

**OPINION UNDER SECTION 74A**

Patent	GB 2585096 B
Proprietor(s)	Homex Soft Furnishings Hangzhou Limited
Exclusive Licensee	
Requester	Craske and co
Observer(s)	
Date Opinion issued	17 July 2025

**The request**

1. The Comptroller has received a request from Craske and Co (the requester) to issue an opinion covering whether the claims of GB 2585096 B (the patent) are novel and/or comprise an inventive step over two pieces of prior art; CN 109397806 A (D1) and CN 104742480 A (D2). As well as providing copies of D1 and D2 the requestor provided English-language translations of both documents. While I thank the requestor for providing translation of D1 and D2, and I do not doubt the substance of the machine translated documents, I do note that the paragraph numbering in the machine translated documents may differ from the numbering in D1 itself.
2. The patent has a filing date of 25 July 2019 and claims an earlier priority date of 28 June 2019. The patent was granted on 21 July 2021 and it remains in force. The proprietors are Homex Soft Furnishings Hangzhou Limited (the proprietor).

**Observations**

3. Observations on behalf of the proprietor, were received by the office on 21 May 2025. Observations in reply were then received by the IPO on 3 June 2025.

**The patent**

4. The patent describes a blackout fabric. The patent as granted comprises 8 claims, and only one independent claim.
5. Claim 1, the only independent claim present in the patent, reads:

1. *A blackout fabric, comprising:*

*A fabric body, wherein the fabric body comprises a first base cloth, a black thermoplastic polyurethane (TPU) film and a second base cloth, wherein the first base cloth, the black TPU film and the second base cloth are bonded together from bottom to top.*

6. Claims 2-8, which all append to at least claim 1 of the patent, are as follows:

2. *The blackout fabric of claim 1, wherein the thickness of the black TPU film is not greater than 0.02mm.*
3. *The blackout fabric of claim 1 or 2, wherein the first base cloth is any one of cotton, polyester fabric or blended fabric of cotton and polyester, wherein the second base cloth is any one of cotton, polyester fabric, blended fabric of cotton and polyester or non-woven fabric.*
4. *The blackout fabric of claim 1, 2 or 3, wherein the first base cloth, the TPU film and the second base cloth are bonded together from bottom to top by using polyurethane (PU) adhesive.*
5. *The blackout fabric of any preceding claim, wherein the surfaces where the first base cloth and the second base cloth are laminated with the TPU film are respectively punched with a polypropylene cloth, wherein the first base cloth and the second base cloth are bonded with the TPU film through heating the polypropylene cloth.*
6. *The blackout fabric of any preceding claim, wherein the first base cloth is cotton cloth, and the second base cloth is polyester fabric.*
7. *The blackout fabric of any of claims 1 to 5, wherein the first base cloth is cotton cloth, and the second base cloth is non-woven cloth, wherein the non-woven cloth is made of recycled polyethylene terephthalate (PET).*
8. *The blackout fabric of any of claims 1-7, wherein the full-blackout fabric is applied as curtain cloth or curtain lining.*

## **Claim construction**

7. Before I can determine an opinion as to the validity of the patent, I must construe the claims. This means interpreting them in light of the description and drawings as instructed by Section 125(1) of the Patents Act 1977 (the Act):

*(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.*

8. 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 decisions of the High Court in *Mylan v Yeda*<sup>1</sup> and the Court of Appeal in *Actavis v ICOS*<sup>2</sup>.

9. The requester has submitted, see paragraph 4 of the request, that the notional person skilled in the art would be a person engaged in the design or manufacture of composite fabrics for use as curtain materials. I accept this is a reasonable definition of the skilled person and, additionally, I note that the observations made on behalf of the proprietor did not dispute this formulation of the skilled person. The requestor also suggested that the common general knowledge of the skilled person would include a general knowledge of materials and processes used in the manufacture of composite fabrics. While I do not disagree with this, the statement is broad and non-specific, defining, as it does, the common general knowledge with reference to 'general knowledge'. Nonetheless, I accept that the skilled person would be aware of materials that are commonly used in the manufacture of composite fabrics as well as having a knowledge of common methods by which composite fabrics are produced.
10. In the observations and observations in reply, there is disagreement between the requestor and the proprietor as to how the phrase 'blackout fabric' (as used in claim 1 of the patent) should be construed. This question brings to mind a passage from *Palmaz's European Patents (U.K.)* [1999] RPC 47 (*Palmaz*):

*This is a word of degree, familiar to patent lawyers (see Cleveland Graphite v. Glacier Metal (1950) 67 R.P.C. 149), which takes its meaning from its context*<sup>3</sup>

