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(72) Inventor; and

(71) Applicant: SCOTT, Melanie [AU/AU]; 10 Cavanagh Rd,
Wesburn, Victoria 3799 (AU).

(74) Agent: ASHBY, Kevin; 6 Nullamanna Road, Camp Moun-
tain, Queensland 4520 (AU).

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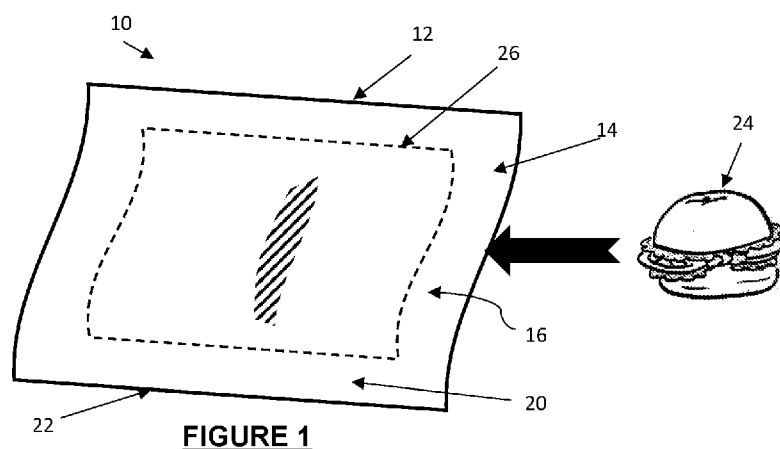
Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- of inventorship (Rule 4.17(iv))

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(54) Title: FOOD COVERING



(57) Abstract: A flexible stretchable food covering or wrapping film that provides an airtight seal when applied to a food item. The film is made of silicone having a thickness in the range 0.15mm to 0.26mm, which renders it thin enough to retain its shape in sealing relation to the item being wrapped, while being thick enough to not be readily ruptured in use. A method of storing and cooking food using the film is also disclosed.



FOOD COVERING

Field of invention

[01] This invention relates to a film for covering food and, in particular, for providing a sealing wrapping around food or a container in which the food it held.

Background to the invention

[02] Long used as wrapping material for food preservation is aluminium foil sheeting. This suffers from opacity, preventing the food item to be displayed to potential retail customers once wrapped and is potentially toxic to human health and not-recyclable.

[03] Self-adhering cling wrappings are well known as protective, relatively airtight wrappers for enclosing food items, especially (but not only) when ready to eat. These wrappers are conventionally made of films of long chain polymers, low density polyethylene and polyvinylchloride. A drawback of this kind of wrapping is that it does not withstand the heat involved in baking. It is also not fit for reuse, being generally discarded after a single use. It is not practical to wash and would in any event look unappealing, if not unsightly. Some versions are hydrophilic, adding to their general unsightliness when exposed to water. Although coverings of this kind are self-adhering, they require added adhesives to render them capable to adhering to other surfaces. They are not heat resistant to the degree of baking temperatures in the upper domestic range, generally in excess of 280K.

[04] When it comes to cooking food, certain known baking papers and parchment papers tend to leach dioxin, a chemical compound that is created when the chlorine in the paper reacts when subjected to heat.

[05] Silicone is a polymer that includes silicon, oxygen, hydrogen and carbon and is commonly produced as a liquid or a solid body. It is known for its non-stick properties, being commonly used as a lubricant. Silicone composites of various sheet thicknesses have been developed for food industry use, such as in baking

mats, bowl covers and food 'keepers'. These are found to be too thick and non-adhesive to be suitable for establishing a sealing wrapper about food items. Inferior quality silicone sheets are not safe for high temperature, use, such as required for roasting or baking.

[06] The present inventor has noticed a need for a wrap that is suitably flexible, yet hard, and which is of sufficient thickness for a user to be able not only to use it as a conventional sealing wrapping, but also to bake the contents while still wrapped and other baking applications. There is considered to be a need for a covering product that is re-usable, recyclable and able to replace, by performing the same function as at least three single use items that are commonly used, namely cling film, aluminium foil and baking paper.

