

PATENTS ACT 1977

IN THE MATTER OF

an application by Contra Vision Limited
to amend Patent Number GB 2165292 C
and an opposition thereto by Clear Focus Imaging Inc

DECISION

Introduction

1. This decision concerns an application by Contra Vision Limited (“Contra Vision”) to amend the specification of Patent Number GB 2165292 C (“the patent”) and an opposition thereto by Clear Focus Imaging Inc (“Clear Focus”). The matter came before me at a hearing and was the subject of my decision of 3 March 2000. In that decision I refused the request to amend on the grounds that some of the proposed amendments were not acceptable, and set out a draft order which would allow Contra Vision to submit a revised proposal. Clear Focus opposed the draft order, arguing that I should refuse the application outright. The issue was settled in my decision of 7 November 2000 in which I allowed Contra Vision to submit a revised proposal to overcome the deficiencies I had found in the original one.
2. A revised proposal for amendment was duly submitted, but again opposed by Clear Focus. Moreover, both parties wished to file further evidence, and Clear Focus argued that the new proposal should be advertised. A dispute between the parties was dealt with on the papers, whereby in a decision of 6 September 2001, I refused to admit the further evidence and held that the revised proposal should not be advertised. An appeal by Clear Focus against this decision was dismissed by the Patents Court.
3. The parties having requested a hearing on the acceptability of the revised proposal, the matter duly came before me. Mr Colin Birss, instructed by patent agents Wilson Gunn M’Caw, appeared as Counsel for Contra Vision and Mr Richard Davis, instructed by patent agents Atkinson Burrington, appeared as Counsel for Clear Focus.

The original request to amend

4. It is convenient to begin by summarising the findings in my decision of 3 March 2000 on the original request to amend. After Contra Vision had applied to amend the patent, Clear Focus applied to the comptroller under section 71(1) of the Patents Act 1977 (“the Act”) for a declaration of non-infringement, and so concurrent with these amendment proceedings are proceedings under section 71 in which the validity of the patent may be put in issue. The parties agreed in consequence that these amendment proceedings which were made originally under section 27 should be converted to proceedings under section 75.
5. I decided that there was no reason on the facts of the present case for withholding the exercise of the comptroller’s discretion to amend. However, I did refuse the request to amend on the grounds that:

- the proposed amendment to claim 1 at least did not cure the stated defect, in that it did not serve to distinguish the claim over the prior art
 - the request, at least insofar as it related to claims 95, 126 and 134, added new matter in contravention of section 76
 - the request as a whole introduced unacceptable prolixity of claims.
6. Regarding the first of the above grounds for refusal, the prior art in question comprises US Patent Numbers 4358488 (“Dunklin”) and 3451877 (Herschman”), and Japanese Utility Model Numbers 51-86049 (“Giken”) and 1982-14101 (“Morimoto”). Dunklin and Giken were referred to by Contra Vision in its original application to amend; Herschman and Morimoto were initially referred to in another, withdrawn opposition to the original amendment application, but were put in evidence in these proceedings by Contra Vision itself.

The revised proposal

7. The revised proposal to amend is complex and extensive. It involves amendments to claim 1 of the patent, the deletion of claims 14 to 16, 20 to 22, 24, 26, 31, 40 to 53, 59 and 62, consequential renumbering of the remaining claims and their appendancies, the addition of new claims 41 to 63 which correspond largely but not wholly to certain claims (differently numbered) proposed in the original request to amend, and consequential amendments to corresponding passages in the description. The basis of the amendments in Contra Vision’s view was set out in a document (“the basis document”) which was filed with the revised proposal on 5 January 2001.

General issues

8. Both parties provided skeleton arguments prior to the hearing, the skeleton provided by Mr Davis including a schedule dealing in detail with each of the proposed amendments to the claims. Mr Birss described this schedule as an extensive attack on each amendment and drew a comparison with the objections to the original request made in the initial statement of opposition from Clear Focus. He argued that, with limited exceptions, the claims now proposed were originally objected to by Clear Focus only on the grounds that the reasons given for the amendment were unclear or that the comptroller’s discretion should be denied, grounds that were considered and rejected in my decision of 3 March 2000. He noted that the grounds for refusal given in that decision were that the amendments did not cure the stated defect, added new matter and introduced unacceptable prolixity, and contrasted this with the attack in Mr Davis’ schedule which, Mr Birss said, is directed principally to lack of support and clarity, constituting new grounds which should not have been run without an application to amend the statement of case. Mr Birss went on to argue that, setting aside amendments to independent claims to make them dependant and amendments which compound existing claims, the only amendments which are new are those to claims 1, 45 and 47.
9. Mr Davis raised a number of counterarguments. He argued that whether or not the amendments should be allowed is a matter of public interest, that the general grounds of

opposition were set out in the original statement and that it should be remembered that under the Patents Rules, Contra Vision had only two months to put together their statement which had to deal, in the original application to amend, with 239 claims of which 64 were independent. He pointed out that the reason Clear Focus did not originally attack on the basis of Morimoto and Herschman was that it was not responsible for bringing in these documents, and that the detailed attack on lack of support followed the filing by Contra Vision, with its revised proposal, of the basis document setting out in detail where the support for the revised amendments is to be found.

10. Before going further I shall repeat two general observations that I made at start of the hearing: first, that I did not (and do not) intend to reopen matters which have already been decided, and secondly that I would be expecting both counsel to deal carefully with all of the amendments, since I need to determine whether or not each of the amendments is allowable, in particular whether or not each adds matter and whether or not each cures the stated defect. In that sense I am grateful to both counsel for the thoroughness of their approach, in particular to Mr Birss for the basis document and to Mr Davis for his schedule. I have sympathy with Mr Birss regarding the level of detail in Mr Davis's schedule and as I said at the hearing Mr Davis has to justify any opposition which comes from a new direction. However, I also take Mr Davis's point that at least some of the issues he has raised on support are responses to Contra Vision's own basis document, and moreover that Morimoto and Herschman were not introduced by Clear Focus. I am also well aware of the need to bear in mind the question of public interest in this matter.
11. With all of the above in mind, I conclude I should proceed as follows. First, I do not intend to reopen matters that were considered and rejected in my decision of 3 March 2000, in particular improper motive. Secondly, any newly raised issues I intend in general to approach by considering their detail first. If I find no weight in the detail I need not consider them further. If I feel that they do have weight then I shall move on to the wider grounds of admissibility and public interest.

Discretion

12. Mr Davis argued that discretion to amend by way of the revised proposal should be refused on three grounds. First, he objected that making "amendments to read more closely onto products of competitors" is not permissible; it is an improper motive. Secondly he argued that Contra Vision should not be permitted to file new dependant claims in order to provide a fallback position. Thirdly he pointed out that although section 26 mandates that a patent cannot be impugned for lack of unity, the comptroller's discretion to withhold consent is not fettered by this.
13. On the first point Mr Birss argued that the primary motive for amending is to address validity and that in any case there is nothing wrong in amending to read more closely onto competitors' products. I note that this particular reason or motive was clearly spelled out in the original request to amend, but that it was not opposed on the grounds of being improper (although Clear Focus did argue at the first hearing that Contra Vision's warning to customers of potential infringement was inconsistent with the request to amend "to read more closely onto products of competitors"; an argument which I did not accept). The argument that this reason is improper is therefore a new attack. In addition no authority has been cited in support of it. In my decision of 3 March 2000 I saw no reason

for withholding the exercise of the comptroller's discretion and I can see no justification for reopening that issue under this head. A number of the claims in the revised proposal are specifically opposed by Clear Focus on this basis. For the reasons given above I dismiss the opposition to all of these claims when made on this basis.

14. On the second point on discretion, concerning the provision of new dependant claims, Mr Davies referred to two authorities, *Sara Lee Household & Body Care UK Ltd v Johnson Wax Ltd* [2001] FSR 17 and a decision of the Technical Board of Appeal of the European Patent Office T 829/93 (*British Telecommunications*) in which it was held that adding new dependant claims in order to provide a fallback position was not appropriate in amendment proceedings. Mr Birss argued that since they both relate to revocation proceedings, neither of these decisions is relevant. More particularly, he submitted that in the present case Contra Vision were threatened with undisclosed prior art, and an argument against new claims based on that premise would not run in revocation proceedings. He pointed out that there is no statutory bar to introducing new appendant claims, it is simply a matter of discretion. He noted that the European Patent Office is heavily circumscribed in what it can allow by way of amendment since amendments are only permitted in opposition proceedings and only then when the amendments relate to a ground of opposition in issue; there is no provision for amendment as in the circumstances of the present case. He also noted that in the *Sara Lee* decision where the claimant sought to add two new claims as an unconditional fallback position, it was held that should the existing claims be held to be valid, consideration of the proposed claims would be an academic exercise and a waste of the court's time, factors which, he argued, did not apply in these proceedings.
15. Mr Davis responded that the *British Telecommunications* decision relates to opposition proceedings in which the patentee may put in amendments with a view to getting around an objection that his patent is invalid, whereas in the present case the situation is the other way round, that is to say Contra Vision has found some prior art and wishes to get around it, but he felt that that makes no difference. He argued that if the independent claims are indeed sound, then new dependant claims are unnecessary and irrelevant, and he felt that the new dependant claims were there to read onto competitors' products. On this basis he submitted that claims 44, 46 to 49, 53 to 55, 58, 59, 62 and 63 should be rejected.
16. I find myself in agreement with Mr Birss that the circumstances of the present case can be distinguished from those in the two precedent cases cited. As already noted, these amendments started life under section 27, but are now proceeding under section 75. They have been proposed for the reasons set out in the original request, reasons that are much wider in ambit than the limited objective obtaining in the *Sara Lee* and *British Telecommunications* cases. The consequence it seems to me is that the limitations imposed by the decisions in those two cases, which derive from the particular nature of opposition and revocation proceedings, are not applicable to the different circumstances of this case. I note in addition that the subject matter of all of the claims Mr Davis listed was present in claims (albeit differently numbered) in the original request to amend, but that request was not opposed on the grounds currently being argued. I find therefore that this too is a new attack, which to my mind has not been adequately justified by Mr Davis. Taking all of this into account, I again find no justification for reopening the issue of the comptroller's discretion.

17. On the third of Mr Davis's points on discretion, concerning lack of unity of invention, Mr Birss argued that the reason that unity is not objectionable post-grant is that divisional applications cannot be filed after grant, and that it would be wrong therefore to take it into account under discretion. I agree, and I note also that this again is a new and not adequately justified argument. In consequence I again find no justification for reopening the issue of the comptroller's discretion.
18. Finally on the question of discretion, Mr Birss touched on the issue of prolixity, noting that Clear Focus did not appear to be pursuing the point and arguing that under the revised proposal the patent would have a mere sixty-three claims, fewer than the sixty-five at grant, and that on that basis it would be absurd to pursue prolixity. Mr Davis did indeed not pursue the point at the hearing, but I have to say that I find Mr Birss's comments a little disingenuous. The patent at grant did indeed have sixty-five claims, but only two of them, omnibus claims aside, are effectively independent claims. By contrast, of the sixty-three claims currently proposed, thirteen are independent claims, that is to say that the burden on the reader is still significantly higher than in the patent at grant. That said, the revised proposal does without doubt provide a significant reduction over the 239 claims of the original request, more than sixty of which were independent, and I am satisfied that the public interest is no longer prejudiced in this respect. I find therefore that the revised proposal has rectified this particular deficiency to an extent which is defensible.
19. To summarise, I am not persuaded that there is any reason for withholding the exercise of the comptroller's discretion in respect of the revised proposal to amend.

