Datasheet for the decision of 16 October 2009

Case Number: T 1502/08 - 3.3.02
Application Number: 02793929.7
Publication Number: 1567016
IPC: A21D 13/00
Language of the proceedings: EN
Title of invention: SQUARE BOTTOM TACO SHELL
Applicant: GENERAL MILLS MARKETING, INC.
Opponent: -
Headword: Taco Shell/GENERAL MILLS MARKETING, INC.
Relevant legal provisions:
EPC Art. 56
Relevant legal provisions (EPC 1973): -
Keyword:
"Admissibility - auxiliary requests 5-6 (yes)"
"Inventive step - main request and auxiliary requests 1-6 (no): taco shells having a flat base are obvious in the light of the prior art"
Decisions cited: -
Catchword: -
Case Number: T 1502/08 - 3.3.02

DECISION  
of the Technical Board of Appeal 3.3.02  
of 16 October 2009

Appellant: GENERAL MILLS MARKETING, INC.  
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 19 February 2008 refusing European application No. 02793929.7 pursuant to Article 97(2) EPC.

Composition of the Board:  
Chairman: U. Oswald  
Members: A. Lindner  
J. Van Moer
Summary of Facts and Submissions

I. European patent application No. 02 793 929.7 was refused by a decision of the examining division of 29 January 2008 on the basis of Article 97 EPC on the grounds that the subject-matter of the main and sole request did not involve an inventive step.

II. The decision was based on claims 1-25 of the main request filed at the oral proceedings before the examining division on 29 January 2008.

Independent claim 1 of the main request before the examining division reads as follows:

"1. A stable, self-standing, taco shell, consisting of: a first sidewall and a second sidewall interconnected by a flat base, the taco shell configured so the height of the taco shell is 1.50 to 4.0 times the width of the base."

III. The documents cited during the examination and appeal proceedings included the following:

(1) US-A-5 993 871
(4) US D 376 893 S1
(8) US D 393 136 S1
(10) US D 369 451 S1

IV. The arguments in the decision may be summarised as follows:

Starting from document (4), (8) or (10) as closest prior art, the problem to be solved could be seen as
providing an alternative stable, self-standing taco shell. The solution, which consisted in reducing the number of sidewalls of the taco shells according to document (4), (8) or (10) to a first and second sidewall only, was a trivial modification which did not involve an inventive step. It was readily foreseeable that this modification would not prejudice the stability and self-standing properties. Alternatively, conventional tacos as mentioned in document (1) rendered the claimed subject-matter also obvious.

V. The appellant (applicant) lodged an appeal against said decision.

VI. At the oral proceedings of 16 October 2009, the appellant filed auxiliary requests 1-6. The independent claims 1 of each of auxiliary requests 1-4 read as follows:

(a) auxiliary request 1:

"1. A stable, self-standing, taco shell, consisting of: a first semicircular sidewall and a second semicircular sidewall interconnected by a flat base, the taco shell configured so the height of the taco shell is 1.50 to 4.0 times the width of the base."

(b) auxiliary request 2:

"1. A stable, self-standing, taco shell, consisting of: a first semicircular sidewall and a second semicircular sidewall interconnected by a flat base, the taco shell configured so the height of the taco shell is 50 to 110
millimeters and the width of the base is 10 millimeters or greater."

(c) auxiliary request 3:

"1. A stable, self-standing, taco shell made from a circular tortilla placed on a generally U-shaped mould having a flat bottom, said taco shell consisting of: a first sidewall and a second sidewall interconnected by a flat base, the taco shell configured so the height of the taco shell is 1.50 to 4.0 times the width of the base."

(d) auxiliary request 4:

"1. A stable, self-standing, taco shell, made from a circular tortilla placed on a generally U-shaped mould having a flat bottom, said taco shell consisting of: a first sidewall and a second sidewall interconnected by a flat base, the taco shell configured so the height of the taco shell is 50 to 110 millimeters and the width of the base is 10 millimeters or greater."

