the points (necessary to anticipate or render the claim obvious).
18. I consider that I should appraise the disclosures in the round, and find anticipation where the skilled addressee taking into account both what is explicit and what is implicit (having regard to their skill in the art) would understand the disclosure to teach, thus a generic disclosure or an example may be anticipatory if it unambiguously teaches a recipe or family of recipes that the skilled person can reproduce by selecting suitable components within their skill as directed in the disclosure.
19. Having regard to inventive step I consider that where the skilled addressee is faced with a range of possible compositions (such as covered by a generic disclosure) and only some of them fall within the scope of the claims, then in order to guard against hindsight I should consider the disclosure as regards obviousness. In this way the skilled addressee brings to bear their common general knowledge and uses it to interpret the disclosure (including a range) in order to put it into effect such as by making routine modifications.

Novelty – the law

20. Section 1(1)(a) and (b) of the Patents Act 'the Act' reads:

1(1) A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say –
(a) the invention is new;
(b) it involves an inventive step;

21. The relevant provisions in relation to novelty are found in section 2(1) and section 2(2) which read:

2(1) An invention shall be taken to be new if it does not form part of the state of the art.

2(2) The state of the art in the case of an invention shall be taken to comprise all matter (whether a product, a process, information about either, or anything else) which has at any time before the priority date of that invention been made available to the public (whether in the United Kingdom or elsewhere) by written or oral description, by use or in any other way.

22. I will begin by considering the novelty of the invention as defined by independent claims 1 and 2. Only if I find either or both claims to be invalid will I turn my attention to the remaining dependent claims.

Novelty analysis

23. The requester makes arguments based on A1-A4 to show that the patent is not novel I will consider these documents in turn.

24. A1 proposes a filling for a food product having a low water activity (wherein low water activity is taken to mean the water in the filling is largely prevented from migrating from the filling to the food casing – and making the product soggy). The skilled person is taught very broad ranges for certain ingredients giving the skilled person a difficult task to derive the teaching of the patent in that they would have to ignore large sections of the stated ranges knowing that they would lead to unsuitable products, as such I think the skilled person would put more weight on the narrower preferred ranges. Therefore although the skilled person is taught that the filling may include edible oil ranging from 0.01 up to 80% they would only use the more preferred indications 5-30% or 10-25% oil. A1 also provides a humectant 0.1-40% (preferably 10-25 weight percent) but I put little weight on this as it is not part of the continuous fat phase. Assuming at least 20% fat is necessary for a continuous phase only some of these compositions satisfy the requirements of the present patent for continuous fat phase with less than 33% fat. Starch is provided for various purposes including enhancing processability without adding water. Starch may also be included in various forms "flours, natural or modified starches, corn, waxy corn, rice, wheat, tapioca, potato, arrowroot, maize, and/or oat" at the head of column 8 and in differing quantities as broadly as 1-40% in the generic disclosure at the foot of column 14 but more specifically 0.01%-15% at column 7 line 60-column 8 line 23.

The exemplified starch sources such as MIRA-THIK and MIRA-GEL (which are considered pregelatinized and as such outside the scope of the patent). Overall, I do not consider there is an unambiguous teaching of a composition or range of compositions according to the patent as defined in claims 1 or 2. Therefore I do not find A1 to render claims 1 and 2 not novel.

25. Page 7 of A2 shows the quantities of certain constituents of products that may be given legally reserved names, among the products listed are 2 versions of "chocolate a la taza" a reserved name for a hot chocolate thickened (with flour), they are disclosed as follows:

8. Chocolate a la taza

designates the product obtained from cocoa products, sugars, and flour or starch from wheat, rice or maize, which contains not less than 35 % total dry cocoa solids, including not less than 18 % cocoa butter and not less than 14 % dry non-fat cocoa solids, and not more than 8 % flour or starch.

9. Chocolate familiar a la taza

designates the product obtained from cocoa products, sugars, and flour or starch from wheat, rice or maize, which contains not less than 30 % total dry cocoa solids, including not less than 18 % cocoa butter and not less than 12 % dry non-fat cocoa solids, and not more than 18 % flour or starch.

In order to make a composition according to A2 the skilled person is required to select quantities within the ranges specified and select suitable sources for the ingredients. Selecting suitable sources of ingredients I find within the skill of the addressee trying to work the patent but whether or not the skilled person is able to select quantities within the ranges when the entire scope of that range is not in the scope of the patent claims is a matter wherein the common general knowledge of the skilled person is relevant. I therefore consider this is best appraised under inventive step, and as such I consider claims 1 and 2 are novel over A2.