General approach to substantive issues

20. Clear Focus has raised objection to a number of claims on the same basis and both parties have made submissions on the approach I should take when considering the revised proposal against those objections. They include onus (on questions of validity), added matter and intermediate generalisation, and apparatus claims with method features.

Onus

21. Regarding onus on questions of validity, Mr Birss argued that in respect of inventive step, Clear Focus had provided no supporting evidence and to run that argument should have applied for revocation. He contrasted this with determining novelty where he accepted that it was generally possible to construe documents and reach a decision without requiring evidence. Mr Davis argued that the burden of proof lies on Contra Vision to show that its claims are novel and inventive and to file evidence in support if necessary. I observe that the initial burden clearly lay with Contra Vision to establish that the proposed amendments cure the stated defect. What it must do to discharge that burden has narrowed now to establishing that the claims in the revised proposal are distinguished specifically from Dunklin, Giken, Herschman and Morimoto. It seems to me that Contra Vision can in principle achieve this on the face of the documents without evidence. Once it has done this, it seems to me that the burden shifts to Clear Focus which is opposing the amendment to show that the proposed claims are not inventively distinguished, for which task it may require evidence.

Added matter and intermediate generalisation

22. It follows from section 76 of the Act that to be allowable, an amendment made to a patent after grant must neither add matter or extend the scope of protection conferred. Mr Davis argued that claiming a new invention constitutes addition of matter, and in support cited *Southco Inc and Anr v Dzus Fastener Europe Ltd* [1990] RPC 587, where at page 616 Aldous J, as he then was, said:

“There is no definition in the Act of what is meant by the word ‘matter’ and I believe that this word is wide enough to cover both structural features of the mechanism and inventive concepts.”

23. He argued that Contra Vision was taking features out of the specification and newly presenting them as inventive. On the same line he objected to what he called “potpourri” claims, that is to say claims to a random assortment of features taken from various parts of the specification, and which introduce added matter insofar as they constitute impermissible intermediate generalisations. To illustrate the point he quoted Pumfrey J in *Palmaz’s European Patents (UK)* [1999] RPC 47 at page 71 as follows:

“If the specification discloses distinct sub-classes of the overall inventive concept, then it should be possible to amend down to one or other of those sub-classes, whether or not they are presented as inventively distinct in the specification before amendment. The difficulty comes when it is sought to take features which are only disclosed in a particular context and which are not disclosed as having any inventive significance and introduce them into the claim deprived of that context. This is a process sometimes called ‘intermediate generalisation’ ”

24. Counsel helpfully illustrated their respective approaches to this issue using fruit as an example. Mr Birss held that if he discloses apples, oranges and bananas and claims fruit, but discovers post-grant that apples are old, the only thing he can do is to have two claims, one to oranges and one to bananas. Mr Davis however saw an alternative, namely a claim to fruit having an inedible rind, and felt this was the sort of impermissible intermediate generalisation that Contra Vision were seeking in a number of their claims.
25. Mr Birss accepted that not all intermediate generalisations were allowable, but held that the key question is whether or not an amendment teaches something which was not taught before. In support he cited *AC Edwards Ltd v Acme Signs & Displays Ltd* [1990] RPC 621 and [1992] RPC 131, noting that the Court of Appeal had concluded that although a claim *covered* alleged new subject matter, if it contained no disclosure thereof, then there was no added information.
26. Having regard to the above, I intend to approach the issue of intermediate generalisation so far as it arises in the present case as follows. First, if there is support in the original specification at the level of generality required by an amended claim, then the amendment is clearly allowable from the point of view of section 76. Otherwise the key question I must address is whether or not the amendment teaches something new. Many of the claims I need to consider are directed to details shown in particular embodiments. If Contra Vision choose to base a claim on a particular embodiment, are they constrained to include *all* the features of that embodiment? It seems to me that the answer to that has to be no, otherwise it would follow that no other intermediate generalisation would be allowable. What is allowable then? I think in this context Counsel’s fruit analogy is indeed

helpful. If Mr Birss goes down from fruit to oranges and bananas, provided he has described oranges and bananas he can have it, but if he goes down to fruit with an inedible rind, if he has not described that concept, then he cannot have it. Applied to the circumstances of this case, if Contra Vision chooses to limit a broad claim by selecting a feature from a related particular embodiment, then this seems to me to be no more than conventional practice in narrowing a claim to overcome a prior disclosure, and as such is allowable. If however Contra Vision chooses to limit a broad claim by creating a new generalised concept from one or more particular embodiments, then there it seems to me lies the forbidden fruit.

Product-by-process claims

27. On the question of apparatus claims having method features, Mr Davis argued that it was unclear what limitation method features imply in such a claim, that it should not be necessary to check for such implied features, and that if no apparatus features are implied there is no distinction over the prior art. Moreover he gave an example (claim 43) where he felt that the method of manufacture made no difference to and cannot be ascertained from the apparatus (or product) *per se*.
28. Mr Birss referred to *Kirin-Amgen Inc v Roche Diagnostics GmbH* [2002] RPC 1, in which Neuberger J discusses “product-by-process claims”. At paragraph 286 of the judgment, Neuberger J says:

“As a matter of ordinary language, a claim to a product obtained or produced by a specific process cannot fairly be said to extend to any product other than one produced or obtained by the particular process.”
29. Mr Davis rightly pointed out that there is a good deal of European Patent Office case law that goes the opposite way and which Neuberger J referred to but was not swayed by. He also noted that the *Kirin-Amgen* case relates to the field of biochemistry, and does not necessarily have direct applicability to mechanical cases, arguing that in simple mechanical cases where the method steps make no difference to the final product, it will not be possible to tell by looking at the product whether or not it infringes.
30. This judgment it seems to me makes a clear and unambiguous statement of the line which I should follow, namely that method features in a product claim are to be taken to restrict the claim to such a product *when made* by that particular method. I see no difficulty in applying this approach to claims to mechanical product, nor any reason why it should apply narrowly to the field of biochemistry. A number of the claims in the revised proposal are specifically opposed by Clear Focus on this basis; I dismiss the opposition to all of these claims to the extent that it is made on that basis.
31. I now turn to the now proposed amendments in detail.

Claim 1: novelty and inventive step

32. In the revised proposal, claim 1 reads as set out below; the division of the claim into passages numbered (i) to (vi) was introduced by Clear Focus to aid discussion at the hearing and I have retained this form of the claim to the same end:

1. A panel comprising a colourless or light coloured transparent material and a design visible from one side of the panel and not visible from the other side of the panel, said design being superimposed on or forming part of a silhouette pattern (as herein defined),
(i) said transparent material being substantially imperforate,
(ii) said design and said silhouette pattern being adhered to one another throughout an area of said design
(iii) and at least one of said design and said silhouette pattern being adhered to said transparent material throughout said silhouette pattern,
(iv) wherein the silhouette pattern comprises a plurality of discrete opaque areas,
(v) at least one of said discrete opaque areas having more than one colour on one side thereof
(vi) and wherein a principal perceived image when viewing said panel changes from said design to an object occupying a space on said other side when the illumination is altered from relative light on the one side and relative dark on the other side to relative light on the other side and relative dark on the one side.

33. The term “silhouette pattern” is defined on page 6 of the granted patent as “intended to mean any arrangement of opaque material which subdivides the panel into a plurality of opaque areas and a plurality of transparent or translucent areas”.
34. In my decision of 3 March 2000 I found that the then proposed amendment to claim 1 did not cure the stated defect, in that it did not serve to distinguish the claim over the prior art, specifically Dunklin, Giken, Herschman and Morimoto. Mr Birss argued that claim 1 under the revised proposal, worded as above, is distinguished from the first three of these documents by virtue of feature (iv), and pointed in particular to Figure 3 in Dunklin, to the top of page 4 of the translation of Giken and to column 3 lines 17 to 21 in Herschman in support of this. I agree with him that for the purposes of novelty that is the case. In Mr Davis’s skeleton argument there is an argument that feature (iv) is not inventive over Dunklin and Giken on the grounds that each of these documents has a plurality of discrete transparent areas, which falls within the scope of the term “silhouette pattern” as defined in the patent. This point was not developed by Mr Davis at the hearing and there is neither argument or evidence before me to suggest why the skilled reader of either of these documents would find it obvious to move in the direction now claimed. I have no reason therefore to find that the amended claim 1 is not inventive over Dunklin and Giken.
35. Mr Birss argued that claim 1 worded as above is distinguished from Morimoto by virtue of features (iv) and (v). In fact he argued that claim 1 is distinguished from Morimoto by virtue of feature (iv) alone, but felt it more straightforward to look at both of these features. In particular, he noted a passage on page 6 of the translation of Morimoto which, with reference to Figure 12, states that “... if light-colored layers 4 are multicolored ...”, and interpreted this to mean that some layers 4 are one colour and some another in order, viewed as a whole, to form a figure. Mr Davis argued that Figure 7 shows “discrete” areas, and that the reference on page 4 of the translation to “achromatic black” satisfies the “opaque” requirement, thus reading on to feature (iv). On Figure 12, Mr Davis accepted that a multi-coloured figure could be made in two different ways, by using some layers of one colour and some of another as suggested by Mr Birss, or by using

layers which are individually multi-coloured and thereby read on to feature (v). He argued that both alternatives are implicit in the disclosure.

36. There are therefore three features required of the material in Morimoto if it is to anticipate. It must have a pattern of areas which are discrete and which are opaque, and at least one of those areas must be multi-coloured.
37. Mr Birss argued that just because something is achromatic black does not necessarily mean that it is opaque. However I note that Morimoto in the passage at page 3 line 20 to page 4 line 4 of the translation states that paint may be printed on to obtain the dark layers and that it is preferable that the dark layers “be decreased in brightness ... until close to achromatic black”. I note also that in the patent in suit printing with “coloured ink or other marking fluid” is a preferred method (eg see page 14 line 10). All this seems to me, on a purposive construction of “opaque”, to point to Morimoto satisfying this requirement. I note moreover that this conclusion is implicit in my decision of 3 March 2000 insofar as I found claim 1, both unamended and as proposed amended, to be anticipated by Morimoto, since claim 1 requires a silhouette pattern which is defined in the patent as including opaque areas.
38. Whether or not Figure 7 of Morimoto shows “discrete” opaque areas, as Mr Davis submitted, I am less certain, given the poor quality of the drawing. However it seems to me that the striped arrangement of Figure 8 clearly fits the bill, as indeed do the so-called “net”, “lattice” and “checked” arrangements of Figures 9, 10 and 11, when modified as described at page 3 lines 18 and 19 of the translation ie with “the colored and uncolored portions .. reversed”. I do not therefore find that feature (iv) renders claim 1 novel over Morimoto.
39. Turning to feature (v), the most difficult question to my mind is how to interpret Figure 12 of Morimoto. I note that the relevant passage in the translated description refers to “.. light-colored layers 4 .. multicolored so as to exhibit a certain figure as a whole, as shown in Fig. 12 ..”. Certainly the simpler construction based on Mr Birss’s interpretation would produce this result, and it would be consistent with what is shown in Figure 12, another drawing of poor quality. Mr Davis’s more complex construction would also produce this result, but it is difficult to see that Figure 12 provides clear evidence of it. It is not clear to me that both alternatives are implicit in the disclosure, and in order to find lack of novelty, it is necessary to have unambiguous disclosure. In the absence of a clear disclosure of multi-coloured in the sense required by feature (v) therefore, I find that the revised amended claim 1 is novel over Morimoto.
40. I have already concluded that I have no reason to find that the amended claim 1 is not inventive over Dunklin and Giken. No suggestion has been made that if revised claim 1 is novel it is not inventive over Herschman in respect of feature (iv) or over Morimoto in respect of feature (v). It does not appear to me that claim 1 as now proposed to be amended is obvious and I therefore see no reason to pursue this issue. In conclusion I find the amended claim 1 novel and inventive over all four prior documents.

