

**OPINION UNDER SECTION 74A**

Patent	EP 1642841 B1
Proprietor(s)	British Polythene Limited
Exclusive Licensee	
Requester	Bailey Walsh & Co LLP
Observer(s)	
Date Opinion issued	27 September 2023

**The request**

1. The Comptroller has been requested by Bailey Walsh & Co LLP (“the requester”) to issue an opinion as to whether claims 1 and 8 of EP 1642841 B1 (“the patent”) lack sufficiency and whether the claims of the patent are infringed by a prototype product (“the product”) detailed in the request.
2. The request includes the following evidence:  
  
Appendix A – images showing a product in a form described by the patent  
  
Appendix B – images of a prototype product  
  
Appendix C – schematic drawing of the prototype product shown in Appendix B

**Observations and observations in reply**

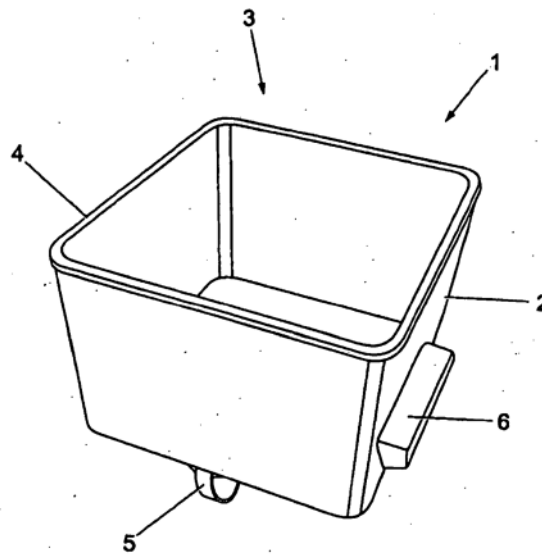
3. No observations were received in response to the request.

**The patent**

4. The patent, EP 1642841 B1, is titled “Stretchable cover for receptacles”. It was filed on 18<sup>th</sup> August 2005 with a priority date of 19<sup>th</sup> August 2004, published on 5<sup>th</sup> April 2006 and granted on 23<sup>rd</sup> March 2009. The patent remains in force.
5. The patent relates to a cover for a receptacle and, more particularly, to a temporary cover for use on food bins particularly whilst transporting raw or unprocessed food from one location to another in order to limit the risk of contamination of the food products. The patent explains that preventing contamination of the food has been

addressed by providing a plastic shroud which is placed over the open end of the bin and progressively fed down the walls of the bin to the floor and by the use of a loose rigid cover similar to an upturned tray which may be formed in plastics or of metal. However, neither of these solutions satisfactorily addresses the risk of food contamination.

6. The patent provides a cover for a receptacle such as a food bin which addresses the problems of contamination of the food products within the bin particularly during transfer of the food within a food processing facility or from a delivery vehicle to a food processing or storage area within a hotel or restaurant. Furthermore, it is an object of the present invention to provide a single use, disposable cover for a food bin which is economic to produce and limits the amount of material required to cover the bin to prevent contamination.
7. Figure 1 shows a food bin 1 for transporting of raw and unprocessed foods from one location to another within a food processing facility or alternatively from a refrigerated vehicle to a cooking or storage area within a hotel or restaurant. The bin as shown is generally square in configuration and may be rectangular. The bin has four generally rectangular walls 2 with an open top 3 to form a receptacle to receive food products. The top of the bin is provided with an outwardly extending lip 4 which extends around the open top of the bin. The bin is provided with means to allow the bin to be easily moved from one location to another such as wheel(s) 5 and a foot plate 6.



*Fig. 1*

8. A cover 7 for the bin is shown in Figure 2. The cover comprises a plastics film sheet 8 such as for example polyethylene. The sheet is substantially rectangular in configuration with opposed longitudinal edges 9 and opposed ends 10. The edges 9 of the sheet are folded onto the sheet 8 about a fold 11 such that about 15-20% of each edge overlies the sheet to provide an overlying section 12. An angle seal 13 is provided across the corner 14 of the folded portion of the sheet. An integral handle 15 is provided by the sheet material formed outside of the angle seal 13 between the fold 11 and the end 10 of the sheet.