26. A3 comprises a similar disclosure to A2 (page 34) but also includes an exemplary composition for chocolate a la taza on page 23/24. This examples shows 55% sugar, 20 % cocoa butter and 8% flour / starch. I note the observer casts some doubt on the publication date of A3 in that it has been updated since the priority date of the patent, however I consider the requester has suitably satisfied me that the revision history, shown on page 3 of A3 shows that the passages of A3 that were amended in 2009 are not those relating to chocolate a la taza. I consider A3 clearly teaches the skilled person to make a product within the range of claim 1 as regards edible fat in the form of cocoa butter, in a quantity that the patent shows is sufficient to comprise a continuous phase. The composition also comprises flour from certain cereal sources that is within the scope of claims 1 and 2, there being no qualification of the term "flour" I consider the skilled person would understand this flour to be native or uncooked. I consider the skilled person would also find this product suitable for use as a fat filling or chocolate substitute, accordingly I consider claims 1 and 2 to be anticipated. The listed sources for the starch include cereal sources such as wheat therefore I find claims 3 and 4 anticipated. The skilled person is also taught that such products comprise lecithin, flavouring and sugar to anticipate claims 6-8 and 11.

27. A4 shows a confectionery crème consisting of 50-80% carbohydrate and 20-50% confectionery fat, with the option for replacement of some of the carbohydrate with starch (about 5 – 20% of the composition being provided as starch). The starch sources indicated include starches dextrins and modified starches with preference placed on "corn starch, wheat starch, modified corn starch, rice starch and tapioca starch". Some of the starch sources indicated I interpret as native and some as "modified". Example 3 shows 34.5% fat, 45% sugar and 20% Aytex (RTM). This example is outside the scope of the present invention having regard at least to the fat content, and there is no generic disclosure that considers a fat content wholly within the range required by the patent in claims 1 or 2. Accordingly I consider claims 1 and 2 are novel as regards A4. To arrive at the invention of the patent starting from A4 the skilled person would be required to select certain starch sources and appreciate that they could modulate the fat content of A4. Consideration of how/if the skilled person would choose to modify the teaching of A4 to select certain quantities of fat and starch sources is a matter I will consider under obviousness.

Inventive step – the law

28. The provisions in relation to inventive step are found in section 3 which states:

3. An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 2(2) above (and disregarding section 2(3) above).

29. The Court of Appeal in *Windsurfing*³ formulated a four-step approach for assessing whether an invention is obvious to a person skilled in the art. This approach was restated and elaborated upon by the Court of Appeal in *Pozzoli*⁴. Here, Jacob LJ reformulated the *Windsurfing* approach as follows:

(1)(a) Identify the notional "person skilled in the art"

(1)(b) Identify the common general knowledge of that person;

(2) Identify the inventive concept of the claim in question or if that cannot be readily done, construe it;

(3) Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or the claim as construed.

(4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps that would have been obvious to the person skilled in the art or do they require any degree of invention?

30. Taking these steps in turn I will consider the obviousness of claims 1 and 2 together. The views of the requester and the observer are broadly in agreement as to the skills attributed to the person skilled in the art. Taking these into account I conclude the person skilled in the art is a food scientist with an interest in fat fillings and chocolate substitutes for use on and in baked products such as biscuits.

³ *Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd*, [1985] RPC 59

⁴ *Pozzoli SPA v BDMO SA* [2007] EWCA Civ 588

31. The common general knowledge is characterised rather differently by the requester and the observer. The observer criticises the requester for including prior art documents in the common general knowledge. I do not consider this is the case rather the request signposts aspects of the common general knowledge in the way they are discussed in the patent documents. Taking into account the comments of both parties I consider the common general knowledge includes:

The aim of reducing fat and sugar in baked goods, and the balance between the two which tends to mean there is difficulty in reducing both;

The importance of not adding too much water or ingredients that contain significant amounts of water to fat fillings or coverings used on baked goods as this will often lead to sogginess;

Available starch sources include heat treated flours, such flours have acceptance in the art as they reduce the microbial load of flours. Heat treated flours may be sourced in pregelatinized and uncooked varieties (A5 is considered to attest to this aspect of the common general knowledge, see below);

Conventional ingredients of baked goods such as biscuits and cookies are also considered within the common general knowledge, these include the presence and the approximate quantities standard in the art for certain common ingredients such as well-known flavourings, emulsifiers and salt;

The skilled person would also be aware of conventional quantities in fat fillings and how they may adjust these to account for other ingredients, such as when seeking to interpret how to change the quantities of ingredients within parameters set in recipes (such as may be found in patents) to account for specified quantities of innovative ingredients;

Conventional formats for baked goods and biscuits such as layering with fat filling, covered or fat filled hollow bakery products; and

The skilled person would also be considered to know within approximate quantities or proportions how much fat filling relative to the weight of casing is considered suitable to give a satisfactory product.