Claim 1: support and clarity

41. I now turn to the other issues raised by Clear Focus against claim 1 of the revised

proposal. Since I have already found that claim 1 is novel and inventive I do not need to address any further points concerning the prior art. The first issue raised is lack of clarity and support against feature (i), which requires that the transparent material is “substantially imperforate”. (I should perhaps make clear at this point that when I talk about “support” in respect of this amended claim and others, I am doing so in the sense, used by Counsel at the hearing, of looking for support for the claim in the original specification as granted. “Support” in this sense will indicate no addition of matter or extension of scope of protection, and hence compliance with section 76 of the Act; its absence will naturally indicate non-compliance.)

42. On clarity, Mr Davis questioned whether it is clear to what the transparent material is imperforate; noting that it is clearly not imperforate to light, but perhaps is imperforate to air or gamma rays. This is an issue which was not raised at all during the extensive debate on these structures during the first substantive hearing before me, from which I conclude that it did not cause a problem then, and I find it difficult to see why it should cause a problem now. The reason for that I take to be that “imperforate” was and is to be understood in its dictionary sense as meaning “not perforated”, where “perforated” means “pierced with holes”. This is consistent with the reasoning in my decision of 3 March 2000, where I rejected a submission by Mr Birss that a solid panel carrying blobs of paint could be described as “perforate” in view of the holes between the blobs. I note that Mr Birss now also regards the presence or absence of holes to be the critical issue. I therefore find no objection to this amendment on this head.
43. On support, as noted by Mr Birss, the issue of perforate structures was discussed at some length at the first hearing; Mr Burrington for Clear Focus stated then that “there is absolutely nothing in this patent specification as filed which would give a basis for a claim which covers perforate”. Clear Focus has therefore changed its position completely, initially arguing that Contra Vision was not entitled to perforate and now that it is not entitled to imperforate. Whatever, there are examples throughout the patent of imperforate structures which to my mind provide the requisite support.
44. On the same point, Mr Davis objected to the use of “substantially” to qualify “imperforate”. He cited a decision of the Technical Board of Appeal of the European Patent Office *Albany Molecular Research, Inc* [2001] 7 OJEP 319 (T 728/98). In this case, when considering a definition of an organic compound as “substantially pure” in examining a question of lack of novelty, the Board held that, to quote from the head note:

“It follows from the requirement of legal certainty that a claim cannot be considered clear in the sense of Article 84 EPC if it comprises an unclear technical feature (here “substantially pure”) for which no unequivocal generally accepted meaning exists in the relevant art. This applies all the more if the unclear feature is essential for delimiting the subject-matter claimed from the prior art”.
45. In the present case, the feature in question is not being relied on to distinguish the claim from prior art. Under the terms of the Board of Appeal decision therefore, the importance of the question is diminished. In any case however, Mr Birss justified the use of “substantially” as being the wholly conventional one of aiming to prevent an infringer from avoiding the strict terms of a claim through minor, unimportant variations. I am satisfied that, in context, this is right and is consistent with the well known principle of purposive

construction. I therefore find no objection to this amendment on this head.

46. In summary therefore I accept that feature (i) is both supported and clear, construing it to mean that the transparent material effectively has no holes through it.
47. Next in Mr Davis's schedule is an objection that feature (ii), which requires the design and silhouette pattern to adhere to one another throughout an area of said design, is unclear. Clear Focus argues that this feature implies that the silhouette pattern and design are separate entities, and that this is inconsistent with the first clause of the claim insofar as it states that the design can form part of the silhouette pattern (the first clause of claim 1 reads "said design being superimposed on or forming part of a silhouette pattern").
48. Mr Birss referred me to Figure 3 of the patent where the silhouette pattern and design are formed by contrasting inks 25, 26 and 28. It is clear in this example that the design and silhouette patterns clearly adhere to one another throughout the design. However, the inks 25 and 28 forming the design are clearly superimposed on the ink 26 forming the silhouette pattern and hence Figure 3 is not an example in which the design forms part of the silhouette pattern, hence it is not clear to me what point Mr Birss was intending to make. However I do not see the issue as a major one at this stage of these proceedings; the first clause of claim 1 appears word for word in a number of places in the patent and feature (ii) appears to read onto most if not all of the embodiments described. Thus if there is an inconsistency there, then it seems to me that it has been present from the outset, and amendment proceedings are not intended to reopen examination of the patent. I note also that this is not an issue that Mr Davis pursued at the hearing.
49. Feature (iii), which requires that at least one of the design and silhouette pattern are adhered to the transparent material throughout the silhouette pattern, is objected to on three grounds, namely that "throughout" is not supported since the figures only show part of the panel, that the passage at page 50 lines 13 to 15 referred to as contributing to support in the "basis" document is so vague as to be meaningless, and that "at least one" includes both and as such is added matter.
50. Mr Birss dismissed the first ground as "absurd" since the figures are representative. The figures do indeed only show part of the panel, but I have no doubt that the informed reader would take it as read that the rest of the panel is constructed in a similar fashion to the part illustrated, and indeed Mr Davis did not draw my attention to anything in the patent inconsistent with such a presumption.
51. Turning to the second ground, the passage at page 50 lines 13 to 15 of the patent, which relates to Figure 18, reads "The silhouette pattern is defined by the extremities of the individual elements within or outside the transparent area or areas 20". Mr Birss explained that this means that the silhouette pattern is defined by the "edges of the individual bits", and this I accept. Thus in Figure 18E for instance the three elements shown, spaced by gaps 20, I understand to form part of the silhouette pattern.
52. On the final point, as to whether or not there is support for both the design and silhouette pattern adhering to the transparent material throughout the silhouette pattern, Mr Birss referred again to Figure 18E which he said shows the background layer 44, the background layer 46 or the design 42 adhered to the transparent material 10. He went on

to say that both layers 44 and 46 or design 42 are adhered to the transparent material 10. It seems to me that neither of these statements is correct or fully addresses the point. In the outer elements of Figure 18E, the background layer 44 adheres to the transparent material 10, however in the middle element it does not, and the requirement is adhesion throughout the pattern. That said, the design 42 and the background layer 46 adhere to the transparent material 10 in all three elements, and in consequence it seems to me provide the necessary support.

53. Feature (iv), which requires that the silhouette pattern comprises a plurality of discrete opaque areas, is objected to by Clear Focus as lacking support and clarity.
54. On the issue of support, Mr Birss referred me to the passage at page 6 line 21 to page 7 line 10 of the patent, to page 7 lines 20 and 26 and to page 8 line 1. I need not quote these, but I note in particular that there is a specific reference at page 7 line 1 to “discrete elements” and at page 7 line 5 to “a regular array of discrete opaque elements such as dots or discs”. Mr Davis has, if I understand him correctly, conceded that there might be support if the claim were limited to “a regular array”, but points out that claim 1 is clearly intended to cover irregular arrays since claim 17 is specifically directed to this. However since claim 17 is identical to claim 23 as filed and since the passage at page 6 lines 3 to 12 where “silhouette pattern” is defined specifically refers to both regular and irregular patterns, it seems to me that the support necessary for these amendment proceedings is present.
55. On the issue of clarity, Clear Focus argues that describing the silhouette pattern as comprising a plurality of discrete opaque areas redefines the term and renders its meaning unclear in other claims. It seems to me that there is no substance in this objection. The term has a broad definition in the description which includes within its scope the narrower definition in claim 1. Thus for the purposes of claim 1 and any claim appendant thereto, the term takes the narrower definition; for other claims the term takes the wider definition.
56. Feature (v), which requires that at least one of the said discrete opaque areas has more than one colour on one side thereof, is objected to as lacking support. The argument here centres on claim 26 as granted which reads “A panel as claimed in any preceding claim, wherein at least part of the silhouette pattern comprises an element or elements having more than one colour on one side thereof”. Mr Birss pointed out that the phrase “more than one colour on one side thereof” is a direct copy from claim 26 to claim 1. Mr Davis argued that it is not correct to assume that an element in the terms of claim 26 and a discrete opaque area in the terms of claim 1 are one and the same. Mr Birss directed me again to the definition of “silhouette pattern”, and it seems to me that, having regard to the references on pages 6 and 7 quoted above in the context of feature (iv), there is every reason to view the “discrete opaque areas” of claim 1 as examples of the “elements” of claim 26. Given this, I find the necessary support present.
57. Feature (vi) relates to the principal perceived image feature. I dealt with this in detail in my decision of 3 March 2000 and I do not need or intend to revisit it here.
58. I find therefore no reason to reject claim 1 as contained in the revised proposal on the grounds of lack of clarity or support.

Claims 2 to 40

59. Claims 2 to 40 remain as at grant, although differently numbered in the case of claims 14 to 40. Claim 2 is an independent claim and remains unchanged, claims 39 and 40 are omnibus claims corresponding to claims 64 and 65 in the granted patent. Claims 3 to 38 are claims which are all appendant to claim 1; and of these Clear Focus has raised objection, on the grounds of lack of clarity, to claims 3 to 6, 11 to 14, 16 to 22, 28, 31 and 38. At the hearing Mr Davis withdrew his objection to claims 14 and 28, but maintained his objections to the other claims, without going into detail beyond that in his schedule. On the question of whether or not this is a justified attack, it seems to me that the fact that a new amendment has been proposed to claim 1 opens up to attack claims appendant to it.
60. Turning then to the claims as proposed in the revised proposal for amendment which Clear Focus still opposes, claim 3 is objected to as lacking clarity “since ‘clarity of vision’ is no longer always provided”. Mr Birss argued that claim 3 simply introduces the feature of “clarity of vision”, and that in doing so creates neither ambiguity nor lack of clarity. I have to say that, to the extent that I can make any sense of the point at all in the absence of any development of it by Mr Davis, I agree. I find no objection therefore to claim 3 on this ground, or to claims 4, 5 and 6 against which a similar objection is raised.
61. Claim 3 is also objected to on the grounds that although claim 1 refers only to transparent and not to translucent, claim 3 still refers to translucent. At the hearing Mr Birss said that it probably would have been better if translucent had been deleted from claim 3 but that it does not actually create a problem and it is not a reason for not allowing the amendment. I agree with Mr Davis on this point. In my view the retention of “translucent” in claim 3 after its deletion from claim 1 throws doubt on the scope of claim 1. That said, I do not view this as any more than a straightforward oversight and I accept claim 3, but only on condition that the words “or translucent” are deleted from it. I make a similar finding in respect of claims 5, 6, 21 and 22.
62. Claims 11, 12 and 13 are objected to on the grounds that they are inconsistent with feature (vi) of revised claim 1 which requires that “a principal perceived image when viewing said panel changes from said design to an object occupying a space on said other side when the illumination is altered from relative light on the one side and relative dark on the other side to relative light on the other side and relative dark on the one side.” Claims 11, 12 and 13 all relate to the visibility of the design or silhouette pattern. Mr Birss argued that these claims were not inconsistent with feature (vi) but I understood him to concede they may not add anything to it, and I think that is right. There is an additional complication in that these claims are also appendant to claim 2 which does not include feature (vi), however the relevance of this was not argued before me. All in all I conclude that at worst these claims add nothing to claim 1 but I am not persuaded that this is sufficient reason to refuse the amendment.
63. Claim 16 as proposed to be amended reads:
- “16. A panel as claimed in claim 15 wherein at least a part of one side of the silhouette pattern is not in register with the other side.”

