Neutral Citation Number: [2011] EWCA Civ 303

Case No: A3/2010/1274

IN THE HIGH COURT OF JUSTICE
COURT OF APPEAL (CIVIL DIVISION)
ON APPEAL FROM THE CHANCERY DIVISION
PATENTS COURT
The Hon Mr Justice Floyd
[2010] EWHC 660 (Pat)

Royal Courts of Justice Strand, London, WC2A 2LL

Date: 29/03/2011

#### **Before:**

## THE RT HON LORD JUSTICE WARD THE RT HON LORD JUSTICE JACOB

and

### THE RT HON LORD JUSTICE PATTEN

Between:

Schütz (UK) Ltd - and -Werit (UK) Ltd **Appellant** 

Respondent

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Mr Richard Meade QC and Miss Lindsay Lane (instructed by Messrs SNR Denton UK LLP) for the Appellant
Mr Simon Thorley QC and Mr Thomas Mitcheson (instructed by Messrs Hogan Lovells International LLP) for the Respondent

Hearing dates: 9 and 10 February 2011

# Judgment

#### **Lord Justice Jacob:**

- 1. The exclusive licensee of EP (UK) 0 734 947 (the "Patent"), Schütz, appeals Floyd J's dismissal of its infringement claim against Werit, ([2010] EWHC 660 (Pat)). Werit cross-appeals the judge's finding that the Patent is valid. The patentees, Protechna, are formally parties to the proceedings (and hence bound by the result) but have taken no part.
- 2. The Judge had a number of issues to decide (including infringement of another patent). Most (including a dispute about another patent, No. 0 370 307) have now fallen by the wayside. We were left with three points, namely:

- a) whether the Patent was invalid for insufficiency or was so ambiguous that it could not be infringed;
- b) Whether the Patent was invalid for added subject matter; and
- c) Whether, if valid, what Delta does, amounts to an infringement within the meaning of s.60(1) of the Patents Act 1977 (corresponding to Art. 25 of the Community Patents Convention 1989). I call this the "Making?" point.

Although '307 (which the Judge held valid but not infringed) is no longer directly in issue before us, the first of the validity points was the same for that patent as for the Patent. The Judge dealt with the point in the context of '307 rather than this Patent, so it is necessary to refer to '307.

3. The first two points have no general importance – they concern only the Patent. The Making? point (which both sides called the "main point") is of more general application. It of course only arises if the Patent is valid, so I consider the cross-appeal about that first.

#### The Background

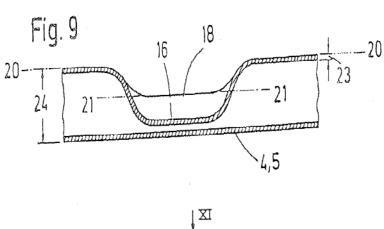
- 4. The Patent is for an intermediate bulk container (IBC). An IBC is a large (about 1000 litres, so about a metric tonne or more) container used for the transport of liquids. They have to be able to withstand the tough conditions of transport they must be leak proof, capable of being stacked in threes or fours (so the bottom one may have about 6 tonnes on it), capable of withstanding prolonged or violent vibration and withstanding the forces caused by the liquid within sloshing around.
- 5. Before the date of the Patent, IBCs of a two-part construction (ignoring the pallet) were well known. They consisted of a cage into which a large plastic container ("bottle") was fitted. The bottle had to fit the cage well obviously if it could "rattle around" the cage would not provide protection and the walls of the bottle would not be supported. The general idea is shown by the prior art IBC made by Sotralentz and Mauser which looked like this:

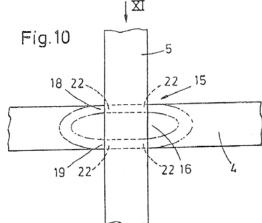


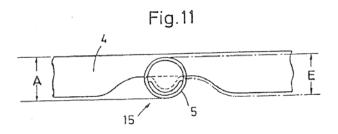
- 6. IBCs are used for a wide range of types of liquids. Sometimes the bottle cannot be reused because it contains residues of a toxic liquid; in other cases the bottle may become somewhat damaged. The upshot is that a cage has more life than a bottle we were told that on average the useful life of a cage is about five times that of bottles.
- 7. Thus it is that people, called "reconditioners", engage in "re-bottling" or "cross-bottling" used IBCs. In either case the old bottle is removed, any damage to the cage repaired and a new bottle is fitted within the cage. "Re-bottling" is a term of art meaning replacing the bottle with a fresh bottle from the original manufacturer, whilst "cross-bottling" means replacing the bottle with a bottle from a different source. Reconditioners offer these products to the market in competition with the products of the original manufacturers.
- 8. Opinion in the industry is divided about cross-bottling. Because the bottle is not specifically designed for the cage, the "fit" is not necessarily as good as with a bottle from the original manufacturer. For instance stabilising loops in the top of the bottle may not match with bars on the cage, or the bottle may not fit in such a way that it will drain properly without tipping.
- 9. Despite the divided opinion about cross-bottling, there is clearly a market for cross-bottled products. Schütz objects to its cages being used by cross-bottlers. Apart from the effect caused by competition, Schütz says it has a concern that publicity about any accident with a cross-bottled product made with one of its cages might rebound on its reputation.
- 10. In this case in particular, Werit sells bottles for IBCs to a company called Delta, a reconditioner. Delta buys discarded Schütz IBCs, removes and discards the original Schütz bottles, makes any necessary repairs to the cage, replaces them with Werit bottles and offers the resulting IBC to the market in competition with Schütz. It is common ground that if Delta thereby infringes Patent, then so also does Werit.

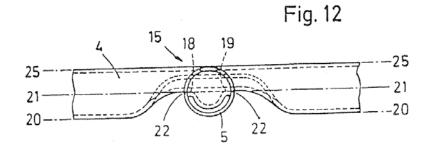
#### **The Patent**

- 11. The Patent cross-refers to the priority document for '307 and is closely related to the invention there disclosed, also of course disclosed in '307.
- 12. '307 was the first disclosure of an IBC having a cage made from tubes as opposed to solid rods. It says advantages are obtained thereby, namely that the cage (called a "grid box container") "saves weight and achieves substantially higher stability." The particular form of crossover connection between the tubes is said to facilitate "an optimum connection ... by resistance pressure welding." The crossover connections were said to be "distinguished by a high resistance to external forces [which it was agreed meant forces on the cage from the outside] as well as to the internal forces arising from the contents [i.e. caused by sloshing].
- 13. At the crossover points the tubes are flattened (the claim says "trough-like double-walled recesses"). Figures 9-12 show this and how the flattened portion of one tube is placed at right angles against the flattened portion of another.







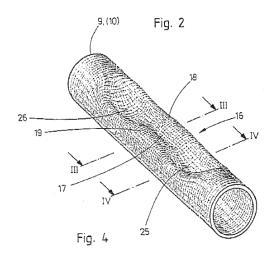


- 14. As shown the cage has a flush grid surface the tubes are all in the same plane. That was feature [F] of claim 1:
  - [F] and in that the grid rods are so connected together by resistance pressure welding of the four contact locations at each crossover point that the rods have common tangential planes inside and outside.

The italicised portion meant a flush grid surface.

- 15. The actual Schütz cages do not have that feature. The outer tubes (diameter 18mm) project rather a lot -7.5 to 10 mm. The Judge held that they projected too far to fall within feature [F]. Hence there was no infringement of '307. There is no appeal from that.
- 16. However before the Judge, Werit took another point of non-infringement of '307. This was about feature [E]:
  - [E] and, at each crossover point between the longitudinal edges of the indentations of two grid rods lying one over the other at right angles, there result four contact locations disposed in a plane, each with a build-up of metal corresponding to four times the grid rod wall thickness,
- 17. The Judge rejected that point. Claim 1 of the Patent has effectively the same feature, though the wording is somewhat different. It is common ground that the Judge's construction of [E] in '307 is equally applicable to the construction of the corresponding feature in the Patent. Werit challenges that construction albeit in the context of the Patent rather than '307.
- 18. With that preliminary I turn to the Patent. I can gratefully adopt the Judge's description:

- [22] 967 is also concerned with IBCs. The starting point is the weld joint in the cage of the '307 patent. The weld in this joint is said to be subject to static bending stresses because of stacking of containers and vibration during transport. The object of the invention is stated to be to increase the durability of the joint by relieving the stresses on the joint. The patent explains that this can be achieved by introducing a dimple on either side of the weld and a central raised portion. The idea is that the dimpled portions create more readily bendable portions, thus relieving the stress on the weld itself.
- [23] Everything is shown in Figure 2 which is a perspective view of the configuration:



Claim 1 is in the following form (again without numerals and with added reference letters):

- [A] Pallet container for the transporting and storing of liquids, having a flat pallet, an exchangeable inner container made of plastic material with an upper, closable filler opening and a lower emptying device and also, surrounding the inner container, one outer sleeve which consists of vertical and horizontal lattice bars made of metal which support the plastic inner container filled with liquid,
- [B] the lattice bars which are configured as tubes being indented at the intersection points to form trough-like, double-walled recesses extending in the longitudinal direction of the lattice bars
- [C] in such a manner that at each intersection point between the longitudinal edges of the recesses of two lattice bars lying perpendicularly one above the other there arise four contact points with a material accumulation respectively corresponding to the quadruple lattice bar wall thickness, and the four contact points of the two lattice bars being welded together at the intersection points