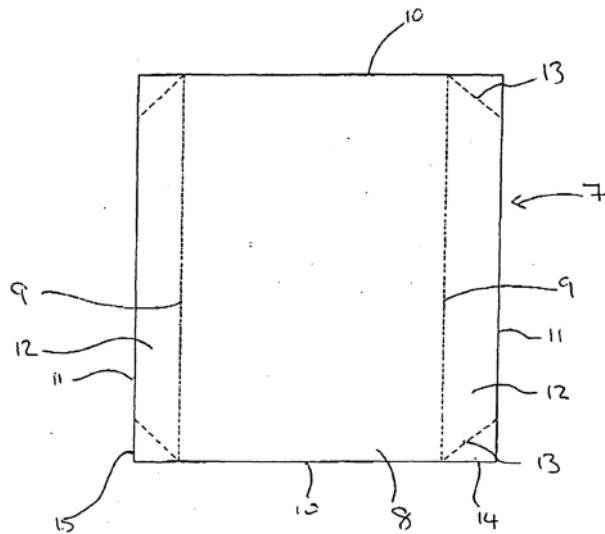


Figure 3

9. In use, and as shown in Figure 3, the cover 7 is provided over the open top 3 of the food bin. One end 10 of the cover 7 is placed over the lip 4 which acts to retain the cover in position on the bin whilst the remainder of the cover is put in place. The cover 7 is stretched over the top of the bin such that the overlying sections 12 of the cover open and the opposed ends 10 of the cover are drawn together by the angle seals 13 to form a shallow tray which can be pulled over the open top 3 of the bin. When the second opposed end 10 of the cover is placed over the lip 4 of the bin this holds the cover in place. The handles 15 can be used to pull the cover firmly into position on top of the bin. The cover is fully in place on the bin as shown in Figure 4. As the cover 7 is formed by a plastics film material which is stretched over the open top of the bin 3, this ensures that the cover provides a close fit with the top of the bin and prevents the cover from moving during transport of the bin which further reduces the risk of contamination.