[07] US patent application publication number 2006/0045949 discloses various "devices" of silicone that may be used in the preparation of food. The devices include silicone cords, bindings, meshes and films, both contiguous and perforated, but there is nothing said about the importance of physical characteristics such as thickness in the successful functioning of the devices in question. However, the thermal inertness of silicone, relative to that of various polymer films is noted. There is no suggestion that there may be a film that has three-in-one functionality deriving from its thickness, namely a combination of re-usability, heat resistance and self-clinging properties. There is no disclosure of a film being sealingly wrapped around a food item. Silicone film is instead disclosed as a barrier layer to be placed between food and aluminium foil, to prevent leaching of contaminants from the foil during cooking or when exposed to acidic food components such as tomato. There is no suggestion that silicone be used alone as a covering.

[08] US patent application publication number 2011/0097555 discloses manufacture of a food wrapping wherein a silicone gum mixture is subjected to silk-screening on a non-stick sheet such as polytetrafluoro-ethylene (PTFE), whereafter it is cured on the sheet. The cured silicone gum mixture forms a relatively thick silicone layer for foodstuffs of 0.3 to 1 mm and is sold either in a rolled form or as a flat sheet. It is said to be able to withstand temperatures in

excess of 500°F - equal to 160°C – and even up to 500°C. This property is thought to be a function of the thickness of the sheet. A drawback is that this thickness is too great for ease of wrapping, leading to a propensity of the wrapping to unwrap after a while, reducing its effectiveness in providing a seal of freshness for the foodstuff that has been wrapped.

[09] US patent application publication number 2014/0110292 discloses a food wrap formed in a laminate structure comprising a silicone film backed by a support layer of polyethylene terephthalate (PET). The structure is vulcanized to promote a crosslinking effect between the silicone and the support layer. The structure or the silicone layer alone has a thickness in the range 0.05mm to 5mm. This is an extremely wide range. The thickness of the support layer is not disclosed. The silicone is taught to have a heat resistance to only 230°C. Once the composite laminate is wrapped over a food container requiring wrapping, the support layer is said to be “torn” away, to leave the silicone layer in place over the container. A disadvantage of this structure is that because of the crosslinking, a certain degree of violence is required to tear away the PET support layer from the silicone film. This can result in the integrity of the silicone layer being compromised and the film even rupturing, depending on its thickness and the degree of crosslinking achieved. This requires the thickness of the silicone to be increased. This in turn leads to a reduction in clinginess or wrappability of the end product. This suggests that films towards the lower end of the quoted thickness range are not practical for wrapping.

[010] Food wrappings sold under the brand name “Stretch & Fresh”, although made of silicone, provide a degree of sealing, but are not suitable for wrapping or baking.

Objects of the invention

[011] It is an object of this invention to address the shortcomings of the prior art and, in doing so, to provide a multifunction homogeneous protective covering for items of food.

[012] The object is also to provide a substantially airtight flexible and transparent protective wrapping for food items that alleviates at least some of the problems of prior wraps.

[013] A further object of the invention is to provide method of reducing environmental damage resulting from the use of non-reusable wrappings.

[014] The preceding discussion of the background to the invention is intended to facilitate an understanding of the present invention. However, it should be appreciated that the discussion is not an acknowledgement or admission that any of the material referred to was part of the common general knowledge in Australia or elsewhere as at the priority date of the present application.

[015] Further, and unless the context clearly requires otherwise, throughout the description and the claims, the words 'comprise', 'comprising', and the like are to be construed in an inclusive sense - that is to say, in the sense of "including, but not being limited to" - as opposed to an exclusive or exhaustive sense - that is to say meaning "including this and nothing else".

Summary of invention

[016] According to a first aspect of the invention, there is provided a food covering comprising a silicone film adapted for clinging to itself or to an item to be wrapped therein, and to be substantially transparent and resistant to deterioration at food cooking temperatures. The film is adapted such that it has a thickness in the range 0.15mm to 0.26mm, preferably 0.190mm to 0.21mm. Ideally, the thickness is 0.20mm \pm 3%.

[017] The silicone film is a standalone film at the point of application to an item to be covered, in that it is not then part of a laminated structure. Although it is manufactured on a supporting substrate, it is unsupported when applied, in the sense that it is not bonded or attached to any other layer, such as the substrate, having been separated therefrom. The film is able to function as a three-in-one membrane by virtue of its thickness being limited to a narrow range of values, from 0.15mm to 0.26mm. The food-cooking temperatures are preferably at least those

suitable for roasting and baking. Further preferably, the covering is resistant at a temperature of at least 530K.