VII. At the oral proceedings before the board, which took place on 16 October 2009, the appellant submitted new auxiliary requests 5 and 6. The independent claims 1 of each request read as follows:

(a) auxiliary request 5:

"1. A stable, self-standing taco shell made from a circular tortilla placed on a generally U-shaped mould having a flat bottom, said taco shell consisting of: a first sidewall and a second sidewall interconnected by
a flat base, the taco shell configured so the height of the taco shell is 1.50 to 4.0 times the width of the base, wherein a first curved element interconnects the first sidewall to the flat base and a second curved element interconnects the second sidewall to the flat base, the curved elements having a radius of 3 mm or less."

(b) auxiliary request 6:

"1. A stable, self-standing, taco shell made from a circular tortilla placed on a generally U-shaped mould having a flat bottom, said taco shell consisting of: a first sidewall and a second sidewall interconnected by a flat base, the taco shell configured so the height of the taco shell is 1.50 to 4.0 times the width of the base, wherein a first curved element interconnects the first sidewall to the flat base and a second curved element interconnects the second sidewall to the flat base, the curved elements having a radius of 3 mm or less, and wherein the taco shell is formed from a tortilla having a thickness of less than 1.5 millimeters."

VIII. The appellant's submissions can essentially be summarised as follows:

Document (1), which related to the same problem as the present invention, i.e. the provision of stable, self-standing tacos, constituted the closest prior art. However, document (1) taught away from the present invention by stating that tacos having a flat base were not stable. In order to be stable, taco shells must have a W-shaped base according to the teaching of document (1).
In connection with auxiliary request 5, it was further emphasised that curved elements having small radii were advantageous in that they contributed to the food being retained in case the taco shell broke. As a consequence, it was possible to use taco shells formed from tortillas having a thickness of less than 1.5 mm as claimed in auxiliary request 6.

IX. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request or, in the alternative, on the basis of auxiliary requests 1 to 4 filed with the statement of the grounds of appeal or auxiliary requests 5 to 6 submitted during the oral proceedings.

Reasons for the decision

1. The appeal is admissible.

2. Admissibility of auxiliary requests 5 and 6:

These requests were filed at a late stage of the oral proceedings before the board. The admissibility of these requests is therefore at the board's discretion and depends upon the overall circumstances of the case under consideration (see Article 13 RPBA). The amendments, which were a reaction of the appellant to objections raised by the board during the discussion of inventive step, were made to further delimit the subject-matter of the claims from the prior art and were of a simple nature. As a consequence, the board decided to admit auxiliary requests 5 and 6 into the proceedings (Article 13 RPBA).
3. **Main request:**

3.1. **Novelty:**

The examining division acknowledged the novelty of the subject-matter claimed in the main request. The board has no reason to disagree. The requirements of Article 54 EPC are therefore met.

3.2. **Inventive step:**

The subject-matter of the present invention concerns stable, self-standing taco shells (see page 2, lines 26-27 of the application as filed).

Document (1), which constitutes the closest prior art, is also concerned with stable self-standing taco shells, which, like the taco shells of the present application, consist of a first and a second sidewall, the taco shells being configured such that the ratio height of the shell to width of the base is within the range of 1.50 to 4.0 (see column 1, lines 51-56 and figures 1 and 4). The two sidewalls are connected by a W-shaped bottom (see figures 1 and 4).

Accordingly, the technical problem to be solved is the provision of structurally simpler, stable and self-standing taco shells. This problem was solved by replacing the W-shaped base according to document (1) by a flat base. In the light of the overall teaching of the present application (see e.g. figures 2 and 3a), the board is convinced that the problem has been plausibly solved.
The provision of structurally simpler products may provide a valuable contribution to the state of the art and therefore give rise to an inventive step provided that the state of the art does not hint at the proposed solution and/or the simpler structure is not the result of concessions made in connection with other properties of the product. In the present case, it is noted that taco shells having a flat bottom are discussed in document (1). However, providing a plurality of support points at different elevations, which causes the taco shell to be unstable when it is supported by its base, instead of providing coplanar support points, such a taco shell is in the eyes of the author of document (1) not considered to be sufficiently stable (see column 1, lines 34-35 and 39-44). This passage does not teach away from using taco shells with a flat base. It rather tells the skilled person that there is a trade-off between simplicity of structure on the one hand and maximum stability on the other hand: if one is prepared to sacrifice maximum stability and accept that the taco shell does not stand perfectly when put onto an even surface but might wobble slightly, then a structurally simpler flat base is feasible. Sacrificing stability in favour of a simpler structure does therefore not involve an inventive step in the present case, so the requirements of Article 56 EPC are not met.