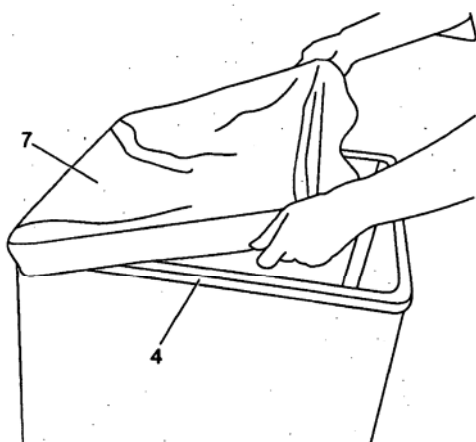


Fig. 3

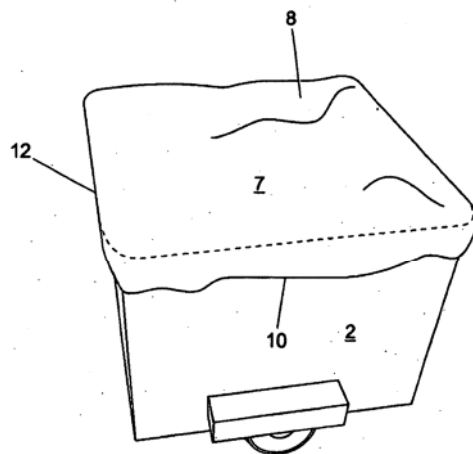


Fig. 4

10. A method of making the cover 7 is illustrated in Figure 5. A plastics film sheet 8 is prepared by folding the longitudinal edges 9 of the sheet about a fold 11 such that both sides of the sheet overlie at least a portion of the sheet. The material is then wound onto a reel 20.
11. The reel holding the folded film sheet may then be fed through a series of rollers 21 which can for example place the sheet under tension or provide further pre-processing steps. The folded sheet 8 is then passed from the reel through a processing station 22 in which substantially triangular shaped heat-sealing heads 23 press down upon the flat sheet 8, one on either side of the sheet. This puts two diagonal heat seals 13 into the overlying portion 12 of the sheet.
12. As the heat seals are being made, a perforation may also be made along the width of the sheet between the two sets of heat seals 13 on either side of the sheet by a known perforating head. Once the seals 13 are made, the sheet passes through a further series of rollers 25 to maintain the tension in the sheet and through a further sealing station 26 where a heat seal 27 is formed along the width of the sheet on either side of the perforation. This gives additional strength to the sheet in the areas of the overlying portions 12 in the area where the diagonal seal 13 meets the end 10 of the cover. The sheet is then wound onto a take-off reel from which it can be unloaded as required. Individual covers 7 can be removed from the reel by separating the covers along the perforation.

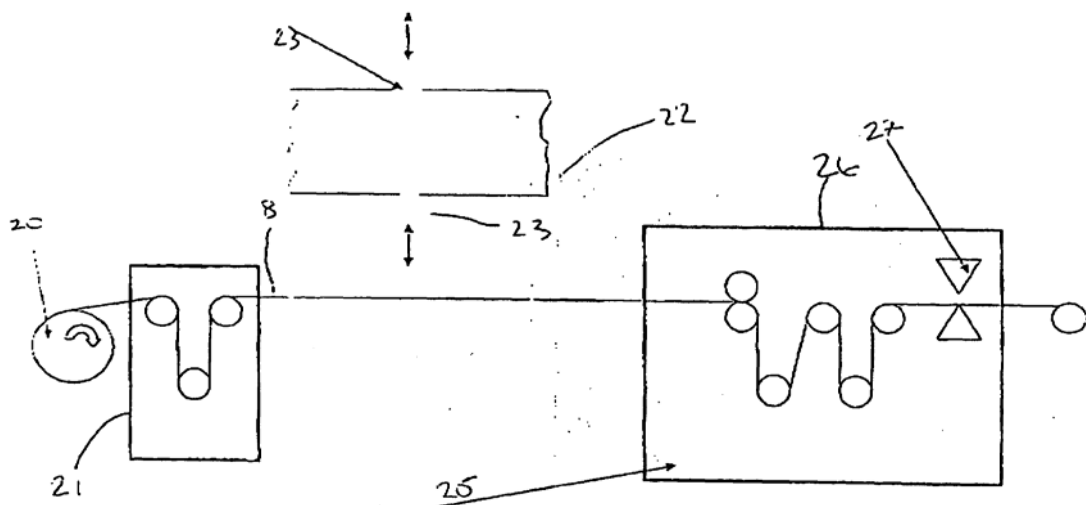


Figure 5

13. The patent has 15 claims including three independent claims 1, 11 and 12. Claims 1, 11 and 12, adopting the references used by the requester, read:
  1. a. A cover (7) for a receptacle (1) comprising
  - b. a flexible plastics sheet (8) which has first and second opposed longitudinal edges (9)

- c. *characterised in that the edges (9) are folded onto at least a portion of the sheet (12)*
  - d. *and held in a folded condition by seals (13) formed across the corners (14) of the folded edges*
  - e. *such that when the opposed longitudinal edges are held substantially at right angles from the sheet (8), the cover (7) forms a shallow tray*
  - f. *which is stretchable over the open top of the receptacle (1).*
11. a. *A method of forming plastics covers (7) for use on receptacles such as food bins (1) used in the transporting of foods from one location to another*
- b. *characterised in that the method comprises the steps of providing a flexible plastics sheet (8) having the longitudinal edges (9) folded onto at least a portion of the sheet (12);*
  - c. *applying a sealing means on the folded edge of the sheet to provide two spaced apart seals (13) across the fold;*
  - d. *perforating the sheet across the width of the sheet between the two seals (13);*
  - e. *and providing a further seal across the width of the cover on either side of the perforation.*
12. a. *A method of forming plastics covers (7) for use on receptacles such as food bins (1) used in the transporting of foods from one location to another*
- b. *characterised in that the method comprises the steps of providing a flexible plastics sheet (8) having the longitudinal edges (9) folded onto at least a portion of the sheet (12);*
  - c. *applying a sealing means on the folded edge of the sheet to provide two diagonal seals (13) across the fold;*
  - d. *perforating the sheet across the width of the sheet between the two seals (13);*
  - e. *and providing a further seal across the width of the cover on either side of the perforation.*

