Opinion Number

OPINION UNDER SECTION 74A

Patent	GB 2528484 B
Proprietor(s)	Bibado Ltd
Exclusive Licensee	
Requester	Be-Baby Ltd
Observer(s)	Bibado Ltd
Date Opinion issued	18 October 2021

The Request

- The Comptroller has been requested by Be-Baby Ltd ("Be-Baby") to issue an opinion as to whether GB 2528484 B ("the Patent") is invalid on the following grounds: (i) insufficiency of disclosure, (ii) lack of novelty and/or lack of inventive step. The request was filed on 28 July 2021 and was accompanied by a statement explaining the request. The statement referred to 16 possible citations (including translations) D1-D16 as well as other supporting documents.
- 2. This opinion is related to opinion requests 8/21 (regarding infringement) and 10/21 (regarding validity) which are also concerned with the Patent and have been issued together in a single report. These earlier opinions were requested by Bibado Ltd ("Bibado"), the proprietor of the Patent on 12 July 2021 and 13 July 2021 respectively. It was agreed that any relevant validity arguments raised in the current request would be considered as observations in response to the validity request, Opinion 10/21. The remaining validity matters form the basis of the current opinion.
- 3. Previously, in 2018, Mr Daniel Laxton of Bibado requested an Opinion regarding the validity of the Patent (Opinion 34/18) in view of four registered designs and a US patent.

Observations & Observations in reply

4. Observations were received from Bibado on 10 September 2021 and observations in reply were received from Be-Baby on 22 September 2021.

Scope of the Opinion

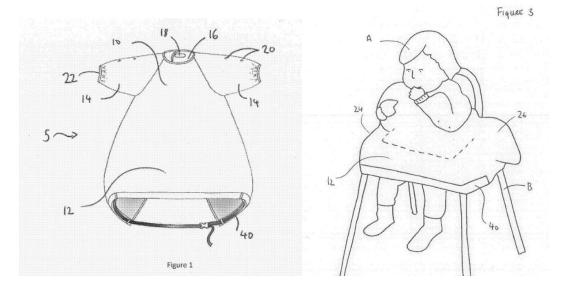
5. As Be-Baby notes, documents D1-D6 were cited during prosecution of the Patent.

The examiner considered the claims as filed to be not new or not to involve an inventive step in view of each of these documents. The claims were subsequently amended to the satisfaction of the examiner. The Office will not issue an opinion (or part of an opinion) if for any reason it considers it inappropriate in all the circumstances to do so (by virtue of s.74A(3)(b) of the Patent Act 1977 ("the Act")). This provision allows requests to be refused which do no more than repeat arguments already considered pre-grant. Here, documents D1-D6 had been clearly considered pre-grant and therefore do not raise a new question when considered alone for novelty or inventive step. Apart from D5, Be-Baby have not provided any arguments in their request regarding how these documents could be combined with any newly cited documents, for example in a mosaic-type obviousness argument. The arguments surrounding D5 are discussed in Opinion 10/21. Therefore, there is no new question for me to consider in this opinion regarding documents D1-D6.

- 6. Be-Baby in their observations in reply refer to decision BLO/370/07 regarding whether documents already cited pre-grant could be revisited in an opinion. Be-Baby refers to the following passage: "I have to acknowledge the possibility that a decision by an examiner to discount a citation might be shown to have been clearly perverse, in the sense that no reasonable person could have reached it. Only in such a case might it be appropriate to reconsider the citation in an opinion as there could be said to be a new argument'. I have carefully considered all the arguments put forward by Be-Baby on these matters but do not consider them persuasive enough for me to reconsider any of documents D1-D6.
- 7. The validity of the claims with respect to documents D7-D10 was dealt with in previous Opinion 34/18 and therefore arguments surrounding these documents do not raise a new question. Be-Baby clarified that the comments on Opinion 34/18 were intended to assist me in construing the claims and not to have the Opinion re-examined.
- 8. Documents D14 (English translation D15) and D16 were cited in Opinion 10/21 and all relevant arguments with respect to these documents are considered there (however see below in relation to D11 and D12).
- 9. Bibado in their observations assert that document D11 has the same proprietor as document D1 and discloses exactly the same features as D1. They submit that D11 should therefore not be considered. I have studied documents D1 and D11 and consider that the disclosures are sufficiently different for me to consider D11 here. I agree with both parties that D12 (with English translation D13) is a new document. Be-Baby present arguments regarding whether the claims of the patent involve an inventive step in light of either D11 or D12 in combination with common general knowledge. They also consider a combination of D11 or D12 with the disclosures of D14 and D16. I will cover all of these combinations here.
- 10. Therefore, this Opinion will be restricted to whether the claims of the Patent involve an inventive step over D11 and D12 either alone (in combination with common general knowledge) or in combination with D14 or D16; and issues regarding sufficiency.