- [D] characterised in that the trough-like recesses of the vertical and horizontal lattice bars have a central raised part extending across the cross-section of the recesses,
- [E] two lattice bars respectively lying one above the other at the intersection points are welded together at the four contact points of these raised parts and the incisions of the recesses of the lattice bars adjacent on both sides to the raised part
- [F] with the contact and weld points form restrictedly elastic bending points with a reduced bending resistance moment relative to the raised part for relieving the weld joints at the intersection points upon application of static and/or dynamic pressure on the lattice sleeve.
- [25] The part of feature [D] which requires the central raised part to "extend[ing] across the cross-section of the recesses" was added in the course of prosecution, and is derived from the figures rather than any particular words in the specification. It forms the subject of the objection of added matter.

#### Point (a) The construction of feature [C]

- 19. The disputed language is "material accumulation respectively corresponding to the quadruple lattice bar wall thickness." The corresponding language in '307 is "build-up of metal corresponding to four times the grid rod wall thickness." It is agreed they are equivalent.
- 20. Mr Thorley contended that this phrase does not cover the Schütz cage or, alternatively is so ambiguous or meaningless that it is unenforceable: one simply cannot tell whether a product falls within it (see the principle approved in *Scanvaegt v Pelcome* [1998] FSR 786 sometimes going by the name of the Pinocchio point).
- 21. More specifically Mr Thorley contended that the phrase meant the thickness of the weld must be four times the wall thickness. "Where", he asked of the Schütz product, "is there anything which could be described as quadruple wall thickness?"
- 22. Mr Thorley had to accept none of the drawings of the Patent or '307 shows a weld of four times the wall thickness. The thickness of each weld is two wall thicknesses. So his submission involved this: that the skilled reader would understand the language used to exclude the very embodiment of the invention described in detail in the Patent. That, the reader would surely think, is highly improbable. Mr Thorley recognised the force of that. He was reduced to submitting that the reader would understand the drawings to be merely schematic. Yet there is nothing which so suggests. Nor is there any reason why a purely schematic drawing would not be able to illustrate a four wall thickness weld.
- 23. Nor does either specification assist Mr Thorley. The specification (of '307) says ( $3_{23-37}$ ):

At the crossover points 15, the vertical and horizontal grid rods 4, 5 are drawn in to form trough-like, double-walled indentations 16 extending in the longitudinal direction of the rods, such that the two curved longitudinal edges 18, 19 of the wall 17 of the indentations 16 in the tubular rods 4, 5 run between a tangential plane 20-20 and a parallel intersecting plane 21-21 of the grid rods (Figure 9). This formation of the grid rods 4, 5 has the result that, at each crossover point 15, four contact locations 22 result, each with a build-up of material corresponding to a fourfold wall thickness 23 of the grid rods 4, 5 (Figures 10 to 12), between the longitudinal edges 18, 19 of the indentations 16 of two grid rods lying over each other at right angles, the said contact locations 22 lying in one plane, namely the intersecting plane 21-21.

Not only do the very drawings referred to not show a fourfold wall thickness of weld, but the description describes how the fourfold wall thickness is achieved, namely simply by having the indentations on the rods at the cross-over points. At those points you do indeed get four walls, though the outer ones do not touch the inner two (which of course do touch). You have all four walls contributing to the strength of the join.

- 24. Moreover there was no expert evidence to support Mr Thorley's construction. Werit's expert could only suggest two ways of making the joint which conformed to that construction. Both of which he acknowledged to be impractical (Judgment [60-61]). The skilled reader would not readily expect that the patentee intended by the words used to specify that which is impractical.
- 25. Furthermore Mr Thorley did not offer any real purposive reason supporting his construction. He tried, suggesting that if the tube were indented sufficiently, the wall of the indentation would meet the back wall and thus provide greater strength. But that is not what the Patent (or '307) says and it was not even shown on the evidence to be practical to produce an indentation as deep as that.
- 26. Accordingly I think the skilled man would be very strongly inclined to reject Mr Thorley's construction. The Judge did so, saying:
  - [63] ... I do not think that the claim is requiring anything more than the bringing together at the weld points of the two double- walled sides of the troughs. If this is done, the contact for the creation of the projection weld is created. There may, of course, come a point where the troughs are not drawn in sufficiently for it to be possible to say that there is a double-walled indentation, or where the lack of drawing-in prevents the feature of common tangential planes from being realised. But this question depends on those features. The quadruple wall thickness feature requires only the bringing together of the four walls at the weld.
- 27. I think that must be right. The wording would be read as describing what you get when you cross two indented tubes at that their points of indentation. You get four

"kissing points". At those points it is not a misuse of language to say that you have a "build up" of metal. You have four tube walls, rather than the two walls you have elsewhere. The claim does not say, as Mr Thorley was in effect suggesting, that you have a weld thickness of four times wall thickness.