32. The observer and requester set out the inventive concepts of claims 1 and 2 in different ways, the requester indicates a broad notion of the use of starch/flour to replace sugar and fat in fillings without adversely impacting the texture of the filling and/or baked products comprising the fillings, whereas the observer frames the inventive concept more narrowly that the advantages (fat and sugar reduction without compromising taste and mouth feel) flow from the use of specific types of starch. I agree with the observer that the patent is specific as regards the starch sources, namely "native and/or over dried starch (claim 1) and "flour, preferably cereal, that is uncooked but may be overdried and or heat-treated. Therefore inventive concept of claim 1 relates to reducing the fat and/or sugar in fat fillings by the use of 33% or less edible fat, but sufficient fat to provide a continuous fat phase, and 3-40% of at least one native and/or overdried starch; and in claim 2, a fat filling comprising 33% or less edible fat, but sufficient fat to provide a continuous fat phase

and 3-30% of an uncooked flour, preferably cereal that is optionally overdried or heat treated.

Document A1

33. Examining the prior art starting with A1. I consider the skilled person is taught among other filings a range of fat filling compositions comprising at least 20% fat in a continuous phase, and would tend to keep the fat content near this quantity (i.e. below 33%) to satisfy the aim of providing a low fat composition in line with their common general knowledge. The differences between A1 and the inventive concept of claims 1 or 2 is that the skilled person is faced with a choice of starch sources and needs to determine the quantity of starch to add within a broad range 0.01-15 w%. As regards the source of flours or starches I consider the skilled person would not be confined to using the exemplified pregelatinized starches such as those sold under the MIRA trade names when working A1, even though some of these are confusingly termed "natural", this is because they are also taught to use other suitable flours listed at the head of column 8. I take these flours to be uncooked. I also consider the skilled person would use these flours in quantities of 3% or more (as these are the quantities used in the examples). I do not consider the skilled person would be overly concerned by increasing water activity by this addition of flour as the contribution would be rather small for the textural benefits gained. As such I consider the differences between A1 and claim 1 and 2 to be obvious steps to the skilled person and as such are non-inventive.
34. Furthermore, I note the requester also argues that the skilled person would appreciate from their common general knowledge that as well as the starches and flours set out in A1 the starch could be a supplied as a heat treated flour, to show that heat treated flours are a readily available aspect of the common general knowledge the requester provides A5. A5 indicates that heat treating flour involves a low residence time, high temperature process, and that this process may be combined with a cooking step for providing pregelatinized starches. I agree that this fundamental knowledge about heat treated flours is within the common general knowledge of the skilled person. Therefore I consider the skilled person would not find it inventive to replace native starches with heat treated flours and in doing so they would further limit the increase in water activity and facilitate a longer shelf life for the product. By the use of unmodified heat treated flours in the fat filling composition of A1 claim 1 and 2 are rendered obvious.
35. I note that the observer questions that the flour in the fat filling resulting from the processes disclosed in A1 remains uncooked owing to the elevated temperatures used in the processing of the filling. However I have considered this point and found that the starch or flour is added late to the product and that the temperatures used in the subsequent processing steps are near ambient and not expected to cook the starch.
36. Finding claims 1 and 2 not inventive I will continue to consider the remaining claims. Insofar as A1 teaches cereal starches, at the head of column 8, as well as the provision of conventional ingredients of fat fillings, such as sugar and lecithin, salt and flavourings. I consider claims 3, 4, 6-8, 10 and 11 are also not inventive with respect to A1.

37. It is also of note that the generic disclosure of A1 also comprises 30-45% sweetener. The possible sources of sweetener used in A1 include some which would be expected to add significant quantities of water which teaches away from the aim of the present invention of providing a fat filling that doesn't make a biscuit soggy. However as the desirability of keeping the water content of the fat filling low is also proposed in A1 I do not place much weight on the statements regarding the source of sweetener as teaching away from the present invention. Insofar as the disclosure of sweetener falls in the scope of claim 9 I consider this claim does not lend an inventive step.
38. Insofar as the biscuit formats such as layered, coated and filled bakery goods are aspects of the common general knowledge and it is envisaged in A1 that the fat filling could be a chocolate substitute I conclude claims 12-15 are not inventive. In respect of claim 16 it is considered that the skilled person seeking to fill a hollow product would work within the broad range of 20-50% ratio of filling to casing, merely by exercising their common general knowledge concerning the filling its water content and the rigidity of the casing. Therefore claim 16 is also not inventive.
39. There is no indication of the flour particle size in A1, but the patent at paragraph 23 implies that the conventional particle size for wheat starch is suitable to satisfy claim 5, hence I conclude this claim is obvious. As regards claim 17, I consider the percentage of edible fat to the total weight of bakery product is within limits the skilled person would find conventional in the art concerning standard fat filled baked goods, and as such I conclude claim 17 is also obvious.