The Patent

- 11. The Patent entitled 'Protective Garment' was filed on 23 July 2014 in the name of Rachel Wood and was granted on 31 January 2018. Bibado was registered as proprietor of the Patent by virtue of assignment dated 26 April 2018. The Patent remains in force.
- 12. The Patent relates to a protective garment such as a bib or apron, especially for a child. The Patent explains that such bibs often protect the chest and occasionally the arms of the individual but don't prevent food from falling on and around the legs of the user and on the chair in which the individual may be sitting. In the invention, the bib has a lower region 12 which is arranged to cover the legs of the wearer and can also cover a chair in which the wearer is sitting. The inside of the bib is provided with a gripping region 40 that helps to prevent the garment slipping and holds it in place, by allowing the garment to grip an item of furniture about which the garment is placed. (See Figures 1 and 3 reproduced from the Patent below.)



13. The Patent has 6 claims including one independent claim, claim 1. Claim 1 reads as follows with the features separated out.

1a	A protective garment to be worn by a wearer,
<i>1b</i>	the garment having a lower edge,
1c	wherein the lower edge is provided with a gripping region,
1 <i>d</i>	the gripping region comprising a strip
1e	of thermoplastic elastomer, silicone, rubber or acrylic tape
lf	arranged to provide a frictional engagement between the garment and a
	chair or other item of furniture used by the wearer.

15. The relevant legal provisions for sufficiency and inventive step are provided below.

Sufficiency of Disclosure – the law

16. Section 14(3) of the Act states:

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.

Inventive step – the law

17. Section 1(1)(b) of 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;

18. 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).

19. The Court of Appeal in *Windsurfing*¹ 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*.² Here, Jacob LJ reformulated the *Windsurfing* approach as follows:

(1)(a) Identify the notional "person skilled in the art"
(1)(b) Identify the relevant common general knowledge of that person;
(2) Identify the inventive concept of the claim in question or if that cannot readily be 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 which would have been obvious to the person skilled in the art or do they require any degree of invention?

¹ Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd, [1985] RPC 59

² Pozzoli SPA v BDMO SA [2007] EWCA Civ 588

Construction of claim 1

- 20. When considering the validity of the claims of the Patent I will need to construe them. This means interpreting the claim in the light of the description and drawings as instructed by Section 125(1). In doing so, I must interpret the claim 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 claim to mean. This approach has been confirmed in the recent decisions of the High Court in *Mylan v Yeda*³ and the Court of Appeal in *Actavis v ICOS*⁴.
- 21. Bibado suggests that the person skilled in the art is 'someone knowledgeable in the manufacture of bibs'. Be-Baby expands this to submit that the skilled person is 'a designer of protective garments, including bibs and aprons, for example for young children or invalids, and would be well versed in the possible configurations of protective garments and the materials out of which such garments can be made'. I consider that the skilled person would have both these characteristics.
- 22. There has been some dispute regarding how claim 1 should be construed. I will make some general comments here; I will make further comments in relation to the cited documents and discussion regarding sufficiency. Due to the nested formation of claim 1, some terms need to be considered in combination.
- 23. I will begin with the term 'gripping region'. From page 2, paragraph 2 of the Patent, 'The gripping region allows the garment to grip an item of furniture about which the garment is placed.' And also, from the same paragraph, 'The gripping region helps to hold the garment in place'. Further, the gripping region 'may be provided with an area that is [sic] sticks to or grips a surface against which it is placed'. In its broadest construction the skilled person would understand a 'gripping region' to be simply a region that allows the garment to grip an item of furniture to help to hold the garment in place. However, claim 1 specifies in more detail where the gripping region is placed, what form it takes, what it's made of, and how it operates to grip the furniture.
- 24. Regarding the first three points, claim 1 specifies: 'the garment having a lower edge, wherein the lower edge is provided with a gripping region, the gripping region comprising a strip of thermoplastic elastomer, silicone, rubber or acrylic tape'.
- 25. Regarding the 'lower edge', on page 2 lines 7-8 of the Patent we are told, 'The gripping region is preferably found at or near a lower edge of the lower region'. On page 2 lines 18-20, 'the gripping region may comprise a strip of thermoplastic elastomer or silicone tape that extends along part or all of the lower edge of the garment'. From page 5, paragraph 1 of the Patent: 'Near to the lower edge, 38, of the lower region, 12, the garment is provided with a gripping region, 40'. There seems to be some confusion from the Patent as to whether the 'lower edge' refers to the ultimate edge of the garment or a region at this extreme edge. I think the skilled person would understand the lower edge in claim 1 to have the latter interpretation. This construction is supported by Fig.1 where there is seen to be a small gap