28. That construction is not ambiguous, so Mr Thorley's fall-back Pinocchio point does not come into play.

#### Point (b) Added Matter?

- 29. The point of the Patent, as compared with '307, is to have a more refined indentation. An IBC in accordance with claim 1 is said to increase the durability of the weld joints "by relieving the static and dynamic stresses during service."
- 30. Figure 2 shows how this is done. Instead of being flat the indentation has a raised portion in the middle (17) (or lower portions (25) at the sides). Feature [D] specifies this:
  - [D] characterised in that the trough-like recesses of the vertical and horizontal lattice bars have a central raised part extending across the cross-section of the recesses,
- 31. Now the specification as filed disclosed figure 2 and that there should be a "central raised part" of the recesses. It did not explicitly say that the central raised part should extend across the cross-section of the recesses.
- 32. Mr Thorley suggests that "extending across" is an extra requirement not disclosed as a generality in the specification as filed. So there is an illegitimate "intermediate generalisation" of the type described by Pumfrey J in *Palmaz's Patents* [1999] RPC 47 at p.70. The Judge rejected that, tersely saying:
  - [168] It is true that no particular attention is drawn to the requirement of the extent of the raised portion in the application as filed. But the objection of added matter does not arise every time a feature is taken from the body of the specification and placed in the claims. If that were so very few amendments of this kind would ever be allowed. The objection comes when one strips the feature of its context. I do not see that this can be said to have happened in the present case. The raised portion was always a feature of the claim: the amendment adds more detail, but the context is identical.
- 33. I cannot see anything remotely wrong with that. There simply is nothing new added by the "extending across" words. They merely make explicit what is shown in the Patent as filed. There is no new matter.

#### Point (c) The Making? Point.

34. Feature [A] of Claim 1 of the Patent is to:

Pallet container for the transporting and storing of liquids, having a flat pallet, an exchangeable inner container made of plastic material with an upper, closable filler opening and a lower emptying device and also, surrounding the inner container, one outer sleeve which consists of vertical and horizontal lattice bars made of metal which support the plastic inner container filled with liquid,

This can be paraphrased: an IBC consisting of three items: a pallet, a bottle and a cage. The remaining features of the claim spell out the details of the cage. It is those features which make the claim novel and inventive. There is nothing special about the pallet or bottle, save that the bottle co-operates with the frame – the frame is required to surround the bottle. The interaction of frame and bottle is what gives the IBC as a whole its strength and stability. The bottle is expressly said to be "exchangeable."

35. The question is whether Delta, when it puts a Werit bottle in Schütz cages infringes. If does, it is common ground that Werit also infringes.

#### The Legislation

The Domestic Legislation

- 36. s. 60(1) of the Patents Act 1977 provides for what is commonly called "direct infringement." A person infringes if,
  - (a) where the invention is a product, he makes, disposes of, offers to dispose of, uses or imports the product or keeps it whether for disposal or otherwise.
- 37. s.125(1) laboriously provides:

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

- 38. And s.130 provides:
  - (6) References in this Act to any of the following conventions, that is to say -
  - (a) The European Patent Convention ["EPC"];
  - (b) The Community Patent Convention ["CPC"]
  - (c) ....;

are references to that convention or any other international convention or agreement replacing it, as amended or

supplemented by any convention or international agreement (including in either case any protocol or annex), or in accordance with the terms of any such convention or agreement, and include references to any instrument made under any such convention or agreement.

- (7) Whereas by a resolution made on the signature of the [CPC] the governments of the member states of the European Economic Community resolved to adjust their laws relating to patents so as (among other things) to bring those laws into conformity with the corresponding provisions of the European Patent Convention, the Community Patent Convention and the Patent Co-operation Treaty, it is hereby declared that the following provisions of this Act, that is to say, sections 1(1) to (4), 2 to 6, 14(3), (5) and (6), 37(5), 54, 60, 69, 72(1) and (2), 74(4), 82, 83, 100 and 125, are so framed as to have, as nearly as practicable, the same effects in the United Kingdom as the corresponding provisions of the [EPC], the [CPC] ... have in the territories to which those Conventions apply.
- 39. To this day I remain baffled, nay flabbergasted, by this convoluted and roundabout way of implementing the relevant provisions of the treaties. Dr Justine Pila has directed my attention to the debate about the change of language from the Treaties in the House of Lords:

Lord Chancellor (Lord Elwyn-Jones): "One point which was referred to by a number of noble Lords, including the noble Lords, Lord Lyell and Lord Alexander of Potterhill, was the desirability, where we are harmonising our own domestic law with the provisions of the Convention, that we should so far as possible use the same language. Of course, the difficulty we are in here is the difficulty of translation. I remember some time ago addressing the Council of Europe and I referred to the "common lawyers of the United Kingdom". This was translated as "les juristes très ordinaires du Royaume Uni"! So we do confront these questions of translation, but we are certainly prepared to examine the delicate question that was raised in regard to Clause 1 of the Bill as to the alternative words that were used there. But in principle, obviously, if we are going to apply the same law we should try to do our best to use the same language." HL Deb, 24 January 1977, vol 379, cols 313-314

It would seem that the Lord Chancellor at least was not aware that English was already an authentic language of the treaties. Quite why "our best" was not done remains a mystery.

#### The International Legislation

40. This is much shorter. The scope of protection is defined by Art. 69 of the EPC (I use the current version, as amended in 2000 because it is the applicable version, see s.130(6) Act)):

69(1) The extent of the protection conferred by a European patent ... shall be determined by the claims.

(I skip the bit about interpretation and the Protocol to Art. 69 which have no relevance here).

41. Direct infringement is defined by Art 25 of the CPC which reads (again I take the current, 1989, version – note that it makes no difference that no version of the CPC has ever been ratified or come into force as such):

Art. 25

Prohibition of direct use of the invention

A Community patent shall confer on its proprietor the right to prevent all third parties not having his consent:

(a) from making, offering, putting on the market, or using a product which is the subject-matter of the patent, or importing or stocking the product for these purposes.

The approach to the legislation

- 42. Neither side suggested that the domestic legislation means anything different from that in the Treaties. So s.60(1)(a) is a pointless re-write of Art. 25. The position as regards s.125(1) is a little more complex. The provision (particularly the bit about "unless the context otherwise requires") has no direct parallel in the Treaties. Yet s.125(1) is one of those provisions to which s.130(7) applies and thus is supposed to have the same meaning "so far as practicable."
- 43. What that must mean, therefore, is that so far as the Treaties do provide for the extent of protection of a patent, the same is intended to apply in the UK. That means that Art.69 of the Treaty is what matters, and nothing else.
- 44. We had some debate about whether the "context otherwise requires" a point considered by the Judge at [200]. I do not think it assisted one way or the other because the phrase forms no part of the basic, Treaty, provisions. It is the sort of sterile argument caused by the legislators failing to do "our best."

#### The question in this case

- 45. The upshot is simply this: does the act of putting a bottle into a Schütz cage, constitute "making a product which is the subject-matter of the patent" within the meaning of Art. 25 of the CPC. The subject-matter of the patent is an IBC covered by any of the claims because "the extent of protection is determined by the claims" (Art 69 of the EPC).
- 46. It should be noted that this is the only question. Although Delta is re-using Schütz cages, there is no question of their having any licence to do so. No express licence was ever pleaded. An implied licence was at one point pleaded but that defence was expressly abandoned before trial because, Mr Meade told us, Schütz put in evidence

showing that it made plain to the trade its vehement objection to cross-bottling and that its terms and conditions of sale forbade it.

United Wire

- 47. Both sides contended that the House of Lords decision in *United Wire v Screen Repair Services* [2001] RPC 24 was determinative of the case.
- 48. The Judge held that *United Wire* established that:

[197] In my judgment the correct approach is to ask whether, when the part in question is removed, what is left embodies the whole of the inventive concept of the claim. I think that Mr Meade's approach, with its emphasis on the form rather than the substance of the claim, is too mechanical, and leads to results which are contrary to principle.

He went on to hold that it was the cage which embodied the whole of the inventive concept of the claim. Hence, he reasoned, putting a new bottle into a cage was not "making" the patented article.