It is objected to on the grounds that the adherence required in features (ii) and (iii) of revised claim 1 cannot be achieved if the silhouette pattern is not in register. Features (ii) and (iii) require that the design and silhouette pattern are adhered to one another throughout an area of the design, and that at least one of the design and silhouette pattern are adhered to the transparent material throughout the silhouette pattern.

64. Mr Birss referred me to the embodiment of Figure 18 and to the corresponding description on pages 49 and 50. He pointed out in particular that this embodiment, whilst meeting the requirements of claim 1, also shows a background layer 46 out of register with the other layers. This seems to me to be sustainable and again was not challenged by Mr Davis. I find no objection therefore to claim 16 on this ground.
65. Revised claim 17 is objected to on the grounds that a silhouette pattern comprising discrete areas, as required by the new claim 1, in an irregular or random pattern as required by claim 17, constitutes added matter. Mr Birss referred me to the passage at page 6 lines 9 to 12 of the patent which, in describing what form the silhouette pattern can take, reads “.. a free form element in an irregular layout or a combination of regular and free-form elements in regular and/or irregular layouts. Instead of a number of separate elements ..”. Mr Birss argued that the last few words quoted indicate that the silhouette pattern can comprise separate elements and that the preceding words indicate that they can be arranged in an irregular layout. This seems to me to be sustainable and again was not challenged by Mr Davis. I find no objection therefore to revised claim 17 on this ground.
66. Revised claims 18 and 19, which both require that “at least part of the silhouette pattern comprises an element or elements”, are objected to on the grounds that the “element(s)” to which they refer no longer have an antecedent in claim 1. Mr Birss argued that since the claims do not read “*said* element”, no antecedent is necessary. This seems to me to be sustainable and again was not challenged by Mr Davis. I find no objection therefore to claims 18 and 19 on this ground.
67. Revised claim 20, which requires that “at least part of the silhouette pattern is of non-uniform opacity” is objected to on the grounds that the concept of “non-uniform opacity” is inconsistent with feature (v) of revised claim 1. There is some confusion here, since it is clearly feature (iv) that is in question; confusion compounded by the fact that Mr Birss appeared to be addressing himself, at least in part, to feature (vi). However the point can still be dealt with.
68. Feature (iv) relates to the “discrete opaque areas” forming the silhouette pattern and Mr Birss explained that “non-uniform opacity” in claim 20 was intended to describe the effect on some car windscreens where a pattern of opacity fades at the top and bottom because the dots get smaller. On this interpretation, ie that the silhouette pattern *taken as a whole* is of non-uniform opacity, there does not appear to me to be any conflict with the requirement in feature (iv) of claim 1 that *individual elements* of the silhouette pattern must be opaque. I find no objection therefore to revised claim 20 on this ground.
69. Revised claim 31 reads:

“31. A method of producing a panel or panel assembly as claimed in any

preceding claim, wherein the design and/or silhouette pattern is printed on the panel.”

and is objected to on the grounds that, according to Contra Vision’s evidence, a single printing cannot be opaque and so is inconsistent what is now required by claim 1. However as pointed out by Mr Birss, claim 31 says nothing about a “single” printing, and again Mr Davis did not follow up the point. I therefore find no objection to revised claim 31 on this ground.

70. Revised claim 38 reads:

“38. A method of producing a panel or panel assembly as claimed in any of Claims 1 to 30, wherein the design and/or silhouette pattern is comprised in a cut sheet or film and said cut sheet or film is applied to the panel.”

and is objected to on the grounds that a cut sheet or film cannot provide discrete silhouette areas as now required by claim 1. As an example of such a structure, Mr Birss referred me to the description at the top of page 27 of the patent where a cut film silhouette pattern “of continuous straight or curved lines” is described, and took me to Figure 25 where a detailed example is shown. Mr Davis raised the question of how such a cut film structure could be made without falling to bits. He acknowledged that the method of Figure 25 using a carrier membrane might solve the problem, but felt in that case if the membrane is an essential feature then it should be in the claim.

71. This objection then becomes one of lack of support. I note however that the proposed claim 38 corresponds to claim 63 of the patent as granted, and that claim 63 is appendant to claim 14 which is directed to a silhouette pattern comprising discrete areas. It seems to me therefore that claim 38 does have the requisite support, and I find no objection therefore to claim 38 on this ground.

Claims 41 and 42

72. Mr Birss pointed out that claim 41 is claim 71 of the original proposal for amendment, and that in its original opposition Clear Focus only objected to claim 71 on the grounds that the reasons given by Contra Vision for making the amendment were unclear and that the comptroller’s discretion should be refused in view of the behaviour of Contra Vision. These are grounds that I considered and rejected in my decision of 3 March 2000.

73. At the hearing, claim 41 was objected to by Mr Davis’ as lacking support and clarity. There is also a reference in Mr Davis’ schedule to the possibility that claim 41 is not distinguished from Dunklin. This is therefore a fresh attack, however Mr Birss took me through the embodiment of Figure 18 with a view to countering it.

74. Claim 41 is a page in length and to help in its understanding Mr Davis handed up at the hearing a version broken down into paragraphs and bullet points, and carrying reference numerals from Figure 18. It is this form that I now quote for convenience:

41. A panel comprising a colourless or light coloured transparent material and a design visible from one side of the panel and not visible from the other side of the

panel, said design being superimposed on or forming part of a silhouette pattern (as herein defined),

wherein said design and said silhouette pattern comprise at least three superimposed layers including

- a design colour layer (42),
- a first background colour layer (44)
- and a second background colour layer (46)

and wherein a particular cross-section taken through said panel comprises

- two outer edges of said transparent material (42)
- and alternate transparent and opaque portions of said silhouette pattern (44)

at least one of said opaque portions within said cross-section being constructed and arranged such that it includes

- a part of said design colour layer (42),
- a part of said first background colour layer (44)
- and a part of said second background colour layer (46);

it includes two outer edges of each of

- said part of said design colour layer (42),
- said part of said first background colour layer (44)
- and said part of said second background colour layer (46);

and a single side of said part of said design colour layer (42) is disposed in contact with both

- said part of said first background colour layer (44)
- and said part of said second background colour layer (46)

and wherein said part of said design colour layer (42) extends across at least one of said two outer edges of said part of said first background colour layer (44).

75. Turning to Figure 18, Mr Birss explained how claim 41 reads on to this figure, with particular reference to the structure of the left hand element in Figure 18E. His interpretation corresponded to Mr Davis's numbering in the preceding paragraph (although the transparent material should I think be referenced 10 rather than 42). I am satisfied that the claim does indeed read onto Figure 18 and I do not believe a point-by-point rationale for that conclusion is necessary or justified.
76. Mr Davis objected that although claim 41 might read on to the left hand element of Figure 18E, it does not read on to the other two elements in the Figure, and that this is insufficient to support a new independent claim. Indeed he suggested that the left hand element might even be a draughtsman's error. Secondly, he argued the Figure 18 embodiment shows two designs 42 and 48 and two backgrounds 44 and 46, that claim 41 only requires one design, and that the concept of a single design with two backgrounds constitutes an impermissible intermediate generalisation. Thirdly, he objected that only layers which are printed are shown but that claim 41 is not so limited.

77. Mr Birss responded that there was no draughtsman's error and that the drawing taken in conjunction with the description provided the necessary support. On intermediate generalisation he argued that the key issue was whether or not the amendment added matter. He also referred back to the justification provided in the basis document.
78. I am not persuaded that Figure 18 is a draughtsman's error. It seems to me that Figures 18A to 18E, which illustrate successive steps in a method of making a panel, are completely consistent in their representation of the whole structure let alone any one particular element, and Mr Davis has provided no detailed argument or evidence that would make me question that view. That claim 41 does "just about" read directly on to this left hand element was acknowledged by Mr Davis at the hearing. The relevant part of the claim requires "*at least one of said opaque portions*" to have the specified layer construction, but I think it would be perverse not to regard the elements in Figure 18 as being representative of many such elements. In any case the middle element also seems to me to read on to the claim; only the right hand element does not, since it does not satisfy the requirement in the final clause of the claim. I therefore am not persuaded by Mr Davis' first point on lack of support.
79. On the question of intermediate generalisation, the question to be answered is whether or not the amendment teaches something new - in particular in this case, whether the patent as proposed to be amended teaches a new generalised concept of one design and two backgrounds whereas originally it taught only two designs when there are two backgrounds. In this connection, Mr Birss pointed to the left hand part of Figure 20H which he said shows two backgrounds 44 and 46 and a single design 48. Mr Davis pointed to the right hand part of Figure 20H which he said shows two backgrounds 44 and 46 and *two* designs 42 and 48. Both are right I think, however it is clear from page 51 of the patent that Figure 20 shows two alternatives, and that the alternative shown in the left hand part of Figure 20H does indeed show two backgrounds and a single design. In consequence I find that the concept in question is taught in the granted patent and that claim 41 of the revised proposal does not add matter.
80. Finally on the question of added matter, Mr Davis argued that, in contrast to claim 42, claim 41 is not limited to layers which are printed, that the techniques referred to in support of claim 41 all involve printing with ink, and that claim 41 should be so limited in order to avoid adding matter. Mr Davis admitted this was a minor point and I think that, although the description of Figure 18 refers to "overprinting", other alternatives are described in the patent and I do not see any new teaching here.
81. On clarity, Mr Davis's schedule states that the claim is almost incomprehensible and at the hearing Mr Davis objected that it was not clear whether claim 41 was defining the Figure 18 structure from the top to the bottom or *vice versa*. I think he did in the end conclude that it was bottom up, and I think that is right. Moreover I am satisfied that, although long and perhaps clumsily worded, the claim is clear when interpreted in the context of the description and drawings, in particular with reference to the embodiment of Figure 18.
82. Mr Davis did not pursue the question of whether claim 41 is distinguished from Dunklin. Dunklin does not it seems to me describe the complex layer structure required by claim 41 and I find no objection there.

83. Taking account of all of the above, I find no objection to claim 41.
84. Claim 42 is the combined subject matter of claims 82, 84 and 91 of the original proposal, and is objected to in Mr Davis's schedule as lacking support, in similar terms to the objections raised against claim 41.
85. Claim 42 is also objected to on the grounds that it is not understood how a second independent claim, ie a claim additional to claim 41, can stem from the same disclosure, namely Figure 18. On this latter point, Mr Birss argued that this is not a valid objection, and I agree with him; it is wholly commonplace to have the same embodiment supporting more than one independent claim.
86. Mr Davis handed up at the hearing a version of claim 42 broken down into paragraphs and bullet points, and carrying reference numerals from Figure 18. It is this form that I now quote for convenience:

42. A panel comprising a colourless or light coloured transparent material and a design visible from one side of the panel and not visible from the other side of the panel, said design being superimposed on or forming part of a silhouette pattern (as herein defined), and

wherein said design and said silhouette pattern comprise at least two superimposed layers including

- a design colour layer (48)
- and a background colour layer (46)

and wherein a particular cross-section taken through said panel comprises

- two outer edges of said transparent material
- and alternate transparent and opaque portions of said silhouette pattern,

at least one of said opaque portions within said cross-section being constructed and arranged such that it includes

- a part of said design colour layer (48)
- and a part of said background colour layer (46)
- and a part of another background colour layer (44);

it includes two outer edges of each of

- said part of said design colour layer (48)
- and said part of said background colour layer (46)
- and said part of said another background colour layer (44);

and both said two outer edges of said part of said design colour layer (48) are within and spaced from said two outer edges of said part of said background colour layer (46),

and wherein both said two outer edges of said part of said another background colour layer (44) are outside and spaced from said two outer edges of said part of

said background colour layer (46),

and wherein said layers are printed.