³ Generics UK Ltd (t/a Mylan) v Yeda Research and Dev. Co. Ltd & Anor [2017] EWHC 2629 (Pat)

⁴ Actavis Group PTC EHF v ICOS Corporation & Ors [2017] EWCA Civ 1671

between the gripping region 40 and the extreme edge of the garment. Be-baby have allowed for this gap by construing the lower edge to be a region 'at or near' the most distal edge. I think this is unnecessary and the lower edge is simply a region of the garment at the distal boundary of the garment. Regarding 'the lower edge is provided with a gripping region', the skilled person would understand this to mean that at least part of the garment that is the lower edge (as defined previously) includes a gripping region. In other words another part of the lower edge (e.g. a small gap at the ultimate boundary) may not be provided with a gripping region.

- 26. In claim 1 the gripping region comprises a 'strip'. On page 2 lines 18-20 of the Patent we are told, 'In a particular embodiment the gripping region may comprise a strip of thermoplastic elastomer or silicone tape that extends along part or all of the lower edge of the garment'. Further on page 5 lines 2-5: 'the gripping region is made up of a strip of sticky or gripping material that helps to prevent the garment slipping and holds it in place'. This arrangement is illustrated in the Figures of the Patent where in the single embodiment the gripping region 40 is seen to extend as an elongate, continuous, piece along the garment. The skilled person would understand a strip to mean a long, narrow piece of material. The skilled person would further understand that the strip comprises a continuous, uninterrupted length of material as no other type of strip is described. The skilled person would also conclude that the 'strip' is a particular feature, distinct from the rest of the garment. It is not clear in claim 1 whether the strip may be of acrylic tape or whether 'acrylic tape' is a separate option. However, I do not think this is important as 'tape' will be construed in a similar way to 'strip'.
- 27. Regarding how the gripping region operates, claim 1 specifies that the gripping region (comprising a strip etc) is 'arranged to provide a frictional engagement between the garment and a chair or other item of furniture used by the wearer'. The term 'friction' or 'frictional engagement' is not mentioned explicitly in the description. However, from the Patent the skilled person would understand that the gripping region relies on frictional forces arising from the contact between the gripping region and the furniture to grip an item of furniture used by the wearer.
- 28. Therefore, the 'gripping region' can be interpreted broadly to be simply a region that allows the garment to grip an item of furniture to help to hold the garment in place. This interpretation will be used later to aid in considering feature 1(c) of claim 1 in isolation. However, when considering the claim as a whole the skilled person will understand that the gripping region has a much narrower interpretation as discussed above (and in keeping with that construed in previous Opinion 34/18).
- 29. Finally, from the Patent, the item of furniture in the last part of claim 1 is typically a chair or highchair (as in Fig. 3) but could be any suitable item of furniture 'on which the wearer is sitting or lying' (page 5, line 7). I think it is reasonable to assume that this would also include a table at which the wearer is sitting.