11. Here, 'blackout' is the word of degree and, as per the words of Pumfrey J from *Palmaz*, the phrase is given meaning from the context in which it is used. In *Palmaz*<sup>4</sup>, Pumfrey J went on to caution against over-elaborate construction of claims while also saying that interpreting terms purely to make them consistent with representation from patent attorneys is also not a legitimate approach. The proprietor, in their observations, suggests that 'blackout' should be construed as 'full-blackout', by which they mean a fabric with 100 % light-shielding effect. While the two embodiments in the patent are both full-blackout fabrics, it is not at all uncommon for the claims of a patent to be generalisations departing from what was literally done in the examples. Therefore, while the patent is concerned with providing full-blackout fabrics, as evidenced by what was disclosed in examples 1 and 2, it is not inherent that the claims should be construed to cover these embodiments but nothing broader. In their response to such observations, the requestor suggests that the product disclosed within D1 is, inherently, a blackout fabric. As the requestor does not state how they are viewing the term 'blackout fabric' it would appear they are using it, and thus suggesting the word as present in the patent should be construed, in the way the term is standardly used in the art. Noting that the description of the patent does not suggest that the phrase 'blackout' should be construed in any way other than it's normal meaning as viewed by the person skilled in the art, I therefore believe the correct way to construe the phrase 'blackout fabric' as used in the patent, especially within the claims, is as per the

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

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

<sup>3</sup> *Palmaz's European Patents (U.K.)* [1999] RPC 47 at 72 lines 24-26

<sup>4</sup> See especially page 73

standard definition in the art. Within the art, it seems the term 'blackout fabric' is most commonly, although I accept not exclusively, used to denote fabrics that block in excess of either 90 % or 95 % of light. The skilled person, a person engaged in the design or manufacture of composite fabrics for use as curtain materials, would be aware of this and interpret a blackout fabric as being a fabric that blocks at least 90 % of light. The claims have been construed using this definition.

## **Validity – novelty and inventive step**

12. As stated in paragraph 1, this opinion is concerned with the novelty and inventiveness of the patent. Section 1(1)(a) and 1(1)(b) of the Act defines that:

*(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;*

*(c)...*

*(d)...*

13. What is meant by new is itself defined in section 2 of the Act, titled novelty. The parts of s.2 of the Act that are most pertinent to the current opinion request are s.2(1) and s.2(2);

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

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

14. S.1(1)(b) of the Act should be viewed in tandem with s.3 of the Act, s.3 reading as follows;

*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 of section 2(2) above (and disregarding section 2(3) above).*

15. At this point, I note that the requestor is prepared to assume that the patent is entitled to its claimed priority date. In any event, D1 and D2 were both published prior to the claimed priority date and form part of the state of the art (as defined by s.2(2) of the Act) irrespective of if the priority date is valid or not. Before discussing the novelty and/or inventiveness, or otherwise, of the claims in the patent, I will first summarise the relevant disclosure of D1 and D2.

16. In the request, the requestor argues that claim 1 of the patent lacks novelty over embodiment 6 of D1. Observations submitted by the proprietor make clear that they do not agree with this position. Embodiment 6 of D1 discloses a composite fabric, suitable for use as part of a curtain roller blind comprising two fabric baselayers and, laminated between these base layers, a thermoplastic polyurethane (TPU). The TPU film in embodiment 6 of D1 comprises 5 % carbon black, while [0005] of D1 discloses that TPU films may comprise between 3.7 % and 6.5 % of carbon black. Table 1 of D1 discloses that the material of embodiment 6 passes only 3 % of UV-B light. D1 does not disclose how much visible light is passed through the composite fabric of example 6. [0026] of D1 discloses that the baselayers are preferably a polyester woven textile.
17. D2 is concerned with the moisture-permeability of TPU fabric, with examples 1-3 disclosing methods for preparing fabrics in which TPU, modified nano calcium carbonate and ethylene vinyl acetate are mixed and melt extruded. The extrudate is subjected to granulation and the resulting granulated product dried. Separately, a base fabric is glued (using PU glue) and a film formed. The requestor has not suggested that D2 anticipates any of the claims in suit or that D2, taken in isolation, shows that any of the claims in suit are lacking an inventive step. Instead, D2 is presented in the request as evidence that certain base materials are known in the art.
18. Therefore, neither D1 nor D2 explicitly disclose a 'blackout fabric' in the sense that I have construed the term. Regarding D1, this is because it is silent as to how much visible light is passed through the composite fabric of example 6. Nevertheless, D1 states that the carbon black present "has a high absorption efficiency for visible light and ultraviolet light". The skilled person would have understood that the composite fabrics of D1 were concerned with absorbing visible light and that they do so with high efficiency. Applying their common general knowledge, the skilled reader of D1 would be aware that carbon black is a good absorber of light across the visible spectrum and often displays better absorbance across the visible spectrum than the UV spectrum. As such, the skilled person would understand that the composite fabric of example 6 of D1 is thus a 'blackout fabric' within the meaning of the term as construed within this report (see especially paragraph 11) even if the term 'blackout' is never used within D1. As such, claim 1 of the patent lacks novelty over what is disclosed within D1.
19. Having found that claim 1 likely lacks novelty, I shall commence an assessment of the dependent claims. Claim 2 of the patent defines that the thickness of the black TPU film is not greater than 20 microns, with lines 12-16 of page 2 of the patent disclosing that the range  $0\text{ mm} < \text{TPU film thickness} \leq 0.02\text{ mm}$  is beneficial only due to market competitiveness which seemingly arises from a lower material cost relative to thicker TPU films. Such a feature is therefore selected on economic rather than technical grounds. Quoting from [49] of *Generics v Yeda*<sup>5</sup>, 'iv) A selection from the prior art which is purely arbitrary and cannot be justified by some useful technical property is likely to be held to be obvious because it does not make a real technical advance'. A TPU film thickness of  $\leq 0.02\text{ mm}$  does not make a real technical advance and, as such, is seemingly purely arbitrary and, consequently, is held to be obvious.