- 49. So did *United Wire* establish a "whole of the inventive concept" test? To determine that it is first necessary to understand its facts. The patentees had two patents. Drilling for oil requires the use of "mud" (in reality a quite expensive liquid) pumped down the bore for lubrication and other purposes. When it returns to the surface it contains drill bit cuttings which require removal before the mud can be re-used. Vibratory sifting machines are used for this purpose. These consisted of a frame fitted with a screen consisting of a mesh so-sized that the fluid passes through leaving behind the solids. The vibration induces the mud to flow through the screen and to transport the solids left behind across the screen and discharge them off the end.
- 50. The first patent (948) was for a special sort of "sifting screen assembly". It consisted of a frame to which two screens were glued at the edges of the frame. Both screens were tensioned but the upper screen was to be at a lower tension than the lower screen so that when the screen was vibrated the screens struck each other so as to clear or prevent blockages to produce a self cleaning effect. The second patent (715) was for an improvement: its idea was to use a flexible frame. When clamped in the machine, the necessary tensions in the meshes were produced. Prior to clamping the frame would bend under the tension. The result was that you could use a lighter frame than one which had to be rigid enough to withstand the ultimate tension.
- 51. The meshes wore in use they could wear out in a day. The defendant's activities consisted in taking the patentees' frames, stripping off the old, worn meshes, cleaning the frame and fitting new meshes. They sold the re-conditioned frames in competition with the patentees.
- 52. At first instance, Robert Walker J held there was no infringement. He said:

The decision of the Court of Appeal in the Solar case [[1977] RPC 537] is important for the principles which it states, not for the decision on its facts which (though not wholly dissimilar

from those of this case) were different in some important respects. The passages from the judgment of Buckley L.J. which I have already cited do appear to set quite a demanding standard (from the plaintiff patentee's point of view) before reconditioning moves beyond genuine and legitimate repair. This last point is less technical than many of the other issues in the case, but I have not found it an easy one. The question of degree is quite finely poised. But gathering some guidance in principle from the authorities already mentioned, I am narrowly persuaded that the defendants' reconditioning operations should be regarded as repairs, even though they are extensive and involve the replacement of the whole double mesh which is central to the inventive concept of 948. The frame is nevertheless an important part of the whole assembly. It is not insignificant, nor is it retained simply for show. It is retained because it is an essential component (on which the double mesh is pre-tensioned) and the screen's useful life is in that way prolonged.

- 53. Mr Meade submitted that Robert Walker J was in effect applying the "whole of the inventive concept" test used by the Judge here. He wanted to submit that because Robert Walker J's decision was reversed by the Court of Appeal which was upheld by the House of Lords. If Mr Meade were correct, therefore, he would be able to say that the test had been positively disapproved.
- 54. But I do not think Mr Meade is right about that. In his reasoning Robert Walker J described the meshes as "central to the inventive concept of 948" (the first patent). If the "inventive concept test" is applied, then the defendants were replacing the part which embodied it and ought to have infringed. Moreover if he had applied that test to the second patent (not separately discussed), then he would have found no infringement. For in that case one could say that the "whole of the inventive concept" really lay in the flexible frame. It was that which give the patent novelty and inventiveness over the 948.
- 55. In truth Robert Walker J was trying to find a line between alterations which merely amount to "repair" and those which went too far and amounted to "making". That is the test which he stated he derived from *Solar Thompson*.
- 56. So I turn next to the decision of the Court of Appeal, for this was expressly approved in the House of Lords. The leading and only reasoned judgment was given by Aldous LJ. Although he referred to pre-1977 (and hence pre-CPC/EPC) cases (which for that reason I do not go to), he founded his judgment on the language of s.60. The key paragraphs in his decision read as follows:
  - [25] The concept of implied licence in patent cases does not seem apt now infringement has been defined in the Patents Act 1977 which was an Act giving effect to European obligations. In any case it suffers from the deficiency that such a licence could be excluded by agreement or the circumstances surrounding the sale by the patentee. In my view the reason why genuine repair does not infringe a patent is that, as pointed

out by Lord Templeman and Lord Hoffmann, it does not amount to an infringing act. Section 60 states that a person infringes "if, but only if ... in relation to the invention without consent of the proprietor ... where the patent is a product, he makes ... the product." The invention is that specified in the claims (see section 125). Thus a person who carries out a repair, e.g. patching a tyre, will not infringe a patent for the tyre as he will not make the tyre. However a person will infringe the patentee's rights if he does, without the patentee's consent, an infringing act. Consent must mean contractual consent and it would not be right to conclude that a patentee who sells a product thereby consents to infringing acts being carried out. The disposal by a patentee results in exhaustion of his patent rights and therefore the owner of the article may do whatever he wants with it including having it repaired. But that does not mean that he has a licence to use the rights given to the patentee in section 60. It follows that acts as prohibited by section 60 are infringing acts whether or not they can be categorised as repairs. It is therefore better to consider whether the acts of a defendant amount to manufacture of the product rather than whether they can be called repair, particularly as what could be said to be repair can depend upon the perception of the person answering the question. Even so, when deciding whether there has been manufacture of the product of the invention, it will be necessary to take into account the nature of the invention as claimed and what was done by the defendant.