[018] In a preferred form of the invention, the film comprises silicone rubber.

[019] The film is adapted to be stretchable over a food item or a container in which the food is held. Ideally the film exerts grip on a surface of the container, preferably an external side wall surface, and provides a substantially airtight seal in respect of the contained food.

[020] Preferably the silicone of the film is of food grade or superior.

[021] Preferably, the film has a hardness on the Shore scale in the range Shore A 25-70. Further preferably, the hardness is in the range Shore A 30-50.

[022] In an embodiment, the film colour is 40% Pantone 376C.

[023] The wrapping may be provided in sheets or in rolls. Examples of sheet sizes that may be provided are 200mmx200mm, 300mm x 300mm and 300mm x 450mm.

[024] In a second aspect of the invention, there is provided a method of inhibiting the deterioration of food, the method comprising the steps of providing food requiring preservation and a covering comprising a silicone film adapted for clinging and to be substantially transparent and wrapping the food in the film, thereby to create a substantially airtight barrier around the food.

[025] In a preferred form of the invention, the method includes the step of causing the film to be wrapped on to itself for allowing a cling seal to be established between contacting surfaces thereof.

[026] In a preferred form of the invention, where the food is in a container, the method includes wrapping the film around said container.

[027] In an embodiment, the method includes providing the film adapted to be resistant to deterioration at food roasting and baking temperatures. Preferably, the film is resistant to deterioration at a temperature of at least 530K.

[028] The film preferably comprises silicone rubber, further preferably with a hardness on the Shore scale in the range Shore A 25-70, even further preferably Shore A 30-50.

[029] In preferred embodiments, the film has a thickness in the range 0.15mm to 0.26mm, further preferably 0.190mm to 0.21mm. Ideally, the thickness is 0.20mm \pm 3%.

[030] In a third aspect of the invention, there is provided a method of heating food, the method comprising the steps of providing food requiring heating and a covering comprising a silicone film adapted for clinging and to be substantially transparent and resistant to deterioration at temperatures suitable for food roasting and baking, covering the food with the film and subjecting the covered food to heat sufficient for achieving baking and cooking.

[031] Preferably, the film is temperature resistant at least to 530K.

[032] In a preferred form of the invention, the covered food is subjected to heat sufficient for cooking. Preferably, the heat is applied for sufficient time to cause the food to bake.

[033] The characteristics of the film are preferably any one or more of those set out above in relation to the other two aspects of this invention.

[034] According to a fourth aspect of the invention, there is provided a food covering consisting of a substantially transparent and wrappable silicone film of at least food grade having a thickness in the range 0.15mm to 0.26mm and being resistant to deterioration at temperatures suitable for roasting and baking food.

Brief description of drawings

[035] In order that the invention may be readily understood, and put into practical effect, reference will now be made to the accompanying figures. Thus:

Figure 1 shows in schematic form a diagram of a preferred embodiment of the wrapping of this invention ready for use in wrapping a food item.

Figure 2 shows the wrapping of Figure 1 with a food item placed upon it.

Figure 3 shows the wrapping of Figure 1 operatively wrapped around the aforesaid food item.

Detailed description of an embodiment of the invention

[036] The food covering of this invention provides a silicone sheet having a combination of hardness and thickness in a limited range that enables it to render improved performance compared with prior silicone films, without the need for it to be merely a layer in a laminated structure. The improvements render the present film on its own not only suitable to take on and retain a given changed shape, such as when sealingly wrapped about food, but also to be subjected to heating conditions, such as those experienced in the process of roasting or baking, without deterioration, for example deterioration in the form of thermally induced disintegration. The wrap is therefore suitable for reuse and advantageously can be washed. When dry, its surfaces tend to cling to other objects as well as to self-adhere.

[037] The wrapping is re-usable, recyclable and able functionally to replace at once three common single-use items in household use, namely cling film, aluminium foil and baking paper. The covering is composed of a homogeneous, unsupported, sheet of silicone, preferably in the form of silicone rubber. It is unsupported in the sense that it is not bonded or attached to any other layer, such as a substrate at the time of its being applied to an item to be covered. The film functions as a three-in-one wrapping by virtue of its thickness being limited to a narrow range of values from 0.15mm to 0.26mm.