14. The requester has provided images of a product formed as described by the patent. Figure 1 shows a flattened plastic sheet having folded edges and seals (shown in red broken lines). Figure 2 shows the edges being held substantially at right angles

to form a shallow tray.



Figure 1



Figure 2

## Claim construction

15. Before I can consider whether the patent could be infringed, I need to construe the claims of the patent – that is to say, I must interpret them in the light of the description and drawings as instructed by Section 125(1):

*125(1) For the purposes of this Act an invention for a patent for which an application has been made or for which a patent has been granted shall, unless the context otherwise requires, be taken to be that specified in a claim of the specification of the application or patent, as the case may be, as interpreted by the description and any drawings contained in that specification, and the extent of the protection conferred by a patent or application for a patent shall be determined accordingly.*

16. In doing so I must interpret the claims in context through the eyes of the person skilled in the art. Ultimately the question is what the person skilled in the art would have understood the patentee to be using the language of the claims to mean. This approach has been confirmed in the recent decisions of the *High Court in Mylan v Yeda*<sup>1</sup> and the *Court of Appeal in Actavis v ICOS*<sup>2</sup>.
17. The requester has argued that it is not clear in claim 1 where the seals formed

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

<sup>2</sup> *Actavis Group & Ors v ICOS Corp & Eli Lilly & Co.* [2017] EWCA Civ 1671

across the corners are required to be located. The requester puts forward the following possible locations for the seals:

- Between the respective longitudinal edges across the width of the cover and at a distance from the corner; or
- Extending to the corner of the cover; or
- Located across and between opposing corners.

18. Claim 1 requires the seals to be formed across the corners of the folded edges and to hold the folded edges in a folded condition. Figure 2 of the patent shows seals 13 provided from folded edge 11 across the folded section 12 to end of the sheet 10. Paragraph [0031] of the patent describes an angle seal 13 provided across the corner 14 of the folded portion of the sheet. The angle seal 13 preferably provided at about 45 degrees from the fold 11 of the sheet 8 to the end 10 of the sheet.
19. To my mind, the person skilled in the art reading the patent as a whole and trying to understand its meaning would consider claim 1 to define something very similar to the embodiment shown in figure 2 of the patent. Figure 2 shows an embodiment where the seals are formed across the corners of the folded edges. In my opinion, the meaning of the seals being formed across the corners is that they extend from the folded edge 11 to end of the sheet 10. The seals would be required to be positioned at a location extending from the folded edge 11 to end of the sheet 10 where they held the folded edges in a folded condition. I do not believe the skilled person would have any issue in doing so.
20. The alternative positions for the seals put forward above by the requester would not, in my opinion, be formed across the corners of the folded edges to hold the folded edges in a folded condition as required by claim 1. None form a seal “across the corners” as I consider the person skilled in the art to understand “across the corners” to mean according to the teaching of the patent.
21. I have no issue with the remaining claims and consider them to be clear when read in light of the description and drawings. I am unable to identify anything in the patent that would justify deviating from a normal interpretation of the language used in the claim.
22. I consider the person skilled in the art to be a designer and manufacturer of plastic covers for receptacles. In my opinion the skilled person would have no issue with understanding the meaning of the claims.