Sufficiency of Disclosure – arguments

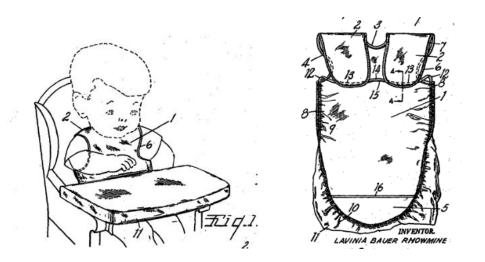
30. Claim 1 specifies that the gripping region comprises 'a strip of thermoplastic elastomer, silicone, rubber or acrylic tape arranged to provide a frictional engagement between the garment and a chair or other item of furniture used by the

wearer'. Be-Baby argue that it is 'unclear as to what the term "frictional engagement" encompasses', in particular that there 'is no indication as to what value of coefficient of friction may constitute a suitable level of friction for a frictional engagement'. They continue that in particular 'the lower bound of the coefficient of friction is not defined in the patent claims or in the patent description as a whole leaving the person skilled in the art unguided as to what constitutes a "gripping region" and unable to carry out the invention without significant trial and error'.

- 31. Be-Baby also argue that 'the claimed invention cannot function as intended when an acrylic tape is used as a gripping region, as the acrylic tape is clearly intended not to be an adhesive acrylic tape as argued by the patent applicant in their prosecution response A1, where it was argued that the adhesive tape arrangement disclosed in D6 did not fall within the scope of the claimed invention. A non-adhesive acrylic tape would have a low coefficient of friction and therefore not function to provide any significant frictional engagement between the garment and an item of furniture'. They assert further that if such an acrylic tape was deemed to fall within the scope of the claims then so would other materials from well known bibs and aprons.
- 32. Regarding the first point, I agree that the only explicit mention of 'frictional engagement' or even 'friction' in the Patent is in claim 1 itself. Claim 1 was amended to include the feature 'arranged to provide a frictional engagement between the garment and a chair or other item of furniture used by the wearer' during prosecution of the Patent. The Patent explains for example in the first paragraph on page 5 that 'the gripping region is made up of a strip of sticky or gripping material that helps to prevent the garment slipping and holds it in place'. The skilled person would understand that the invention has been limited to a mechanism where the gripping region relies on frictional forces arising from the contact between the gripping region and the furniture to grip an item of furniture. They would understand that this is achieved through the selection of suitable materials as specified in the claim. Although a value of coefficient of friction could have been specified, I do not consider this essential. The skilled person would understand that as long as the resulting frictional forces are sufficient so that the gripping region is able to rely on these forces to grip the item of furniture then the invention will work. They would be able to choose materials from those specified in the claim to put the invention into effect without undue burden. Therefore, I consider the specification of the Patent to be sufficient in this regard.
- 33. Regarding the second point, I agree with Bibado that claim 1 specifies: 'the gripping region comprising a strip of ... acrylic tape *arranged to* provide a frictional engagement ...'. Without more evidence regarding the properties of acrylic tape and how they could be adapted it is difficult for me to make an assessment on this point. However, it seems to me that the skilled person would understand that as long as the acrylic tape can be arranged to provide a frictional engagement between the garment and the furniture as discussed above then it will be a suitable material to work the invention. I note also that acrylic tape is just one of several options. I do not consider the specification to be insufficient with regard to this matter.

Whether claim 1 involves an inventive step in light of the disclosures cited by Be-Baby

- 34. Be-Baby identify two patent documents. These are indicated as D11 and D12 in Be-Baby's request and I will keep this notation here. D11 is patent document US 2822548 A and D12 is French-language patent document FR 2722063 A1. D13 is an English translation of D12 provided by Be-Baby which I will use as required. Both documents were published before the filing date of the Patent. Be-Baby submits that claim 1 is obvious in light of either of these documents. I will use the Windsurfing/ Pozzoli approach as detailed above.
- 35. Regarding step 1, I have already identified the person skilled in the art. The skilled person would be equipped with the necessary knowledge to enable them to design and manufacture protective garments using materials and techniques established in the art. They would be aware of common designs of protective garments but would not necessarily be aware of particular patent disclosures.
- 36. Regarding step 2, the inventive concept is as set out in claim 1 and as construed above.
- 37. Moving onto step 3, D11 discloses a combined bib and tray cover consisting of a single sheet of flexible, preferably plastic, material. The plastic sheet has a central body portion 1 with upwardly extending shoulder straps 2, and lower tray cover portion 5. The peripheral edges of the body portion 1 and cover portion 5 are secured by stitching to a single continuous length of elastic banding 8. When the tension on the band is released the edges of the body portion and cover portion are uniformly gathered to form a tray receiving pocket 11 in the lower end of the tray cover portion. (See Figures 1 and 3 reproduced below.)