4. **Auxiliary request 1 - inventive step:**

Claim 1 of auxiliary request 1 differs from claim 1 of the main request by the additional feature that the first sidewall and the second sidewall are "semicircular" (see figure 2 of the application as
filed). In view of the fact that the taco shells according to document (1) are also "semicircular" (see figure 1), the reasoning of paragraph 3.2 in connection with inventive step of claim 1 of the main request applies mutatis mutandis to claim 1 of auxiliary request 1. The requirements of Article 56 EPC are therefore not met.

5. **Auxiliary request 2 - inventive step:**

Claim 1 of auxiliary request 2 differs from claim 1 of the main request in that the feature "the height of the taco shell is 1.50 to 4.0 times the width of the base" is replaced by "the height of the taco shell is 50 to 110 millimeters and the width of the base is 10 millimeters or greater".

The indication of the height and the width of the taco shell does not add any additional aspects for the evaluation of inventive step as compared to the main request: taco shells are preferably made from circular tortillas (see also page 1, paragraph [002] of the present application and column 1, lines 8-9 of document (1)). The tortillas conventionally used for tacos are typically between 5.0 and 7.5 inches (= 12.7 and 19.05 cm) in diameter (see page 1, paragraph [002] of the present application). A width of the base of at least 10 mm must be selected for practical reasons, because a narrower base would no longer be self-standing. Moreover, it would be difficult to introduce the filling into such narrow taco shells. The dimensions introduced into claim 1 of auxiliary request 2 are therefore inevitably obtained by using conventional tortillas. As a consequence, the reasoning
of paragraph 3.2 in connection with inventive step of claim 1 of the main request applies mutatis mutandis to claim 1 of auxiliary request 2. The requirements of Article 56 EPC are therefore not met.

6. Auxiliary request 3 - inventive step:

Claim 1 of auxiliary request 3 differs from claim 1 of the main request by the additional feature that the taco shell is "made from a circular tortilla placed on a generally U-shaped mould having a flat bottom" so that the product of claim 1 is now additionally defined by its method of preparation. As repeatedly decided by boards of appeal, "product-by-process" claims have to be interpreted in an absolute sense, i.e. independently of the process. They have, thus, to be examined as any other product claim, namely whether or not the claimed product as such fulfils the basic requirements of novelty and inventive step. In the present case, the board arrived at the conclusion that, apart from the "semicircular" shape of the sidewalls, which can also be found with the taco shells according to document (1), the method of preparation does not introduce any additional structural elements as compared to the taco shells claimed in claim 1 of the main request. As a consequence, the reasoning of paragraph 3.2 in connection with inventive step of claim 1 of the main request applies mutatis mutandis to claim 1 of auxiliary request 2. The requirements of Article 56 EPC are therefore not met.
7. **Auxiliary request 4 - inventive step:**

Claim 1 of auxiliary request 4 corresponds to claim 1 of auxiliary request 2 to which the process features according to claim 1 of auxiliary request 3 were added. In view of the above reasoning (see paragraphs 5 and 6 above), this combination of features does not introduce any new aspects as far as the assessment of inventive step in connection with document (1) as closest prior art is concerned. As a consequence, the reasoning of paragraph 3.2 in connection with inventive step of claim 1 of the main request applies *mutatis mutandis* to claim 1 of auxiliary request 4. The requirements of Article 56 EPC are therefore not met.

8. **Auxiliary request 5 - inventive step:**

As compared to claim 1 of auxiliary request 3, the taco shell as claimed in claim 1 of auxiliary request 5 is now additionally defined by a first curved element interconnecting the first sidewall to the flat base and a second curved element interconnecting the second sidewall to the flat base, wherein the curved elements have a radius of 3 mm or less.