[038] It is found that within the thickness range stipulated below, the film surprisingly exhibits a degree of clinginess and is not effective as a lubricant, as silicone surfaces are recognized to be. When the thickness is above or below the selected range, it is found that contrary to suggestions in the prior art reviewed herein, the desired properties of this invention are not exhibited. Outside the selected range, the role of a backing layer in a laminated structure becomes crucial to the successful functioning of the composite product when being applied in use.

The inventor has found this not to be so in the case of the present film, which allows for any substrate or backing sheet used in manufacture to be removed by peeling it away from the silicone film, before the silicone is applied as a covering or wrapping.

[039] The thickness of the film is in the range from 0.15mm to 0.26mm, preferably 0.190mm to 0.21mm. Ideally, the thickness is 0.20mm \pm 3%. Ideally, it is found that the sheet should, for an optimum combination of wrappability, strength and remaining in clinging adhesion once wrapped, be 0.2mm thick.

[040] Wrappability is, without being bound by theory, thought to be a function of hardness and thickness, and adhesion a function of electrostatic properties. If the film is excessively hard, it cannot be bent and moulded to the shape of the item being wrapped. It is found that the film should have a hardness on the Shore scale in the range Shore A 25-70. Further preferably, the hardness should be in the range Shore A 30-50.

[041] The film needs further to be substantially transparent, so as to facilitate an observer seeing what is inside the wrapping. This is particularly advantageous when the wrapped item is being cooked, such as by baking. The film may be coloured for decorative or functional purposes, such as to exclude or filter specific wavelengths of light. A preferred, but non-limiting, example of colour is 40% Pantone 376. Colour also enables a user to differentiate between this reusable film and prior art films not having this advantage, such as conventional, single-use cling-films made of polyethylene. It also reduces the risk that a user may dispose of the film of this invention by accident. It will be appreciated, therefore, that various colours may be used within the scope of this invention, whether for decorative or functional purposes. However, the stated shade is found to be particularly advantageous as it does not correspond to the colour of the vast majority of baked or roasted foods and therefore can easily be detected and removed for re-use.

[042] Since the silicone film is to be used with food and is intended to come into direct contact with food, it is necessarily at least of food quality standard. Manufacture of the film is by methods known in the art, using commercially

available liquid silicone and limiting the thickness to the above-stated range. The liquid silicone is applied to a substrate of PET that is formulated to be free of bisphenol A (BPA). Ideally the thickness of the silicone layer, when separated from the substrate layer, is 0.20mm with a 3% tolerance. The silicone layer and substrate are together rolled up onto a roll or cut into discrete sheets to be supplied in standard sheet sizes.

[043] The silicone is separated from the substrate before being applied to the food item or container to be covered. This reduces the risk that would otherwise exist of tearing the silicone film when in the proposed thickness range, were the substrate to be removed only after application of the film. To assist in separation of the silicone film from the substrate without tearing, the film may be pre-scored or have attached a separation tag, according to conventional methods. Without wishing to be bound by theory, it is believed the absence of BPA from the PET substrate helps avoid unwanted crosslinking with the silicone film that may otherwise promote a propensity for the silicone film to be damaged when being separated from the substrate.

[044] A silicone film of thickness in the range 0.15mm to 0.26mm is found thin enough to be readily wrappable about food or over and around the rim of a food container to provide an airtight seal, while conforming to the profile of the item being wrapped. With this thickness, it remains in shape and maintains an airtight seal for weeks under refrigeration, yet it is thick enough to withstand handling and reasonable use as a wrapping film without rupturing or tearing.

[045] Referring to Figure 1, in a preferred embodiment of this invention, a covering, generally denoted by the number 10, is shown laid out in a generally flat manner, ready for an item of food 24 to be placed upon it for wrapping. Covering 10 comprises a transparent silicone rubber film in the form of a sheet 12, having an upper surface 14 and opposite lower surface 16 which has been peeled away from its BPA-free PET substrate, beginning at a location at peripheral portion 20 which extends inwardly from edge 22 to about the broken line 26. The sheet is 0.20mm thick, having self-adhesive properties, as well as the property that it does not slip from porous and non-porous dry surfaces.

[046] In Figure 2, food item 24 is shown placed on sheet 12 in readiness for wrapping.

[047] In Figure 3, food item 24 is shown wrapped in transparent cling sheet 12.