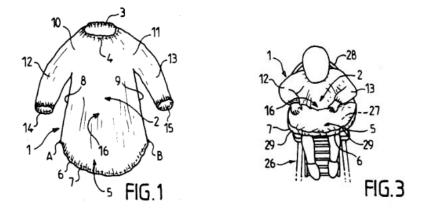


- 38. There is no dispute that D11 discloses a protective garment having a lower edge and therefore meets the terms of features 1(a) and 1(b) of claim 1.
- 39. From D11, column 2 lines 31-32, 'the elastic band properly retains both the bib

portion and tray cover portion in operative position'. In my view the lower edge of the garment has a gripping region in its broadest interpretation in the form of the elastic banding 8 as the banding allows the garment to grip an item of furniture (the high chair) to help to hold the garment in place. Further the elastic band is a long, narrow continuous piece of material and can therefore be considered a 'strip'. Therefore, D11 meets the terms of features 1(c) and 1(d).

- 40. There is no mention in D11 of the materials required in part 1(e) and therefore D11 does not meet this feature.
- 41. Regarding the final feature 1(f), in D11 as described above the elastic band is stretched before being stitched so that when the tension in the band is released the edges of the tray cover portion are gathered. This 'tray receiving pocket' is then placed over the tray and the elastic band holds the bib in its proper position. Be-Baby submits that the tray-receiving portion 'clearly provides a gripping action with a component in the form of a frictional force, between the gripping region and a surface at which the elastic material is engaged with, to provide resistance to movement between the gripping region and the tray'. In response, although some frictional forces may be involved between the garment and the furniture, the skilled person would realise that the key mechanism here is elastic forces as the elastic band tries to return to its unstretched state. In particular, the arrangement does not seem to *rely on* frictional forces to grip the item of furniture. Therefore, in my view D11 does not meet feature 1(f).
- 42. Therefore, the differences between the disclosure in D11 and the inventive concept of claim 1 are features 1(e) & 1(f) i.e. a gripping region comprising a strip of specified material that relies on frictional forces to grip an item of furniture used by the wearer.
- I now move onto step 4, and whether these differences constitute steps which would 43. have been obvious to the skilled person. In D11 the garment relies on a band of elastic employing elastic forces to hold the garment in place whereas in the invention of claim 1 a strip of appropriate material provides a frictional engagement i.e. relies on frictional forces to achieve this goal. These are quite different approaches. Be-Baby asserts that the selection of one of the materials in claim 1 'as the elastic material for the elastic banding 8 of D11, and/or replacement of one elastic material with another elastic material, is considered to be a routine workshop modification requiring no inventive ingenuity to make'. I agree that the skilled person would readily employ suitable elastic materials for the banding, and some may fall within the scope of the materials defined in claim 1. However, these materials would still be operating using primarily elastic forces rather than relying on frictional forces to grip the item of furniture. It would not be obvious to replace the elastic binding with a strip that relies on frictional forces. The key teaching of D11 is to provide an elasticated arrangement to retain both the bib portion and tray cover portion in operative position (see for example column 2 lines 31-32). The skilled person with knowledge of the disclosure in D11 would not consider using the required alternative means. This would require a significant re-design of the bib and its operation. Therefore, I consider claim 1 to include an inventive step in light of D11.
- 44. I will now consider D12. Steps 1 and 2 will be the same as for D11 and so I will move straight onto step 3.