87. Turning to Figure 18, Mr Birss explained how claim 42 reads on to this figure, with particular reference to the structure of the middle element in Figure 18E. His interpretation in this case does not however correspond to Mr Davis's numbering. In Mr Birss's reading, the first mentioned background layer is that referenced 44 and the other background layer is that referenced 46; in Mr Davis's it is the other way round. However I understood Mr Davis at the hearing to agree that Mr Birss's numbering was sound. Looking at the last but one clause of claim 42, this requires the edges of the "other" background layer to extend beyond the edges of the first mentioned background layer. In all three elements shown in Figure 18, it is the layer 46 (referenced in Figure 18D) which extends beyond or overlaps layer 44. I conclude that the claim does read onto the middle element of Figure 18 with Mr Birss's numbering, and indeed onto the left hand element as well it seems to me.
88. I have already disposed of the question of whether there is a reasonable basis for the objection that Figure 18 is a draughtsman's error. I have also dealt (in the context of claim 41) with the question of intermediate generalisation, that is to say whether the patent now teaches the concept of one design and two backgrounds whereas originally it taught only two designs when there are two backgrounds.
89. Taking account of all of the above, I find no objection to claim 42 as now proposed.

Claims 43 and 44

90. Revised claim 43 corresponds to claim 93 of the original proposal. It reads:
- "43. A panel comprising a colourless or light coloured transparent or translucent material and a design visible from one side of the panel and not visible from the other side of the panel, said design being superimposed on or forming part of a silhouette pattern (as herein defined), and wherein said design is applied by means of transfer from a carrying membrane."
91. Objection has been raised by Clear Focus that the claim lacks support and is not distinguished from Dunklin or Morimoto.
92. On support, Clear Focus argues that applying a design by transfer from a carrying membrane is only disclosed in connection with the step of burning off the membrane. Mr Birss referred to the passage at page 18 line 15 to page 19 line 4 of the patent which describes burning off the membrane but noted that this passage also states that "The term transfer includes dry transfers, water slide transfers and any other means of transferring a pattern on or from a carrying membrane". He also pointed out that the description of the embodiment of Figure 19 on pages 50 and 51 states that "The carrying membrane 50 may be transparent and not be removed or may be pulled away, for example as with a dry transfer technique or be otherwise removed, for example being burnt away ...". Mr Davis conceded at the hearing that the support might be implicit, but that it was for Contra Vision to provide the evidence. Having carefully considered the passages in question, I

conclude that the references to “any other means of transferring a pattern on or from a carrying membrane” and to the carrying membrane being “pulled away, for example as with a dry transfer technique or .. otherwise removed” provide explicit support for the feature in question in claim 43.

93. Claim 44, which was claim 94 of the original proposal, is appendant to claim 43 and relates to the application by a carrying membrane of ceramic ink to a sheet of glass. Objection is raised that this claim supports the view that claim 43 is an intermediate generalisation. Since I have found that claim 43 has the required support, I do not need to pursue this point.
94. I turn next to Dunklin. Mr Davis pointed to Figure 5 as showing a carrying member; Mr Birss argued that Figure 5 shows a sticky tape 20 being rolled out onto a window 14. He also referred me to column 3 line 30 of Dunklin which describes the tape (or “applique” as it is described) as comprising a laminate. I agree with Mr Birss. There appears to be no reference in Dunklin to a design being applied by means of transfer from a carrying membrane or member as required by the claim. I note in addition the passage at column 3 line 67 to column 4 line 2 of Dunklin which states “The artwork or indicia 30 is preferably formed on the .. applique 20 by a silk-screening or half-tone printing process”, ie *not* by transfer from a carrier membrane or member. I therefore find revised claim 43 novel over Dunklin.
95. As for Morimoto, Mr Davis argued that layer 9 in this document constitutes a carrying member; Mr Birss responded that this designates a release liner. Turning to the text, on page 4 of the translation the layer 9 is indeed described as a “release paper” which is removed to reveal adhesive when the material is to be stuck onto something. I therefore find revised claim 43 novel over Morimoto.
96. No case has been made for lack of inventive step against claim 43 having regard to Dunklin or Morimoto, and I am satisfied there is none on the basis of the material before me.
97. Taking account of all of the above, I find no objection to revised claim 43 or claim 44.

Claim 45

98. In the revised proposal, claim 45 corresponds to claim 123 of the original request but with the word “film” inserted before the expression “material layer” wherever that expression occurs in the claim. Revised claim 45 therefore reads:

“45. A panel comprising a sheet of colourless or light coloured transparent or translucent material, and a self-adhesive material comprising a film material layer and an adhesive layer, said film material layer and said adhesive layer being cut to form a silhouette pattern (as herein defined), and wherein said self-adhesive material is adhered to said sheet via said adhesive layer, and a design superimposed on or forming a part of said silhouette pattern, said panel having said design visible from one side of the panel and not visible from the other side of the panel, said panel being made by a process comprising the steps of: forming an assembly comprising a protective film layer, said film material layer and said

adhesive layer disposed between said film material layer and said protective film layer and adhering said film material layer to said protective film layer, cutting said film material layer and said adhesive layer while said protective film layer is adhered thereto to form said silhouette pattern, removing said cut film material layer and said cut adhesive layer forming said silhouette pattern from said protective film layer, and adhesively attaching said cut film material layer and said cut adhesive layer to said sheet of transparent or translucent material to form said panel.”

99. Mr Davis raised objection to this claim on the grounds of lack of support. The support issue centres on Figure 25 of the patent, which is subdivided into Figures 25A to 25I illustrating successive steps in a process of making a panel. Clear Focus argues that support for claim 45 is alleged by Contra Vision to be provided by Figure 25F and the corresponding passage in the description at page 54 lines 15 to 24, but that these relate only to an intermediate product. In this connection, Mr Davis referred me to *Raychem Ltd's Applications* [1986] RPC 547 in which a sleeve assembly is formed by a process which includes bonding together parts of a web. In the original description and claims, the bond-forming parts of the web are cross-linked as the final step, and the product before cross-linking is described only as an intermediate. It was held by Falconer J that the invention described at filing had as an essential requirement the cross-linking feature, and a claim without that essential feature was not supported by the description.
100. Mr Birss responded that Contra Vision had never said in its basis document that the support was provided just by Figure 25F, and took me through the whole process as described with reference to Figures 25A to 25I. However turning to the basis document, I note that the relevant passage reads:
- “Claim 45 is disclosed in Fig 25F, Page 54, lines 15-24, wherein 44 and 46 represent the cut material layer, 48 represents the design, 74 represents the cut-self adhesive layer and 68 represents the protective film layer.”
101. Given the second sentence of the above passage, it is manifest why Clear Focus should assume as it did. On the other hand, claim 45 includes steps which clearly go beyond Figure 25F, notably “adhesively attaching said cut film material layer and said cut adhesive layer to said sheet of transparent or translucent material to form said panel”, a process which is illustrated in Figures 25G, H and I. It is clear why Clear Focus was wrong footed, but it seems to me that the structure claimed in claim 45 relates to a final product not to an intermediate product, and that the argument based on the *Raychem* decision is therefore not a valid one on the present facts.
102. Mr Davis has also raised the question of intermediate generalisation, arguing that claim 45 does not include all the layers or designs of Figure 25, and that the fact that further features are introduced by claims 46 (the cutting is in the form of lines), 47 (the cutting is in the form of perforations) and 48 (a further layer in the form of an uncut membrane is used) supports that objection. At the hearing, neither counsel developed these points in any depth as far as claim 45 is concerned, which gives me some difficulty.
103. However, I note that claim 63 of the patent as granted is a broad claim to the general concept. It reads:

“63. A method of producing a panel or panel assembly as claimed in any of Claims 1 to 53, wherein the design and/or silhouette pattern is comprised in a cut sheet or film and said cut sheet or film is applied to the panel.”

104. This seems to me to provide support for the general concept of using cut film, with no limitation as to numbers of layers or designs or cutting patterns. Moreover, revised claims 46 and 47 offer alternative cutting patterns which I think are legitimately generalised in revised claim 45. In conclusion I am not persuaded that claim 45 teaches anything new, in particular that it creates a new generalised concept constituting an impermissible intermediate generalisation.
105. Mr Davis also argued that claim 45 lacks novelty and inventive step against Giken. In claim 45, a panel is made by forming an assembly comprising protective, adhesive and film layers, then cutting the adhesive and film layers to form a silhouette pattern. In Giken, a panel is made by forming an assembly comprising adhesive and film layers, perforating the layers and *then* applying a protective layer. Mr Davis acknowledged the distinction, but held that the order in which things are done makes no difference to the product. This is effectively the product-by-process argument which I have already dismissed, and I therefore find claim 45 novel over Giken. Mr Davis also argued that it is not in any case inventive to put the protective layer on first rather than last, and that Mr Birss should have come up with evidence if he wishes to argue that it is inventive. Mr Birss argued that this is a new attack and that the onus was on Mr Davis to file evidence to support that attack. He also argued that there is a material difference between the two processes. I note that this is an attack which was not foreshadowed in Mr Davis’s skeleton or in his schedule (as indeed was the novelty attack). From the argument and evidence before me it seems that there is indeed a material and non-obvious difference between the two procedures, since as pointed out by Mr Birss, the stage at which the protective layer is attached alters the nature of the procedure. I think there is a burden here for Clear Focus to discharge, if it is to displace that *prima facie* view, and it does not seem to me that it has done so. I therefore find revised claim 45 inventive over Giken.
106. Finally as noted above, claim 45 corresponds to claim 123 of the original request but with the word “film” inserted before the expression “material layer” wherever that expression occurs in the claim. I note first that no objection has been taken to the introduction of the word “film” into claim 45, and I am satisfied that the necessary support is present; the relevant layer 44 in the description of the embodiment of Figure 25 being described as “film” in the granted patent. Secondly, I note that in its original opposition Clear Focus only objected to claim 123 on the grounds that the reasons given by Contra Vision for making the amendment were unclear and that the comptroller’s discretion should be refused in view of the behaviour of Contra Vision. These are grounds that I considered and rejected in my decision of 3 March 2000.
107. Taking all of the above into account, I find no objection to revised claim 45.

Claims 46 to 49

108. It is convenient to deal with these claims together since they are all dependent upon claim 45. Claims 46 to 49 correspond to claims 125, 126, 127 and 132 of the original proposal,

but with some additions and deletions. The word “film” has been added to each of these claims but has not been objected to, and for the reasons I gave when considering the same amendment to claim 45, I am satisfied that the necessary support for this particular amendment is present.