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<sup>5</sup> *Generics [UK] LTD (t/a Mylan) v Yeda Research and Development co. LTD & Anor* [2013] EWCA Civ 925

Separately, it also seems obvious to try a TPU film of thickness  $\leq 0.02$  mm; the skilled person is aware that a reduced material cost is beneficial and there would be a fair expectation of success that the TPU film defined by embodiment 6 of D1 could be used as blackout material at a thickness of  $\leq 0.02$  mm.

20. Despite the argument put forward by the requestor, I do not believe that claim 3 of the patent is anticipated by embodiment 6 of D1 and I see no real reason why a skilled person would combine the teaching of D1 and D2. However, claim 3 still appears to lack an inventive step over D1 in isolation. As noted above, embodiment 6 of D1 discloses that the black TPU film is stacked between two unspecified base fabrics while, at [0025] of the translation provided by the requestor, which seemingly corresponds to [0022] of the original Chinese document, D1 further discloses that the base fabric is, preferably, a polyester woven textile. It is, in my opinion, obvious to a skilled person that embodiment 6 of D1 could be performed using a polyester woven fabric material for both baselayers, as this is explicitly stated in the teaching of the document, e.g. at [0022]. As such, claim 3 lacks an inventive step over what is disclosed within D1.
21. As I have found that claim 1 lacks novelty over embodiment 6 of D1, it is my opinion that claim 4 lacks an inventive step over what is disclosed in D1. A person skilled in the art is aware of different methods by which fabrics can be joined to form a composite or laminate with methods such as stitching and glueing being common in the art. Notwithstanding the final sentence of [0023] of D1, the use of glue, including known PU glue, to fix together the distinct layers in the product of embodiment 6 of D1 is a routine workshop modification. While it may be the case, as set out in the observations by the patentee, that PU glues are particularly beneficial over other types of glue, I must consider what is disclosed within the patent itself. Given that the specification does not specify any such benefits (and in fact teaches away from the use of PU glue at page 5 line 18 to page 6 line 2) and that PU glues are well known, it seems to me that the skilled person would consider the use of PU glue as a routine workshop modification.
22. Embodiment 6 of D1 differs from what is defined in claim 5 of the patent in that embodiment 6 of D1 discloses hot pressing of a TPU film between two base layers, with the two base layers having been previously activated by plasma discharge. Claim 5 of the patent defines that the 'inner' surfaces of the cloths are punched with polypropylene (PP) and the layers then thermally bonded. The patent describes no benefit to the inclusion of PP other than creating a more environmentally friendly product, relative to the use of glue. Given that thermal bonding forms part of the common general knowledge,<sup>6</sup> that PP is commonly used in such processes, and that the patent doesn't show any advantage to the use of PP-thermal bonding beside allowing for a glue-free product, the difference between what is disclosed in embodiment 6 of D1 and defined in claim 5 of the patent is obvious, being an arbitrary adjustment not making a real technical advance and, consequently, amounting to a routine workshop modification amounting to an alternative way of forming laminates, said way already widely known in the art.

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<sup>6</sup> See, e.g., the opening paragraph *Thermochimica Acta*, Vol. 367-368, 08 March 2001, S Chand, "Structure and properties of polypropylene fibres during thermal bonding", pages 155-160, which supports this idea.

23. Given the similarity in claims 6 and 7 of the patent, I will discuss these together. The selections of base cloths defined in claims 6 and 7 are entirely arbitrary, in the sense that word was used by Floyd LJ at [49] of *Generics v Yeda*. Accordingly, there is no inventive step to be found in what is defined by claims 6 and 7.
24. There seems to be agreement between the requestor and patentee that claim 8 lacks novelty and/or an inventive step if the claims to which it appends lack novelty and/or inventiveness. Having set out above, see paragraph 18 of this report, that claim 1 of the patent lacks novelty, it follows that claim 8 also lacks novelty.

## Opinion

25. In my opinion, claim 1 of the patent lacks novelty over D1, while claims 2-7 lack an inventive step. Claim 8 also appears to not meet the requirements of s.1(1)(a) and/or s.1(1)(b) of the Act. I consider the patent to be invalid.
26. In their observations in response, the proprietor invited the UK IPO to comment upon the prospect of success in any revocation proceedings if the requester were to provide evidence to show that black TPU films of less than 0.02 mm thickness were readily available at the priority date, with this invitation relating to claim 2 of the patent. Having found, without having been presented evidence that black TPU films of less than 0.02 mm thickness were readily available at the priority date, that claim 2 lacks validity on the grounds of lacking an inventive step there seems no benefit in exploring this invitation further.

## Application for Review

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

Robert Goodwill  
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.*