[048] It will be appreciated that instead of having sheet 12 completely wrapping around a food item such as a bread roll or hamburger, so that is in contact with substantially the entire outer surface, the covering is placed over and wrapped around a container in which the food item is held, for example, an open-topped polystyrene tray. It is not necessary for the covering to adhere to the polystyrene, provided the covering itself is self-adhering when, as in the case of the food item in Figures 1-3, it is wrapped back over itself, so that at least a peripheral portion 20 of lower surface 16 is brought into contact with upper surface 14.

[049] The covering of the invention, in addition to being re-usable, has the advantage of being able to replace at least three commonly used single-use items, namely conventional known cling film, aluminium foil and baking paper, providing the user with effective three-in-one product functionality. The specific thickness range found by the present inventor was not previously known to provide the benefits realised by way of the present invention. Prior proposals simply to use a silicone film in a generic form have not been practical, failing to achieve the advantages of the present invention. The silicone film of thickness in the range 0.15mm to 0.26mm is found to be thin enough to be readily wrappable about food or over and around the rim of a container to provide an airtight seal while conforming to the profile of the item being wrapped, remaining in shape practically indefinitely, and is still found to be thick enough to withstand handling and reasonable use as a wrapping film without a propensity to rupture or tear.

[050] These embodiments merely illustrate examples of the method and covering of the invention providing a multifunctional silicone film. With the insight gained from this disclosure, the person skilled in the art is well placed to discern further embodiments by means of which to put the claimed invention into practice.

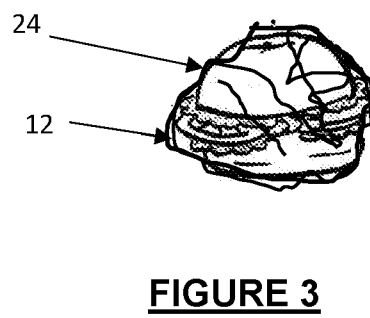
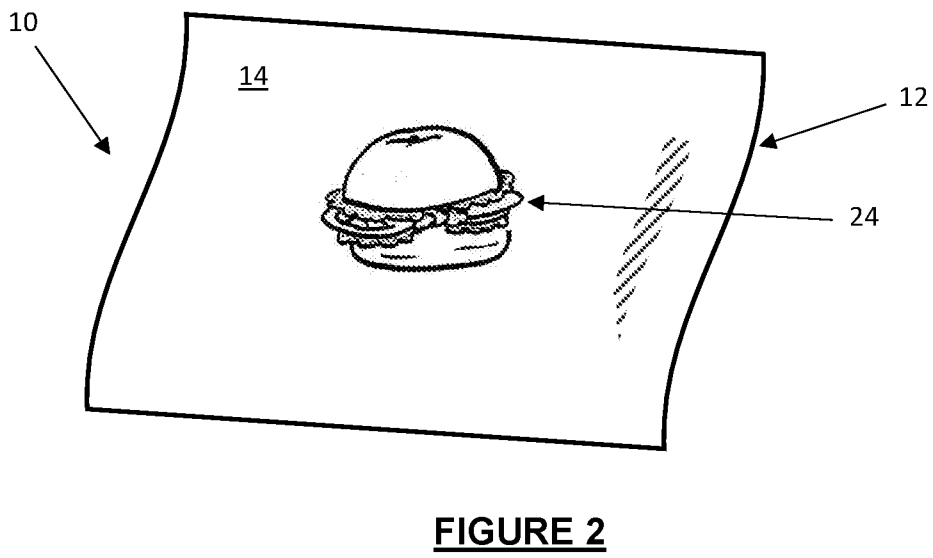
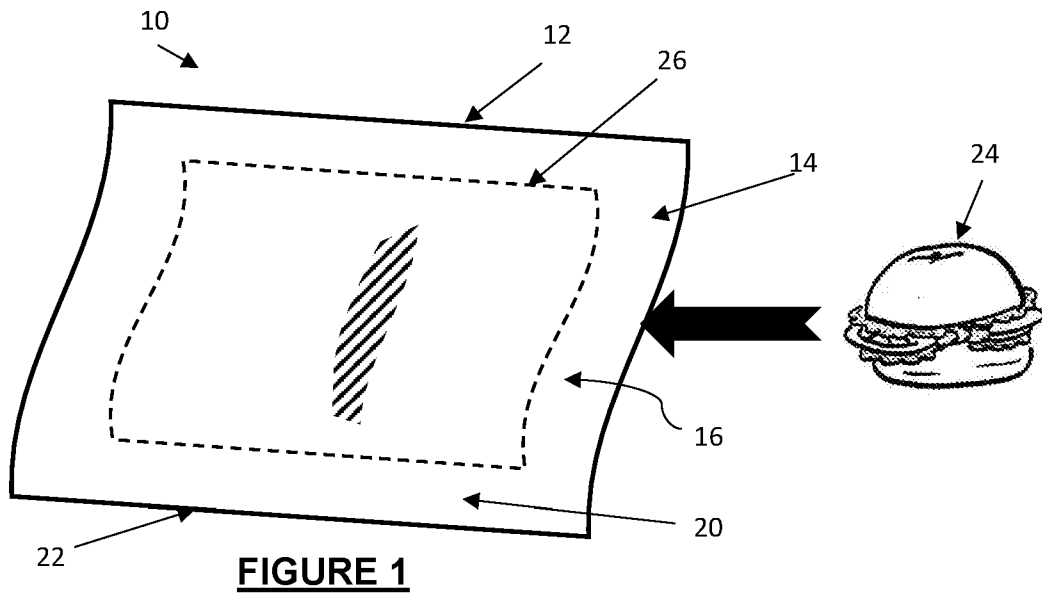
Claims