### **Sufficiency – the law**

23. Section 14(3) of the Patents Act 1977 reads:

*The specification of an application shall disclose the invention in a manner which is clear enough and complete enough for the invention to be performed by a person skilled in the art.*

24. The requester argues that claims 1 and 8 and the patent as a whole lacks

sufficiency. The requester explains that it does not appear possible and nor is it disclosed that the edges can be held at a right angle to the whole of the sheet on which the edges are formed as what the patent shows is that the edges and inwardly depending parts of the sheet are held in the same plane.

25. Claim 1 requires that when the opposed longitudinal edges are held substantially at right angles from the sheet (8), the cover (7) forms a shallow tray which is stretchable over the open top of the receptacle (1). This would appear to be shown in figure 3 of the patent and furthermore in figure 2 of Appendix A provided by the requester. In the figures of Appendix A the requester appears to have worked the invention according to the patent in order to provide a cover as required by claim 1. To my mind, the person skilled in the art, in trying to work the invention, would understand the scope of claim 1. In order to provide the shallow tray the longitudinal sides of the sheet would need to be held substantially at right angles from the sheet.
26. Claim 8 requires each folded edge overlies about 15-20% of the sheet. Paragraph [0019] of the patent explains “Advantageously, each folded edge overlies about 15-20% of the sheet. This ensures that the sides of the cover only extend around the top edge of the bin in use and avoids any potential contamination problems with the cover coming into contact with the ground or the wheels or braking system of the bin” and paragraph [0028] “The edges 9 of the sheet are folded onto the sheet 8 about a fold 11 such that about 15-20% of each edge overlies the sheet to provide an overlying section 12”. In my opinion, the person skilled in the art would again understand the scope of claim 8 when considering the disclosure of the patent as a whole. To my mind, the skilled person would understand the cover of the invention to form a shallow tray which only extends around the top edge of a bin in use. Therefore, the skilled person would understand claim 8 to mean that each overlying section of the sheet only accounts for about 15-20% of the sheet.
27. In my opinion, the teaching of the patent enables the skilled person to work the invention of the claims. Therefore, I do not consider the patent to be insufficient.

## **Infringement - the law**

28. Section 60 Patents Act 1977 governs what constitutes infringement of a patent:

*(1) Subject to the provision of this section, a person infringes a patent for an invention if, but only if, while the patent is in force, he does any of the following things in the United Kingdom in relation to the invention without the consent of the proprietor of the patent, that is to say –*

*(a) where the invention is a product, he makes, disposes of, offers to dispose of, uses or imports the product or keeps it whether for disposal or otherwise;*

*(b) where the invention is a process, he uses the process or he offers it for use in the United Kingdom when he knows, or it is obvious to a reasonable person in the circumstances, that its use there without the consent of the proprietor would be an infringement of the patent;*



*(c) where the invention is a process, he disposes of, offers to dispose of, uses or imports any product obtained directly by means of that process or keeps any such product whether for disposal or otherwise.*

*(2) Subject to the following provisions of this section, a person (other than the proprietor of the patent) also infringes a patent for an invention if while the patent is in force and without the consent of the proprietor, he supplies or offers to supply in the United Kingdom a person other than a licensee or other person entitled to work the invention with any of the means, relating to an essential element of the invention, for putting the invention into effect when he knows, or it is obvious to a reasonable person in the circumstances, that those means are suitable for putting, and are intended to put, the invention into effect in the United Kingdom.*

29. The request has made no indication that indirect infringement under 60(2) is to be considered.

30. In *Actavis v Eli Lilly*<sup>3</sup>, Lord Neuberger states that the problem of infringement is best approached by addressing two issues, each of which is to be considered through the eyes of the notional addressee of the patent in suit, i.e. the person skilled in the relevant art. Those issues are:

*(i) does the variant infringe any of the claims as a matter of normal interpretation; and, if not,*

*(ii) does the variant nonetheless infringe because it varies from the invention in a way or ways which is or are immaterial?*

31. If the answer is “yes” to either question, there is infringement; otherwise there is not.

32. The second issue to be addressed is whether the variant provided by the product varies in a way that is immaterial. The court in *Actavis* provided a reformulation of the three questions in *Improver*<sup>4</sup> to provide guidelines or helpful assistance in connection with this second issue. These reformulated questions are:

*(i) Notwithstanding that it is not within the literal meaning of the relevant claim(s) of the patent, does the variant achieve substantially the same result in substantially the same way as the invention, i.e. the inventive concept revealed by the patent?*

*(ii) Would it be obvious to the person skilled in the art, reading the patent at the priority date, but knowing that the variant achieves substantially the same result as the invention, that it does so in substantially the same way as the invention?*

*(iii) Would such a reader of the patent have concluded that the patentee nonetheless intended that strict compliance with the literal meaning of the relevant claims(s) of the patent was an essential requirement of the*

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<sup>3</sup> *Actavis UK Limited and Others v Eli Lilly and Company* [2017] UKSC 48

<sup>4</sup> *Improver* [1990] FSR 181

*invention?*

33. To establish infringement in a case where there is not literal infringement, a patentee would have to establish that the answer to the first two questions was "yes" and that the answer to the third question was "no".
34. The first step in determining if there is any infringement under section 60(1) is to consider whether the product falls within the scope of the claims of the patent.

## The product

35. The product of the requester is illustrated in the figures below. The product comprises a flexible plastic sheet with folded edges and seals (shown in red/black broken lines). The seals are formed along and adjacent the end of the sheet to hold the folded edges in a folded condition.



Figure 1

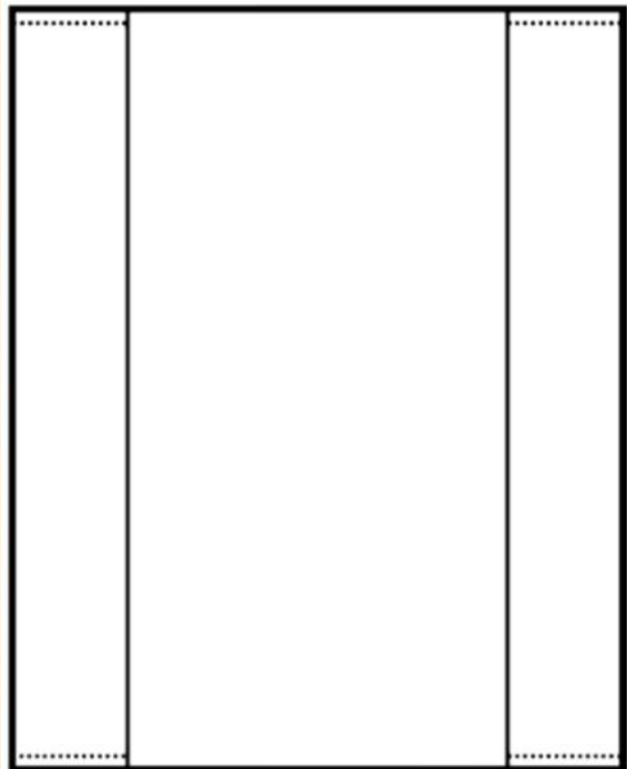


Figure 1

36. Figure 2 below shows the product with the longitudinal held substantially at right angles to the sheet. As can be seen the product does not form a shallow tray in this configuration.



Figure 2

37. The product may be produced as part of a roll having a number of products joined by a perforated line as shown below. The perforated line is provided across the width of the sheet.