109. Objection is raised in Mr Davis’s schedule that claims 46 to 48 lack support. In respect of claim 46, Mr Birss directed me to page 27 lines 1 and 2 of the patent, for claim 47 to page 27 lines 2 to 6 and 13 to 15, and for claim 48 to membrane 72 in Figure 25. Mr Davis did not pursue the point at the hearing and I am satisfied that the necessary support is provided by the passages and Figure referred to by Mr Birss.
110. Claim 47 corresponds to claim 126 as originally proposed but with certain deletions as well as the addition of “film”. The original claim 126 reads as follows, the words that I have indicated in italics being deleted in this revised proposal:

“126. A panel ..wherein said material layer and said adhesive layer *and said protective film layer* are cut to form perforations in said material layer and said adhesive layer *and said protective film layer.*”

111. In my decision of 3 March 2000 I refused claim 126 on the grounds that it added new matter in contravention of section 76, specifically insofar as claim 126 required the protective film to be perforated. The deletions shown above clearly meet the point.
112. In consequence of the above, I find no objection to claims 46 to 49.

Claim 50

113. In the revised proposal, claim 50 corresponds to claim 133 of the original proposal. It reads:

“50. A panel comprising a colourless or light coloured transparent material and a design visible from one side of the panel and not visible from the other side of the panel, said design being superimposed on or forming part of a silhouette pattern (as herein defined), said panel being made by a process comprising the steps of: forming an assembly comprising cut printed layers cut to form a part of said design, a film layer, and a carrier layer; removing said film layer from said assembly; applying said cut printed layers and said carrier layer to said transparent material; removing said carrier layer to leave said cut printed layers forming said part of said design on said transparent material.”

114. Mr Davis raised objection on the grounds of lack of support. Mr Birss explained that the claim is based on the Figure 25 embodiment, and I am satisfied, for similar reasons that I gave in respect of claim 45 that the requisite support is present, and that the claim is not an impermissible intermediate generalisation. I therefore allow the amendment resulting in revised claim 50.

Claim 51

115. In the revised proposal, claim 51 corresponds to claim 145 of the original proposal. It

reads:

“51. A panel comprising a colourless or light coloured transparent or translucent material and a design visible from one side of the panel and not visible from the other side of the panel, said design being superimposed on or forming part of a silhouette pattern (as herein defined), and wherein said design is printed directly onto and in contact with said transparent or translucent material and said design is visible through said transparent or translucent material.”

116. Mr Davis raised objection on the grounds of lack of support. Mr Birss explained that the claim is based on the Figure 18 embodiment. Taking this in conjunction with the subject matter of claims 16 and 17 at grant, which require the silhouette pattern to be “directly applied” and the design to be located “between the silhouette pattern and the panel”, I am satisfied that the requisite support is present, and that the claim is not an impermissible intermediate generalisation.
117. At the hearing, I asked Mr Birss to distinguish claim 51 from Morimoto. He argued that it is distinguished on three grounds, namely that Morimoto does not show opaque areas, does not satisfy the requirement that the design is visible from one side of the panel and not visible from the other, and does not in Figure 12 show a design visible through the transparent material.
118. As Mr Davis pointed out, I have already found against Contra Vision on the first two points in my decision of 3 March 2000 insofar as I concluded that claim 1, both unamended and as originally proposed to be amended, is anticipated by Morimoto. I have also looked again, when considering the latest form of claim 1 above, at the question of whether or not Morimoto shows opaque areas and concluded that it does.
119. On the third point, I think that Mr Birss is right in respect of the particular structure shown in Figure 12 of Morimoto, since the layers 4 which carry the design appear to be on top of the structure and therefore not in contact with the transparent material. However it is clear from the description at page 2 line 12 to page 3 line 5 of the translation that the order in which the layers 4 and the dark layers 3 are arranged is immaterial. Figure 2 shows layers 4 in contact with the transparent material 2, and indeed it is specifically stated on page 3 at lines 2 to 5 that “So long as the two types of layers 3 and 4 are set in such relation [ie stacked in registration], differences in the manner of stacking do not affect the effectiveness...” I see no reason why this teaching should not be interpreted as applying to the structure of Figure 12, and indeed very good reason to conclude that the document teaches that the order of the layers in Figure 12 can be changed, that is to say that the layers 4 which carry the design are in contact with the transparent material, with the design visible through the transparent material as required by claim 51. It seems to me therefore that claim 51 is not novel over Morimoto.
120. If I am wrong in my reasoning, then it is necessary to look at whether or not the claim involves an inventive step over Morimoto. It is difficult to resolve this question satisfactorily without expert evidence as to the attitudes and knowledge of the notional skilled man. However, it seems to me that to a person skilled in the art, presented with the structure of Figure 12 and the statement at page 3 lines 2 to 5 quoted above, it would be obvious to change the order of the layers in the structure of Figure 12, since he would

be pointed firmly and unambiguously in that direction by the document. I conclude therefore that revised claim 51 is not inventive over Morimoto.

121. I therefore refuse the proposed claim 51.

Claim 52

122. In the revised proposal, claim 52 corresponds to claim 152 of the original proposal. Mr Davis initially raised objection to lack of support but at the hearing I understood him to concede the point and I do not need to pursue it here.

Claims 53, 54 and 55

123. Claims 53 and 54 correspond respectively to claims 153 and 154 of the original proposal with the additional limitation that they are each now appendant to claim 1. Claim 55 which is appendant to claim 54 corresponds to claim 155 of the original proposal which was appendant to claim 154.

124. Objection is raised against these claims in Mr Davis's schedule on the grounds of lack of support. In addition at the hearing Mr Davis argued that claim 53 is not distinguished from Morimoto.

125. Revised claim 53 reads :

“53. A panel as claimed in claim 1, wherein each of said discrete opaque areas has an outer perimeter, wherein said one of said discrete opaque areas comprises two superimposed colour layers each having an outer boundary, wherein at least a part of each of said discrete opaque areas is visible from said one side of said panel, wherein a first of said colour layers extends over the whole of said one of said opaque areas and said outer boundary of said first of said colour layers defines said outer perimeter of said one of said opaque areas, wherein a second of said colour layers of a different colour to said first colour layer is superimposed on only a part of said first colour layer, wherein a part of said outer boundary of said second of said colour layers extends across said first of said colour layers and another part of said outer boundary of said second of said colour areas is coincident with a part of said outer perimeter of said one of said discrete opaque areas.”

126. Contra Vision cite the embodiment of Figure 6F as support for claim 55. Clear Focus submit that Figure 6F is purely illustrative, that it is not suggested that the elements in this figure represent discrete, opaque silhouette elements, that the claim excludes the portions 27 and 30 in Figure 6F, and that although the boundaries of the colour layers happen to coincide in that figure there is no suggestion that this is either typical of the structure or inventive.

127. Mr Birss referred me to the top of page 42 of the patent where Figures 6A to 6F are described as illustrating “various kinds of element that can be used to form a silhouette pattern”. I note that the definition of “silhouette pattern” on page 6 refers to “opaque” areas. In consequence I am satisfied that it is right to interpret Figure 6F as showing a

discrete, opaque silhouette element. I also find support in Figure 6F for the coincident boundaries required by claim 55; it seems to me that Figure 6F is a carefully drawn figure in which the draughtsman clearly intended various boundaries to be shown as coincident, in particular the two layers labelled 28 and 29, and it is legitimate to include that feature in a claim. This careful drawing I think also meets any objection based on the submission that the figure is purely illustrative.

128. The final objection on support is that the claim excludes the portions 27 and 30 in Figure 6F, that is to say that the claim relates to an impermissible intermediate generalisation. Again, the question to address is does the amendment add matter by teaching something new? In particular does it teach the use of just two layers 28 and 29? The claim clearly includes any structure having layers corresponding to 28 and 29 but applying *Edwards v Acme* cited above, does not it seems to me disclose any new structure; in particular, it does not disclose a structure which specifically excludes layers 28 and 29 any more than it does a structure which incorporates any number of additional layers. I do not therefore find the claim to lack support.
129. As noted above, at the hearing Mr Davis argued that claim 53 is not distinguished from Morimoto. However since claim 53 is appendant to claim 1 and I have already found that claim 1 is distinguished from Morimoto, this objection falls.
130. I therefore I find no objection to revised claim 53.
131. Revised claim 54 reads:

“54. A panel as claimed in claim 1, wherein each of said discrete opaque areas has an outer perimeter, wherein one side of each of said discrete opaque areas is visible from said one side of said panel, wherein said one side of said one of said discrete opaque areas has two colour areas of different colour disposed thereon, wherein each of said two colour areas has an outer boundary and said two colour areas have a mutual boundary between a first colour area of a first colour and a second colour area of a second colour, and wherein part of said outer boundary of said first colour area comprises said mutual boundary which extends across said one of said discrete opaque areas, and another part of said outer boundary of said first colour area is coincident with part of said outer perimeter of said one of said discrete opaque areas.”

132. In the basis document, Contra Vision cites Figures 6D to 6F in support of this claim. I am satisfied that Figures 6D and 6E provide the necessary support, for similar reasons that I found Figure 6F to support claim 53. (For completeness I should add that I do not find claim 54 to be supported by Figure 6F, since this particular figure does not seem to me to have the “mutual boundary” required by the claim.)
133. I therefore I find no objection to revised claim 54.
134. Revised claim 55 reads:

“55. A panel as claimed in claim 54, wherein another of said discrete opaque areas is adjacent to and spaced from said one of said discrete opaque areas, and wherein

said another of said discrete opaque areas has another mutual boundary between one colour area of said first colour and another colour area of said second colour, and said another mutual boundary extends across said another of said discrete opaque areas, and wherein said mutual boundary on said one of said discrete opaque areas is substantially aligned with said another mutual boundary on said another of said discrete opaque areas.”

135. Although claim 55 is appendant to claim 54, which finds support in Figure 6, Mr Birss referred me to Figure 27 in support of claim 55. Claim 55 requires *inter alia* two adjacent areas each having two colours with a boundary therebetween, and with the two boundaries aligned. However as pointed out by Mr Davis there is no clear disclosure of multi-coloured areas in Figure 27, indeed the description of Figure 27 on page 56 lines 14 to 19 of the patent makes no reference at all to the type of dot required. The basis document also refers to the description at page 19 line 16 to page 20 line 3 and page 20 line 17 to page 21 line 5, however these passages are silent on the alignment requirement.
136. It seems to me that the onus is on Contra Vision to demonstrate where the support for this claim lies and I do not think they have discharged that onus. I am conscious that this is a fresh attack by Clear Focus, but that attack is consequent on what is set out in Contra Vision’s basis document, the issue has been aired at the hearing, and moreover there is a public interest issue here. Taking all of the above into account, I refuse the amendment leading to revised claim 55 as being contrary to section 76.