26 Mr Fysh supported the judge. He accepted that whether or not there had been manufacture or repair was a matter of degree. He drew attention to the fact that the frames were essential elements of the invention and the cost of replacing the meshes was relatively modest. All that Screen Repair had done was to prolong the life of the most substantial element of the screen assembly, namely the frame.

27 Mr Silverleaf submitted that Screen Repair had manufactured a screen assembly. He drew attention to the process carried out by Screen Repair which involved stripping a frame, sandblasting, re-coating with adhesive, supply of new mesh, tensioning and heating to cure the adhesive. That it amounted to manufacture of the assembly was clear when it was appreciated that the frame supplied was not normally returned. He submitted that what was done should be contrasted with the on-site repair made by filling up holes in the mesh with a rubber compound.

28 In my judgment Mr Silverleaf is correct. Screen Repair do, without the consent of United Wire, make a product of the invention. They prepare a frame obtained from an assembly made by United Wire. They then add two meshes and tension

them so that the whole assembly has the features of claim 1. In effect the steps taken by them are equivalent to the purchase on the open market of frames and then using them to produce an assembly. Of course the frames they use were made by United Wire, but unless it can be said that by the sale of complete screen assemblies United Wire had licensed the actions taken by Screen Repair, that cannot make the difference. No such licence can be implied as it would amount to a licence to manufacture rather than an exercise of a right to quiet enjoyment of a screen made by United Wire.

29 In my view, the judge came to the wrong conclusion. I accept, as he said, that the frame is an essential component part of the whole assembly, but that does not decide the issue. In the Dunlop case, the wires were also important and essential elements of the invention, but even so, there was infringement. To characterise the work done by Screen Repair as repair does not in my view decide the issue of whether they had manufactured the product of the invention. In the present case Screen Repair reconditioned or repaired a frame made by United Wire and re-used it to make an assembly as claimed in claim 1. That in my view amounted to infringement.

- 57. I have italicised the portion over which particular dispute raged. Mr Meade submitted that what Aldous LJ was saying mattered was whether the defendant was making the patented article. Mr Thorley, for Werit, submitted that the last sentence was by implication bringing in the Judge's "whole of the inventive concept" test. I do not agree. If that were right he could not have said or reasoned the way he did in paragraph 29.
- 58. That reasoning applies with equal force to this case. Adapting his language in [29] what Delta do is to recondition or repair (where necessary) a cage made by Schütz and re-use it to make an assembly as claimed in claim 1.
- 59. Turning now to the House of Lords decision, Lord Hoffman gave the leading speech, one with which all other members of the House agreed. So I turn to it first. Lord Hoffmann said:
  - [67] Aldous L.J., with whom the other Lords Justices agreed, said that in this case the defendants had made the product. They had repaired or reconditioned the *frame* and then used the frame to make a *screen* in exactly the same way as if they had bought the frames as components from a third party.
  - [68] My Lords, the point is a very short one and in my opinion the Court of Appeal was right.
- 60. Lord Hoffmann went on to discuss the suggested defence of implied licence, pointing out that it was an English law way of explaining why a patentee cannot complain when a patented product he has sold is passed on to third parties by his customer. As

he observes, in some countries the same result is achieved by a notion of exhaustion of rights.

61. He went on to say:

[70] Where however it is alleged that the defendant has infringed by *making* the patented product, the concepts of an implied licence or exhaustion of rights can have no part to play. The sale of a patented article cannot confer an implied licence to make another or exhaust the right of the patentee to prevent others from being made.

62. And then he pointed out that whilst "repair" might as a matter of acontextual language overlap with "making" it could not do so for the purposes of s.60(1)(a) (i.e. Art. 25). He said:

[71] Repair is one of the concepts (like modifying or adapting) which shares a boundary with "making" but does not trespass upon its territory. I therefore agree with the Court of Appeal that in an action for infringement by making, the notion of an implied licence to repair is superfluous and possibly even confusing. It distracts attention from the question raised by section 60(1)(a), which is whether the defendant has made the patented product. As a matter of ordinary language, the notions of making and repair may well overlap. But for the purposes of the statute, they are mutually exclusive. The owner's right to repair is not an independent right conferred upon him by licence, express or implied. It is residual right, forming part of the right to do whatever does not amount to making the product.

63. As regards the decision of Robert Walker L he said:

[73] ..... I think, with great respect to the judge, that he did not correctly identify the patented product. He said that the frame was an important part of the assembly and that the defendants had prolonged "the screen's useful life". It is quite true that the defendants prolonged the useful life of the *frame*. It would otherwise presumably have been scrapped. But the *screen* was the combination of frame and meshes pre-tensioned by attachment with adhesive according to the invention. That product ceased to exist when the meshes were removed and the frame stripped down to the bare metal. What remained at that stage was merely an important component, a skeleton or chassis, from which a new screen could be made.