45. D12 discloses an item of protective clothing 1, for example a bib for a child. The protective clothing 1 is formed from a flexible material comprising a front part 2 that is able to at least cover the child's torso in particular their chest and ends at an edging 3 at the child's neck. At the opposite end, the front part 2 is extended by a tail 5, with a shape adapted to that of a standard tray of a child's chair. The tail 5 has an edging 6 of substantially semi-circular shape provided with an elastic gather 7 extending between two points A and B (see Fig.1 reproduced below). When the child is sitting on the chair, the tail 5 covers the tray 27, the edging 6 of the tail 5 covering the edging of the tray and fitting tightly over the latter by virtue of the elastic gather 7 (see Fig. 3 reproduced below).



- 46. D12 discloses a protective garment having a lower edge and therefore discloses features 1(a) and 1(b). The lower edge is provided with a gripping region, according to its broadest interpretation, in the form of elastic gather 7, meeting feature 1(c).
- 47. We are not told in D12 how the elastic gather is formed and so it is not clear that D12 discloses a strip (feature 1(d)). D12 does not disclose any of the materials required in 1(e) and therefore that feature is also not anticipated.
- 48. Regarding feature 1(f), although the mechanism is not described so fully as in D11, the skilled person would realise that the elastic gather is stretched to fit over the tray of the table and is held there by elastic forces. As with D12, although there may be some frictional forces involved, the elastic gather does not *rely on* frictional forces to grip the item of furniture. Therefore, D12 does not meet the terms of 1(f).
- 49. Therefore, the differences between the disclosure in D12 and the inventive concept of claim 1 are features 1(d), 1(e) & 1(f) i.e. a gripping region comprising a strip of specified material that relies on frictional forces to grip an item of furniture used by the wearer.
- 50. Regarding step 4, Be-Baby again argues that the selection of one of the materials in claim 1 as the elastic gather 7 of D12 (and/or replacement of one elastic material with another) is considered to be a routine workshop modification requiring no inventive ingenuity to make. However, as stated above in relation to D11, while this may be the case these materials would still be operating using primarily elastic forces rather than relying on frictional forces to grip the item of furniture. It would not

be obvious to replace the elastic gather with a strip that relies on frictional forces. As with D11, the whole teaching of D12 is to provide an elasticated arrangement to retain the bib in position on the tray. The skilled person with knowledge of the disclosure in D12 would not consider using the required alternative means. Therefore, I consider claim 1 to include an inventive step in light of D12.

- 51. Be-Baby has also asked me to consider whether claim 1 of the Patent involves an inventive step in light of either D11 or D12 in combination with either D14/D15 or D16. D14 is patent document WO 2013/004230 A1 with English translation D15. D16 is patent document GB 533656 A. Both were published before the filing date of the Patent. D14 and D16 were discussed in previous validity Opinion 10/21 (as documents D1 and D2 respectively). Therefore, I will consider here the question of inventive step from the viewpoint of starting with either D11 or D12.
- 52. In brief D14 discloses a child's bib with friction-increasing means on the underside limited to an edge strip along an end border with which the bib rests on a table of a highchair. The friction increasing means ensures the lower protective section of the bib remains on the table surface or tray surface and does not slip away. D16 discloses a child's feeding apron which is permanently or detachably connected to a tray. Both the apron and tray may be made of rubber. The tray may be provided with tapes or other fastening devices for temporarily securing it to the table on which it is placed and preventing it from being displaced or pulled off by the child.
- 53. D14 and D16 operate in very different ways to the arrangements in D11 and D12. Although they are all in a related field, due to these differences, I am not convinced that the skilled person would look to combine the disclosures together. D14 discloses the required friction-increasing means. However, even if the skilled person did consider either D11 or D12 with D14 it is not clear how easily they would arrive at the invention of claim 1 as the disclosed features seem to have an inherent incompatibility. Specifically, the skilled person would have to replace the elastic banding or elastic gather of D11 and D12 respectively and include the friction-increasing means instead. This would involve a significant re-design which teaches away from what is described in both D11 and D12. Therefore, I consider claim 1 to include an inventive step in view of D11 or D12 when combined with either D14 or D16.

Opinion

- 54. It is my opinion that the Patent discloses 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.
- 55. It is my opinion that the claims of the Patent involve an inventive step in light of documents D11 (US 2822548 A) or D12 (FR 2722063 A1) when considered alone (with common general knowledge) or when considered in combination with either D14 (WO 2013/004230 A1) or D16 (GB 533656 A).

Susan Dewar 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.