Figure 3

## **Does the Product infringe the patent as a matter of normal interpretation?**

38. I will now consider whether the product falls within the scope of independent claim 1.
39. I consider it to be clear that the product is a cover which includes a flexible plastics sheet which has first and second opposed longitudinal edges, the edges folded onto at least a portion of the sheet, and held in a folded condition by seals as required by the cover of claim 1 i.e. of features 1A-1C and 1D (in part).
40. As explained above, the product includes seals formed along and adjacent the end of the sheet to hold the folded edges in a folded condition. Therefore, the product does not include seals formed across the corners of the folded edges such that when the opposed longitudinal edges are held substantially at right angles from the sheet, the cover forms a shallow tray as required by features 1D-1E of claim 1.
41. Therefore, it is my opinion that the product does not fall within the scope of claim 1 of the patent as a matter of normal interpretation. As the answer to the first Actavis question is 'no', it is necessary for me to consider the second Actavis question in relation to claim 1.
42. Does the product nonetheless infringe because it varies from the invention in a way or ways which is or are immaterial? Turning to the Improver questions for assistance I am of the opinion that the answer to the first of these questions is 'no'. The product in this case varies in the positioning of the seals i.e. the seals being formed across the corners of the folded edges. Whilst the seals of the product are not formed across the corners of the folded edges, they also do not achieve substantially the same result in substantially the same way as the invention. The seals of the product do hold the folded edges in a folded condition but they do not allow the sheet to form a shallow tray when the opposed longitudinal edges are held substantially at right angles from the sheet. It is the formation of the shallow tray that enables the sheet to form a cover which is stretchable over the open top of the receptacle. This is the purpose of the invention. Therefore, the product does not vary from the invention of claim 1 in an immaterial way.
43. I will now consider whether the product falls within the scope of independent method claims 11 and 12.
44. I consider that in order to produce the product a method of forming plastics covers for use on receptacles such as food bins used in the transporting of foods from one location to another must be used. The method comprises the steps of providing a flexible plastics sheet having the longitudinal edges folded onto at least a portion of the sheet; applying a sealing means on the folded edge of the sheet to provide two spaced apart seals across the fold; and perforating the sheet across the width of the sheet between the two seals i.e. features 11A-11D of claim 11 and features 12A-12C and 12D (in part) of claim 12.
45. As discussed above in paragraph 37, the product may be produced as part of a roll having a number of products joined by a perforated line. The perforated line is provided across the width of the sheet. However, the product does not include a further seal across the width of the cover on either side of the perforation as required

by features 11E of claim 11 and 12E of claim 12.

46. Therefore, it is my opinion that the product does not fall within the scope of claims 11 or 12 of the patent as a matter of normal interpretation. As the answer to the first Actavis question is 'no', it is necessary for me to consider the second Actavis question in relation to claims 11 and 12.
47. Does the product nonetheless infringe because it varies from the invention in a way or ways which is or are immaterial? Turning to the Improver questions for assistance I am of the opinion that the answer to the first of these questions is 'no'. The product in this case varies in that it does not include a further seal across the width of the cover on either side of the perforation.
48. As explained in paragraph [0038]:

*“Once the seals 13 are made, the sheet passes through a further series of rollers 25 to maintain the tension in the sheet and through a further sealing station 26 where a heat seal 27 is formed along the width of the sheet on either side of the perforation 24. This gives additional strength to the sheet in the areas of the overlying portions 12 in the area where the diagonal seal 13 meets the end 10 of the cover.”*

49. The absence of the further seal across the width of the cover on either side of the perforation in the product results in it lacking the additional strength in the areas of the overlying portions. Therefore, the product does not vary from the invention of claims 11 or 12 in an immaterial way.
50. Therefore, the importation, disposal and/or manufacture of the product in the UK would not constitute infringement under section 60(1).
51. The requester has also provided argument that the product does not infringe dependent claims 2-10 and 13-15. On the basis of the material before me, I am of the opinion that the product does not include the features of dependent claims 2-10 and 13-15 and does not vary from the features of these claims in an immaterial way. Hence the dependent claims would also not be infringed by the importation, disposal and/or manufacture thereof in the UK of the product.

## Opinion

52. It is my opinion that the patent is sufficient as required by Section 14(3) of the Act.
53. It is also my opinion that the product does not fall within the scope of claims 1-15 of the patent as a matter of normal interpretation. Further, it is my opinion that the product does not vary from the features of these claims in an immaterial way. Accordingly, it is my opinion that the product does not infringe EP 1642841 B1 under Section 60(1) of the Act.

Marc Collins  
Examiner



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## 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.*