The claims defining the invention are:

1. A food covering comprising a silicone film of at least food grade, adapted for clinging and to be substantially transparent by having a thickness in the range 0.15mm to 0.26mm and resistant to deterioration at temperatures suitable for roasting and baking food.
2. The food covering of claim 1 being resistant to deterioration at a temperature of at least 530K.
3. The covering of claim 1 or claim 2 wherein the film comprises silicone rubber.
4. The covering any one of the preceding claims wherein the film has a thickness in the range 0.19mm to 0.21mm.
5. The covering of any one of the preceding claims, wherein the silicone of the film is of food grade or superior.
6. The covering of any one of the preceding claims, wherein the film has a hardness on the Shore scale in the range Shore A 25-70.
7. The covering of claim 6 wherein the film has a hardness on the Shore scale in the range Shore A 30-50.
8. The covering of any one of the preceding claims, wherein the film colour is 40% Pantone 376C.
9. A method of inhibiting food deterioration, the method comprising the steps of providing food requiring preservation and a covering comprising a substantially transparent silicone film adapted for clinging by having a thickness in the range 0.15mm to 0.26mm, and wrapping the food using the film, thereby to create a substantially airtight barrier around the food.

10. The method of claim 9 including the step of causing the film to be wrapped on to itself for allowing a cling seal to be established between contacting surfaces thereof.
11. The method of claim 9 or claim 10 comprising providing the film on a substrate and removing the film from the substrate prior to application to an item to be wrapped.
12. The method of any one of claims 9 to 11 wherein the film comprises silicone rubber.
13. The method of any one of claims 9 to 12 wherein the film has a thickness in the range 19mm to 0.21mm.
14. The method of any one of claims 9 to 15 wherein the film has a hardness on the Shore scale in the range Shore A 25-70.
15. A method of heating food, the method comprising the steps of providing food requiring heating and a wrapping comprising a substantially transparent silicone film adapted for clinging by having a thickness in the range 0.15mm to 0.26mm, and being temperature resistant to a temperature suitable for food roasting or baking, wrapping the food in the wrapping and subjecting the wrapped food to effective roasting or baking heat.
16. The method of claim 15 wherein the film comprises silicone rubber.
17. The method of claim 15 or claim 16 wherein the film has a hardness on the Shore scale in the range Shore A 25-70.
18. The method of any one of claims 15 to 17, wherein the film has a thickness in the range 0.19mm to 0.21mm.
19. A food covering consisting of a substantially transparent and wrappable silicone film of at least food grade, having a thickness in the range 0.15mm to 0.26mm and being resistant to deterioration at temperatures suitable for roasting and baking food.

20. The food covering of claim 19 wherein the film is resistant to thermal deterioration at a temperature of at least 530K.
21. The food covering of claim 19 or claim 20 having a hardness on the Shore scale in the range Shore A 25-70.
22. The food covering of any one of claims 19 to 21, wherein the film has a thickness in the range 0.19mm to 0.21mm.



INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU2018/050219

A. CLASSIFICATION OF SUBJECT MATTER B65D 75/04 (2006.01) B32B 27/08 (2006.01)		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
WPI, EPODOC, PATENW: IPC/CPC, B32B2439/70, B65D75, B65D65/02, B29D7/01, B32B27, B32B25, C08J2383/04 & keywords (food, edible, produce, silicone, cling, wrap, film, cover, bake, roast, high temperature, polysiloxanes) like terms; Espacenet: B65D75/002, B65D71/08, B65D71/06, C08J2383/04 & keywords (roast, bake, wrap, food) & like terms; Google Patents: B65D71/06 & keywords (roast, bake, food, high temperature) & like terms; Applicant/inventor name search conducted on Espacenet, AusPat, and internal databases provided by IP Australia		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	Documents are listed in the continuation of Box C	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex		
* "A"	Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E"	earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed	
Date of the actual completion of the international search 24 May 2018	Date of mailing of the international search report 24 May 2018	
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA Email address: pct@ipaustralia.gov.au	Authorised officer Chris Hang AUSTRALIAN PATENT OFFICE (ISO 9001 Quality Certified Service) Telephone No. +61262832657	

INTERNATIONAL SEARCH REPORT		International application No.
C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		PCT/AU2018/050219
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2014/0110292 A1 (SILICOM SILICONE APPLICATION TECHNOLOG CO. LTD.) 24 April 2014 Para [0002], [0009]-[0011], [0019]-[0022], [0024]; figure 3	1-22
X	US 2006/0045949 A1 (MCLAUGHLIN) 02 March 2006 Abstract; para [0003], [0011], [0043]-[0045]; figure 6	1-10, 12-22
X	US 2011/0097555 A1 (YEUNG) 28 April 2011 Para [0001], [0005]-[0006], [0009]-[0010], [0021], [0027]-[0028]	1-9, 12-22
A	TW 200722013 A (HU, YU-HSIN) 16 June 2007 Abstract; figure 1; claim 1	1-22

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
the subject matter listed in Rule 39 on which, under Article 17(2)(a)(i), an international search is not required to be carried out, including
2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See Supplemental Box for Details

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

Supplemental Box**Continuation of: Box III**

This International Application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept.

This Authority has found that there are different inventions based on the following features that separate the claims into distinct groups:

- Claims 1-8 and 19-22 are directed to a food covering. The feature of the food covering is resistant to deterioration at temperatures suitable for roasting and baking food is specific to this group of claims.
- Claims 9-14 are directed to a method of inhibiting food deterioration. The feature of the method comprising wrapping the food using the film, thereby to create a substantially airtight barrier around the food is specific to this group of claims.
- Claims 15-18 are directed to a method of heating food. The feature of the method comprising wrapping the food in the wrapping and subjecting the wrapped food to effective roasting or baking heat is specific to this group of claims.

PCT Rule 13.2, first sentence, states that unity of invention is only fulfilled when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding special technical features. PCT Rule 13.2, second sentence, defines a special technical feature as a feature which makes a contribution over the prior art.

When there is no special technical feature common to all the claimed inventions there is no unity of invention.

In the above groups of claims, the identified features may have the potential to make a contribution over the prior art but are not common to all the claimed inventions and therefore cannot provide the required technical relationship. The only feature common to all of the claimed inventions and which provides a technical relationship among them is the food covering comprising a substantially transparent silicone film having a thickness in the range 0.15mm to 0.26mm

However this feature does not make a contribution over the prior art because it is disclosed in:

D1: US 2014/0110292 A1 (SILICOM SILICONE APPLICATION TECHNOLOG CO., LTD.) 24 April 2014

Therefore in the light of this document this common feature cannot be a special technical feature. Therefore there is no special technical feature common to all the claimed inventions and the requirements for unity of invention are consequently not satisfied *a posteriori*.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2018/050219

This Annex lists known patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document/s Cited in Search Report		Patent Family Member/s	
Publication Number	Publication Date	Publication Number	Publication Date
US 2014/0110292 A1	24 April 2014	US 2014110292 A1	24 Apr 2014
US 2006/0045949 A1	02 March 2006	US 2006045949 A1	02 Mar 2006
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End of Annex