Claim 56

137. In the revised proposal, claim 56 corresponds to claim 159 of the original proposal. It reads:
- “56. A panel comprising a colourless or light coloured transparent material and a design visible from one side of the panel and not visible from the other side of the panel, said design being superimposed on or forming part of a silhouette pattern (as herein defined), wherein said design and said silhouette pattern comprise a design layer and a transparent material layer, wherein a particular cross-section taken through said panel comprises alternate transparent and opaque portions of said silhouette pattern, and wherein each of said opaque portions has two outer edges, wherein said transparent material layer extends only within said two outer edges of each of said opaque portions, and wherein said design layer is printed directly onto said transparent material layer.”
138. Contra Vision cites Figure 20H in support of claim 56; Clear Focus argues that the claim does not cover all the layers in that embodiment, not even sufficient to enable the invention to be performed, and hence relates to an impermissible intermediate generalisation.
139. Mr Birss pointed to a design layer 42 and a transparent material layer 52 in Figure 20H which he said read on to claim 56. He did not concede that the embodiment shown in the left hand part of Figure 20H does not read onto claim 56 as submitted by Mr Davis, but since there is no transparent material layer 52 in the left hand part I agree with Mr Davis

on the point. However I find that claim 56 does indeed read onto the embodiment shown in the right hand part of Figure 20H (there appears to be no dispute over the “alternate transparent and opaque portions” in the claim). Again the point is raised by Clear Focus that the claim does not cover all of the layers shown in the drawing. However I note that Figure 20 is described on page 51 as illustrating method 3, and that one way of carrying out method 3 is described in broad terms at page 3 lines 10 to 12 and 16 to 21 as comprising providing a silhouette pattern of clear ink and applying a design thereto.

140. I therefore find the requisite support for revised claim 56.

Claim 57

141. In the revised proposal, claim 57 corresponds to claim 167 of the original proposal. It reads:

“57. A panel comprising a colourless or light coloured transparent or translucent material and a design visible from one side of the panel and not visible from the other side of the panel, said design being superimposed on or forming part of a silhouette pattern (as herein defined), and wherein said sheet of transparent or translucent material comprises static cling film.”

142. Objection is raised against claim 57 in Mr Davis’s schedule on the grounds of lack of support. In addition at the hearing Mr Davis argued that claim 57 is not distinguished from Dunklin.

143. In Contra Vision’s basis document, the passage at page 32 lines 3 and 4 of the patent is cited as providing support for claim 57. Mr Davis objected that this passage only provides support first for PVC film, a point which I understood Mr Birss to concede, and secondly for transparent but not translucent film. On the second point Mr Birss responded that the patent provides a general teaching of “transparent or translucent”, a point which I accept, particularly given that the passage at page 32 lines 3 and 4 is not restricted to transparent film. I conclude therefore that, provided that claim 57 is amended to read “..static cling PVC film.”, the claim is supported.

144. Mr Davis argued at the hearing that claim 57 is not distinguished from Dunklin, and referred me to the passage at column 3 lines 32 to 37 of Dunklin which states that “The lowermost sheet 22 .. is preferably formed of a 12 gauge poly-vinyl chloride (PVC) sheet material”. This was a completely fresh attack not raised even in Mr Davis’s schedule, and Mr Birss did not respond to it at the hearing. I am conscious of the fact that Contra Vision were initially unsighted on this, but I also have to be aware of the question of public interest.

145. Turning then to Dunklin, I found in my decision of 3 March 2000 that claim 1 as originally proposed to be amended, and therefore also as granted, is not distinguished from Dunklin. Claim 57 differs from claim 1 at grant only insofar as it requires the transparent or translucent sheet to comprise “static cling PVC film”, and it follows therefore that whether or not claim 57 is distinguished from Dunklin will depend on whether or not Dunklin discloses such a sheet.

146. First then I have to construe the term “static cling PVC film”. The passage at page 32 lines 3 to 5 of the patent reads “.. a strip of static cling PVC film or self-adhesive PVC film can be adhered to the upper part of a car windscreen” and from this I take the term to mean PVC sheet material sufficiently thin to adhere *by static cling* to a car windscreen.
147. Secondly I have to determine the question of whether or not Dunklin discloses such a sheet material. As already noted, Dunklin refers to “a 12 gauge poly-vinyl chloride (PVC) sheet”. This is referenced 22. Laminated to this is (column 3 lines 40 to 45) “a one-half gauge silver coloured polyester fabric sheet” (referenced 24) which “lends dimensional stability to the ... PVC sheet thereby preventing the applique 20 from being deformably stretched during its installation onto the window 14”. The whole assembly (or applique) is adhered to the car windscreen 14 using double sided adhesive tape, referenced 40. Therefore on the one hand the PVC sheet 22 is sufficiently thin to require support to prevent its deforming, but on the other hand is stuck to the windscreen using adhesive tape. How thin then is “12 gauge”? In my experience the term “gauge” is used loosely in the materials art. In the absence of any evidence or argument to assist me I find myself unable to determine whether or not the PVC sheet in Dunklin has the static cling properties required by the claim.
148. The onus here, in my view, is on Clear Focus, and any doubt therefore I must resolve in favour of Contra Vision. I therefore find that claim 57 is novel over Dunklin; and in the absence of any evidence or argument I also find the claim inventive over Dunklin. Again of course this finding does not preclude any future attack on validity on these grounds.

Claim 58

149. Revised claim 58 is appendant to claim 1, and requires that “a means is provided of illuminating said design through the edge of said transparent material.”
150. Clear Focus has objected that claim 58 lacks support in that it is not clear whether or not this variation would work given that claim 1 now incorporates the “principle perceived image” requirement, and that this variation is not disclosed in combination with the structure of claim 1. Objection is also made that claim 58 is unclear in that there is no antecedent for “the edge of said transparent material”. I do not take the final objection as a serious one since the panel must have an edge, and I do not think Mr Davis did either. Mr Birss argued that the question of whether or not the combination would work is one of sufficiency, an objection which has not been raised, and that the necessary support is provided at page 38 lines 6 to 13 of the patent. This passage reads:

“Edge lighting of products of the invention may also be used to enhance the images perceived on one or both sides of an assembly.

The light can be introduced through one or more edges of a transparent material and is internally reflected until scattered by the inside design of the silhouette pattern on one surface and emitted through another surface, making the pattern more visible.”

151. This passage it seems to me firstly provides support for any of the devices disclosed in the patent to be used with edge lighting, and secondly gives every indication that rather than

not work with existing images, such images would be enhanced. I find no objection therefore to claim 58.

Claim 59

152. Revised claim 59 is appendant to claim 1, and requires that “said silhouette pattern and said design are located between at least two sheets of transparent material laminated together with polyvinyl butyral material”.
153. Clear Focus has objected that there is support only for PVB film, not for “polyvinyl butyral” or for “material”. The passage in the patent cited by Contra Vision as providing the requisite support is at page 29 lines 7 to 9 which refers specifically to “PVB film”. If I understood counsel correctly, Mr Birss is prepared to replace “material” by “film” and Mr Davis conceded that, in context, PVB would stand for polyvinyl butyral. Provided the further amendment proposed by Mr Birss is made, I would find no objection to revised claim 59.

Claim 60

154. Revised claim 60 reads:

“60. A panel comprising a colourless or light coloured transparent or translucent material and a design visible from one side of the panel and not visible from the other side of the panel, said design being superimposed on or forming part of a silhouette pattern (as herein defined), and wherein a means is provided of projecting images onto said silhouette pattern, and wherein at least a part of said design is formed by an image projected onto said silhouette pattern.”

155. Clear Focus has objected that there is no support for the final clause of claim 60. The passage in the patent cited by Contra Vision as providing the requisite support is at page 39 lines 1 to 6 which reads:

“Coloured lights or images, such as those from photographic transparencies, can be projected onto the surface of the products of the invention preferably onto white or light areas on one side of the silhouette pattern, whilst maintaining visibility through the panel from the other side.”

156. Mr Davis argued that this passage does not say that the projected images form the design, it merely states that you can project images onto the silhouette pattern. Mr Birss accepted that the words did not specifically say what is in the claim, but that there is implicit disclosure in the passage. He argued that the passage teaches the skilled man to project an image onto the silhouette pattern and that the claim does not teach anything beyond that.
157. It seems to me that if the final clause of the claim had read along the lines of “and wherein an image is projected onto said silhouette pattern”, then Mr Birss’s argument might hold. However the claim goes beyond that, it specifically requires that the projected image form “at least a part of said design”. Moreover, I note that the passage quoted above from page 39 of the patent refers to projecting images “onto the surface of the products of the

invention”, which to me implies that what is being described is projection onto a panel *that already comprises a design and a silhouette pattern*.

158. It seems to me that the onus is on Contra Vision to demonstrate where the support for this claim lies and I do not think they have discharged that onus. I am conscious that this is a fresh attack by Clear Focus, but that attack is consequent on what is set out in Contra Vision’s basis document, the issue has been aired at the hearing, and moreover there is a public interest issue here. Taking all of the above into account, I refuse the amendment to claim 60 as being contrary to section 76.

Claims 61 and 62

159. In the revised proposal, claim 61 corresponds to claim 1 of the granted patent but with the words “transparent or” deleted. It reads:

“61. A panel comprising a colourless or light coloured translucent material and a design visible from one side of the panel and not visible from the other side of the panel, said design being superimposed on or forming part of a silhouette pattern (as herein defined).”

160. Clear Focus argues that claim 61 is neither novel nor inventive over Herschman. Mr Birss responded that the key point is the requirement in the claim that the panel material be translucent. He pointed out that although Herschman specifically refers, for instance in claim 1 at column 5 line 19, to “a translucent panel”, the phrase in full is “a translucent panel of reduced transparency”. Also, the term is defined at column 3 lines 4 to 7 of Herschman by the statement:

“The term ‘translucent’ is used herein to define a light pervious member of reduced transparency which permits a clear image to be seen therethrough with reduced light intensity and color range”.

161. Mr Birss referred to the definition of “translucent” in the *Concise Oxford Dictionary of Current English* 1990 which in its essentials reads:

“**translucent** *adj* **1** allowing light to pass through diffusely; semi-transparent.
2 transparent”

162. He argued that transparency is a measure of the intensity of light transmitted, and contrasted this with translucency which he held to be a measure of diffuseness or scattering; he concluded that Herschman was exclusively concerned with the former. In support he directed me to column 1 lines 12 and 33 of Herschman which use the expression “undiminished vision”. He also argued that since the patent in suit refers to transparent or translucent, the intention must be to draw a distinction between the two rather than to use translucent in a sense that includes transparent, and noted that claim 62 which is appendant to claim 61 has paper as the translucent material.

163. Mr Davis noted simply that the dictionary definition provided by Mr Birss includes semi-transparent and that Herschman involves reduced transparency and therefore anticipates.

164. It seems to me that I need to approach this question step by step taking all of these points into account. First, how should I construe “translucent” in its widest sense? The dictionary definition clearly includes two non-exclusive options, which in brief are first, diffusing, and second, semi-transparent. I interpret the latter to mean *partially* transparent rather than literally at exactly 50%. (For completeness I note that the second part of the dictionary definition is simply “transparent”, but neither counsel referred to this, I assume on the basis that in the present context of the patent both sides accept that translucent and transparent should have at least some difference in meaning.)
165. Second, how should I construe “translucent” as used in Herschman? To decide this I turn to the definition of the term in Herschman at column 3 lines 4 to 7. The reference in this definition to “a clear image” seems to me to point firmly away from the first dictionary option of diffusing, and the reference in the definition to “reduced transparency” seems to me to point firmly towards the second dictionary option of semi-transparent.
166. Third, and crucially, how should I construe “translucent” as used in the patent in suit? Mr Birss said that since the terms “translucent” and “transparent” are used as alternatives in the patent they must mean something different. I agree that much, but I think it is arguable that this would be satisfied by interpreting translucent to mean “diffusing”, or “partially transparent”, or both. All three of those possibilities would meet Mr Birss’s condition, but only the first would differentiate from Herschman.
167. Not surprisingly, at the hearing I was taken to various parts of the granted patent in order to elucidate what it means when it says “translucent”. I have since the hearing re-read the granted patent very carefully with a view to identifying exactly what it says, and have arrived at the following non-exhaustive list of references:

page 1, lines 10 to 15: some of the materials mentioned could fit either meaning, but “paper or fabric” provides some support for the diffusing meaning;

page 3: following directly from the consistory clause, which speaks of a panel of translucent material, there are references to “clarity of vision”, culminating at lines 18 to 20 with “in all cases through vision can be obtained ...”, implying partial transparency not diffusing;

page 4: following directly from a second consistory clause, which speaks of a panel of translucent material, there are references to “clarity of vision”, culminating at line 20 with “in all cases through vision can be obtained ...”, implying partial transparency not diffusing;

page 28, lines 5 to 7: this refers to the use of “translucent or obscure sheets or film ... to achieve a translucent or obscure effect”. Depending on whether “or” is read as being disjunctive or not, translucent might mean either partially transparent (in distinction to obscure) or diffusing (as another word for obscure);

page 41: the first paragraph explains that:

“The invention has so far been principally described in relation to transparent materials. However, the invention is also applicable to translucent materials,

where it is required to create a different image from one side than the other side of a translucent panel that can still transmit light, for example as commonly used in Japanese style room partitions.”