Document A2

40. Starting from A2 the skilled person is taught a composition of fat and flour in the range of the patent claims, in quantities that are amenable to providing a continuous phase. The differences between A2 and the inventive concept lies in the skilled addressee selecting suitable sources of flour from their common general knowledge I consider given that the skilled person would find references to flour to imply uncooked flour they would conclude that the difference between A2 and the inventive concept of claims 1 or 2 to be obvious. Accordingly, I find claims 1 and 2 are not inventive.
41. Given that the skilled person may suitably select a cereal flour or cereal starch given the purpose as a thickener I consider claims 3, 4 and 5 are also not inventive. I also find the skilled person would not find it inventive to add standard quantities of emulsifier, sugar or flavourings as are common in such products so that claims 6-9 and 11 do not comprise an inventive step. I have no reason to consider salt a conventional ingredient in chocolate a la taza, therefore claim 10 is inventive.

Document A3

42. Starting from A3, insofar as I have already shown that it renders claims 1-4, 6-8 and 11 not novel I will consider the remaining claims. Having found that claim 5 concerns a conventional wheat starch and that wheat starch is a proposed starch source in A3 I find claim 5 to be non-inventive. As regards claim 9 the person skilled in the art is

considered able to make routine adjustments to the composition such as reducing the sugar with the aim of lowering the calorie content, therefore I conclude claim 9 is not inventive. As noted for A2, I have no reason to consider salt a conventional ingredient in chocolate a la taza, therefore claim 10 is inventive.

43. Insofar as A2 and A3 propose a chocolate like composition but do not propose its use as a fat filling I consider that neither of A2 and A3 would lead the person skilled in the art to use of the composition as a fat filling, therefore claims 12-17 are inventive with respect to A2 or A3.

Document A4

44. Starting from A4 I consider the skilled person is taught a fat filling which may suitably comprise 20-40% fat, although the lower end of this range is exemplified, and thus considered preferred, this is understood to be a continuous fat phase according to the present claims. Starch is indicated at 5-20% and may be provided in the form of "corn starch, wheat starch modified corn starch, rice starch and tapioca starches" most of which are cereal starches, and I take these to be unmodified uncooked starches. I have considered the disclosures regarding Aytex (RTM) (which is used in an exemplified composition according to A4) it states Aytex is an unmodified highly refined wheat starch" I infer this is uncooked. Therefore the difference between the present invention of claims 1 and 2 and the prior art is the choice of a suitably low quantity of edible fat whilst preserving a continuous phase and selection of a starch component from those made available in A4.
45. I consider that the skilled person would readily reduce the quantity of fat towards the lower end of the limits imposed by A4 as in doing so they would provide a lower calorie product. As regards the source of starch or flour I consider the skilled person would not find it onerous to formulate fat fillings using the preferred quantities of starch and conventional ingredients and work through the short list of potential starch sources in order to determine which gave suitable properties such as texture. Therefore the skilled person would consider the differences between A4 and the inventive concept of claims 1 or 2 to be obvious, and finding that wheat starch is provided by A4 would also conclude that claims 3 and 4 obvious.
46. A4 also discloses the use of conventional ingredients such as lecithin, flavours, salt and sugar, the latter being within the limits of 8 and 9 therefore claims 6-11 are not inventive. The use of fat fillings in sandwich cookies is proposed in A4 therefore I find claims 12, 13, 15 and 16 having regard to the common general knowledge indicated above are also non-inventive. Insofar as the parameters of claim 5 would appear conventional for wheat starch which is proposed in A4 this claim is not inventive. Similarly claim 17 appears to relate to conventional parameters for the use of filled goods in articles such as sandwich cookies which are considered in A4 and as such claim 17 is not inventive. Therefore claims 1-13, 15-17 are not inventive having regard to A4.

Summary

47. In my opinion A1 and A4 show that all claims 1-17 of EP(UK) 1912515 B1 are not

inventive. Whereas A2 shows that claims 1-9 and 11 are not inventive. A3 shows the patent claims 1-4, 6-8 and 11 are not novel, and that claims 5 and 9 are not inventive.

Application for review

48. Under section 74B and rule 98, the proprietor may, within three months of the date of issue of this opinion, apply to the comptroller for a review of the opinion.

Dr J. P. Bellia
Examiner

NOTE

This opinion is not based on the outcome of fully litigated proceedings. Rather, it is based on whatever material the persons requesting the opinion and filing observations have chosen to put before the Office.