Accordingly, the problem with regard to document (1), which remains the closest prior art, can be seen as the provision of structurally simpler, stable and self-standing taco shells having predetermined break lines. This problem was solved by taco shells according to claim 1, comprising a flat base which is connected to the sidewalls by means of curved elements having a radius of 3 mm or less.
The selection of a small radius for the curved elements has the technical effect that the taco shell breaks at exactly this position if too much external force is applied, as a small radius implies a high stress concentration at the curved elements (see paragraph [040] of the application as filed). If the taco shell breaks along one of the two curved elements, then an L-shaped shell section may remain, which basically can retain the filling, as the free sidewall without the base can slide towards the sidewall of the L-shaped segment so that the filling remains in a more or less closed compartment (see paragraphs [041] and [042] and figure 3d of the application as filed).

In view of this teaching comprised in the description of the application as filed (see in particular [040]), the board is satisfied that the problem has been plausibly solved.

As for the first aspect of the problem, i.e. the provision of structurally simpler, stable and self-standing taco shells, it is noted that the reasoning in paragraph 3.2 above applies in full to the subject-matter as presently claimed. The question is whether it was also obvious for the skilled person to additionally select a small radius for the curved elements in order to obtain predetermined break lines.

Document (1) (see column 1, lines 35-39) indicates that flat-based taco shells do not provide the required stability or strength due to the high stress concentration factors associated with the sharp corners at the base of the taco shell. From this passage, the skilled person learns that sharp corners are a source
of instability in taco shells, as they easily break. A radius of 3 mm or less includes sharp corners, where the radius equals or is very close to 0 mm. In document (1), where breaking of the taco shells should be avoided, this property is considered as a disadvantage. Therefore, in document (1) larger radii are selected (see figure (4)). However, for a skilled person who is ready to accept breaking and only wants to ensure that, if breaking occurs, then it should take place at a defined location of the taco shell, it is obvious in the light of this teaching that a predetermined break line can be effected by sharp corners or, in other words, by introducing curved segments having very small radii. The fact that a technical effect is labelled as a disadvantage in the prior art does not keep the skilled person from making use of it if, as is the case here, the proposed invention is less ambitious than the invention of that prior art. As a consequence, the requirements of Article 56 EPC are not met.

9. **Auxiliary request 6 - inventive step:**

As compared to claim 1 of auxiliary request 5, claim 1 of auxiliary request 6 contains the additional feature that the taco shell is formed from a tortilla having a thickness of less than 1.5 mm. Accordingly, the problem to be solved with regard to document (1), which remains the closest prior art, can be seen as the provision of structurally simpler, stable and self-standing taco shells having a predetermined break line, which require less dough than the taco shells according to document (1). The problem was solved by taco shells as defined in present claim 1. Again, in view of the overall teaching of the present application (see in particular
paragraphs [040], [043] and [044] as well as figures 2 and 3a - 3d), the board is satisfied that the problem has been plausibly solved.

As for the first and second aspects of the problem, i.e. the provision of structurally simpler, stable and self-standing taco shells and the introduction of a predetermined break line, it is noted that the reasoning in paragraphs 3.2 and 8 above applies in full to the subject-matter as presently claimed. It therefore remains to be evaluated whether an inventive step can be based on the reduction of thickness of the taco shell. In the opinion of the board, it is obvious that material (in this case dough) can be saved by reducing the thickness of the wall.

The appellant reasoned that the probability of a break of the taco shell increased with its thinness. By selecting a thickness of less than 1.5 mm, the chances of a break were comparatively high, so that additional measures had to be taken in order to ensure that the taco filling was retained in case of a break. As a consequence, very thin taco shells were only feasible in combination with a predetermined break line.

The board does not agree with this reasoning. It would emphasise that it is not the intention of the present invention to provide tacos that should break during use (see paragraph [043] of the present invention). It is possible that the consequences of a failure are less dramatic with taco shells having a predetermined break line, but breaking should be avoided. Therefore, the selection of the wall thickness is again a trade off between product stability and the amount of material to
be used, for which no inventive step can be acknowledged. As a consequence, the subject-matter of claim 1 of auxiliary request 6 does not meet the requirements of Article 56 EPC.

In view of this finding, the examination of independent claim 13 is not necessary.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:    The Chairman:

N. Maslin         U. Oswald