I must admit that I do not find this passage in itself very helpful in resolving the dilemma over the term translucent.

page 56, last line: this merely refers to “... the remaining area being transparent or translucent”.

claims 3, 5 and 6: these speak of “transparent or translucent areas permitting any amount of light transmission”. This is not inconsistent with either meaning of translucent.

claims 3 and 5: these speak of “clarity of vision” being provided from one side of the panel to the other, in the context of a panel which may be of translucent material. This suggests translucency in the sense of having partial transparency not diffusing properties.

168. What should I conclude from all this? I am satisfied that Herschman does not use “translucent” in the sense of diffusing. However, construing the term as used in the patent is not as straightforward. I think it right to conclude, given the materials exemplified, for instance paper or fabric on page 1 line 15, and from the passage at the top of page 41, that it is intended in the patent to *include* diffusing and in that sense I find claim 61 potentially novel over Herschman. However, it is not to my mind clear that it is intended in the patent to *exclude* translucent in the sense of partially transparent. In particular I note that claims 3 and 5 of the granted patent refer to providing “clarity of vision” in panels having transparent *or translucent* areas. This seems to me to be on all fours with the reference in Herschman to “a clear image” quoted by Mr Birss; and to point to a broad interpretation of translucent in the patent.
169. Mr Birss has submitted that if there is any doubt, the amendment should be allowed on the grounds that these proceedings are concerned with amendment rather than validity, and he is right up to a point - my decision here will not prevent this argument being run in any future attack on validity. However as noted above he has also accepted that when determining novelty it is generally possible to construe documents and reach a decision without the need for evidence. Bearing all of this in mind, and in particular the absence of any definition of translucent in the patent, and the references in the patent to providing clarity of vision, it seems to me that it is right to place a broad interpretation on translucent as used in the patent, and in consequence I conclude that Mr Birss has not discharged the onus on him to refute Mr Davis’s attack on novelty. I find therefore that as it currently stands revised claim 61 is not novel over Herschman.
170. If I am wrong in giving a broad interpretation to “translucent” in the patent and hence finding the claim to lack novelty, then the question arises as to whether or not claim 61 is inventive over Herschman. Although the point was not argued to any depth at the hearing, in Mr Davis’s schedule objection is taken on the grounds that “It is not understood how a mere limitation to translucent can be inventive as no distinction of significance has been advanced between transparent and translucent. In particular this is so because transparent and translucent are really relative terms ...” Mr Birss responded that Herschman teaches away from “translucent” in that it is aimed at producing

something that you can see through. I note that this argument is again predicated on construing translucent as diffusing in the patent but not in Herschman, and given that interpretation I think the argument is valid. On the other hand given the difficulty there has been in these proceedings in distinguishing one meaning of translucent from another, and given that there are really only two choices of meaning anyway, the question arises as to whether an inventive step would be involved in exploring the alternative meaning, a meaning which, in Mr Birss's own submission, is the more obvious one to take.

171. Mr Birss however argued that evidence would be necessary to make the case, and having carefully considered all the argument and evidence before me on the point, I have to say that I am not persuaded that the case for lack of inventive step, against claim 61 if translucent is construed narrowly has been fully made. Again this does not preclude the argument being run in any future attack on validity.
172. Revised claim 62 which is appendant only to claim 61 claims paper for the translucent material, and is objected to by Clear Focus as lacking inventive step. However, I am not persuaded Clear Focus have made their case on this point for reasons similar to those I have mentioned in relation to the obviousness attack against claim 61. Its fate is therefore really linked to that of claim 61.

Claim 63

173. Revised claim 63 reads:

“63. A panel as claimed in any of Claims 1 - 30, 39, 41 - 46 or 50 - 62, wherein said silhouette pattern is a pattern of discrete straight parallel lines.”

174. Clear Focus has objected that this claim is completely without basis; Contra Vision has cited Figures 14 to 16 and the passage at page 47 line 18 to page 49 line 8 of the granted patent as providing the requisite support.
175. Mr Birss argued that this passage describes “horizontal lines” and that it follows from this that the lines are discrete, straight and parallel. He also referred me to the top of page 27 where there is a reference to “a silhouette pattern of continuous straight or curved lines”. Mr Davis argued that there is no explicit disclosure of discrete or of parallel or of the two in combination.
176. It seems to me that the reference on page 27 clearly provides support for straight lines, but not for discrete nor for parallel, since the wording would fit a set of straight lines that converge. The key question remains then how to interpret the description of Figures 14 to 16 as having “horizontal lines”, or more particularly how the skilled man would interpret this.
177. As pointed out by Mr Davis these figures show panels in cross-section with lines in cross-section spaced from one another. “Horizontal” taken literally at its dictionary definition of “parallel to the horizon” would then it seems to me inevitably describe spaced, straight lines parallel to the horizon and therefore to each other; and this it seems to me is how the skilled man would interpret the teaching of this part of the patent. He might attach other interpretations to the teaching as well, but not to my mind at the expense of the meaning

set out in claim 63. I find no objection therefore to claim 63 on the grounds of lack of support.

178. Mr Davis also argued at the hearing that claim 63 insofar as it is dependant on claim 1 is not distinguished from Morimoto, and insofar as it is dependant on claim 61 at least is not distinguished from Herschman. I have already found claim 1 to be distinguished from Morimoto, so I do not need to pursue that point. However I have found that claim 61 is not novel over Herschman. Herschman shows a grid comprising intersecting sets of discrete straight parallel lines and therefore arguably reads on to claim 63. I conclude therefore that insofar as claim 61 is not novel over Herschman, nor is claim 63. The consequence of this however is no more than that, if claims 61 and 62 fall, then claim 63 insofar as it is dependant on claim 61, would fall also, which I note would be the case whatever.

Conclusions and next steps

179. Having carefully considered all of the evidence and argument before me, I have found adversely in respect of claims 3, 5, 6, 21, 22, 51, 55, 57, 59, 60, 61 and 62 as proposed on various grounds, as indicated in the body of this decision. I therefore refuse the revised request to amend.
180. Contra Vision has already had two opportunities to propose amendments and I am not minded to grant it a third, open-ended opportunity. As I indicated at the hearing however, I am prepared to sanction further tightly limited amendment, “adjustments” as I called them, without taking any further submissions. I understood both Counsel to be content with that course, recognising as I do the need to bring these protracted proceedings to a close.
181. I am satisfied that such limited further amendment would meet the outstanding matters in respect of claims 3, 5, 6, 21, 22, 57 and 59 as follows:
- in claims 3, 5,6, 21 and 22, delete “or translucent”
 - in claim 57, insert “PVC” between “cling” and “film”
 - in claim 59, amend “polyvinyl butyral material” to read “polyvinyl butyral film”.
182. Having found that:
- the proposed amendment to claim 51 does not cure the stated defect in that it does not serve to distinguish the claim over the prior art, specifically Morimoto, and
 - the proposed amendment to claims 55 and 60 adds new matter in contravention of section 76,

it seems to me reasonable at this stage of the proceedings that all three of these claims should be deleted.

183. I have also found claim 61 not to be novel over Herschman because of the meanings to be

read into the term “translucent” in the patent. Mr Birss stated that “reduced transparency is not what our patent means by translucent”, but the problem is that this is not clearly stated in the patent. Neither is it immediately clear what amendment might be made which deals with the issue and would manifestly not give rise to a debate about compliance with section 76. For example, inserting into the specification a definition of “translucent” which limited it to the diffusing meaning might be expected to prompt a debate about support, intermediate generalisation and added matter. In addition, I am bound to repeat the observation that claim 61 as it currently stands is in fact claim 1 of the granted patent from which the words “transparent or” have been deleted: that is, it is claim limited to translucent panels. Contra Vision has had two bites at the fundamental purpose of this amendment application, namely to distinguish claim 1 as granted from certain prior art. Claim 61 is not very far from that original claim 1 despite those two bites. I do not think it unreasonable in the circumstances for Contra Vision not to be given a further open opportunity in respect of this claim. It seems clear though that incorporating claim 62 into claim 61 would differentiate it inventively over Herschman. I am therefore prepared to allow that further amendment, or the deletion of claims 61 and 62 entirely, but no other in respect of these two claims.

184. Amendment consequent on the above is also required to be made: to the numbering and appendancies of the claims; and to the consistency clauses in the description, but only the minimum strictly necessary to correct inconsistencies with the amended claims.
185. **I allow Contra Vision two months from the date of this decision in which to submit a further proposal corresponding to that currently on the table but in which the further amendments set out in paragraphs 181 to 184 above have been made. If it does not, I shall refuse the whole application to amend.**

Costs

186. After some debate, Counsel agreed at the hearing that any costs award should be based on the published Patent Office scale, taking into account the outcome at various stages of these proceedings. The decisions representing these stages comprise that of 3 March 2000 following a hearing, in which I refused the request by Contra Vision to amend on the grounds that some of the proposed amendments were not acceptable, and three decisions on the papers - that of 13 April 2000 where Contra Vision was successful in a request for an extension of time to appeal, of 7 November 2000 where Clear Focus was unsuccessful in a request that the application to amend should be refused outright and Contra Vision required to launch fresh amendment proceedings, and of 6 September 2001 where Clear Focus was unsuccessful in a request to file further evidence and to have the revised proposal advertised.
187. Mr Davis suggested that all of this could be taken as representing a draw overall. Mr Birss did not dissent from this submission, and I see no reason to disagree with it, particularly in view of my mixed findings above. I therefore regard the costs question as even and make no order as to costs.

Appeal

188. On 1 April 2003, a new Part 63 to the Civil Procedure Rules came into force. As a result,

the period for appealing against substantive decisions of the comptroller is no longer prescribed at six weeks as it was under Practice Direction 49E, but is now governed by Part 52 of the Civil Procedure Rules, specifically rule 52.4. Under the terms of that rule, any appeal must be filed within 14 days after the date of the decision, unless the comptroller directs a different period. Since the present decision follows so closely on the heels of the change in the Civil Procedure Rules, and results from a hearing held before it, I believe it is right in this case that a longer period for appeal should be allowed. **I therefore direct that any appeal against this decision shall be filed within 28 days from the date of this decision.**

Dated this 10th day of April 2003

S N DENNEHEY
Divisional Director, acting for the comptroller

THE PATENT OFFICE