- 64. Exactly the same applies here. Again adapting the language: that product [i.e. the IBC] ceased to exist when the bottle is removed. What remained at that stage was merely an important component from which a new IBC could be made.
- 65. Mr Thorley relied on a sentence in the previous paragraph of Lord Hoffmann:

[72] In Solar Thompson v Barton [1977] RPC 537 the Court of Appeal held that there was an implied licence to repair. But the juridical nature of the right to repair was not in issue. The debate was over whether or not the defendants had, as the plaintiff's counsel contended (at page 544) made a "new merchantable article". So the real issue was whether the defendants had made the patented product. Buckley L.J. quoted the remark of Lord Halsbury L.C. which I have already cited. He said that the question was one of fact and degree and said (at page 555) that the "cardinal question" was whether "what has been done can fairly be termed a repair, having regard to the nature of the patented article". The context shows that Buckley L.J. saw no difference between this question and the question of whether, having regard to the nature of the patented article, the defendant could be said to have made it. Speaking for myself, I prefer the latter formulation.

- 66. Mr Thorley suggested that by the words "having regard to the nature of the patented article" Lord Hoffmann was thereby bringing in, or at least allowing for, a "whole inventive concept" test. I cannot think he could have meant that so elliptically. Lord Hoffmann was never one for being less than explicit. The passage will not bear the suggested meaning.
- 67. Nor do I think Lord Bingham's speech contains anything to assist Mr Thorley. Firstly he expressly agreed with Lord Hoffmann. And secondly there is nothing in it which suggested a "whole inventive concept" test. He expressly held that the passage from Aldous LJ which I have italicised was correct and went on to say that the Judge had not concentrated his attention on whether the defendants had made the patented product. Again if the inventive concept test had been applicable the approach would have been wholly different.
- 68. Indeed if it had been applied, then it is difficult to see why re-webbing the flexible frames of the second patent would have amounted to infringement. The whole inventive concept of that patent over the prior art could be said to be to use a flexible frame. Floyd J suggested otherwise at [196] saying the *United Wire* inventions "did not reside wholly in the frame or wholly in the mesh". But I cannot see why that is true of the second patent which was all about a flexible frame for known meshes.
- 69. Accordingly I think that *United Wire* not only endorses the "making" test but excludes any additional "whole inventive concept" test.
- 70. This was made all the clearer in the course of argument before us. We asked Mr Thorley what the position would be if Delta made a frame according to claim 1 and fitted it with a Schütz bottle. Would that infringe? He initially agreed that it would. But the physical act of fitting the bottle into the cage is exactly the same as that complained of here. If it is "making" one way round, it must be "making" the other way round. Seeing the force of that he was driven to submit that putting a bottle in a cage so as to create an IBC was not "making" one. The submission only has to be stated to be rejected. If right it would mean that even Schütz never made IBCs.

71. That is all that it is necessary to say. But in deference to the arguments we heard I should mention some further points.

The uncertainty of the "whole inventive concept" test

- 72. Another reason for rejecting the "whole inventive concept" test is that in practice it is likely to be fuzzy and uncertain. How precisely do you ascertain it? Take this very case. The cage co-operates with the bottle in the complete IBC. It is the combination of both which is claimed. So what is the whole inventive concept? Just the cage? Or the combination?
- 73. Now it is true that sometimes it is handy to use "inventive concept" as an analytical tool. Thus it may be used as part of the *Windsurfing/Pozzoli* ([2007] EWCA Civ 588, [2007] FSR 37 at [23]) structured approach to the question of obviousness. Stages two and three of that are:
  - (2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;
  - (3) Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or the claim as construed;

But identifying the concept is not a necessary part of the analysis – you can just work on the claim and should do so if identifying the concept is not agreed or helpful. After all it is "the claimed invention which has to involve an inventive step" (*per* Lord Hoffmann in *Conor v Angiotech*, [2008] UKHL 49, [2008] RPC 28 at [17]).

- 74. And sometimes one perforce has to try to distil an inventive concept out of a document simply because there are no claims as in the case of a dispute about entitlement see e.g. *Markem v Zipher* [2005] RPC 31.
- 75. But it has been a long time since "whole inventive concept" or anything like it has had a part to play in the law of infringement. It plays no part in the scope of protection (Art. 69 EPC) and no part in the definition of infringing acts (Art.25 CPC).
- 76. Another way in which the test is uncertain is that it would depend on what piece of prior art you took into account. For in a general sort of way the "inventive concept" is the difference between the patented idea and the old idea. That depends on what the old idea was.

#### Canon

77. Next there is the decision in *Canon v Green Cartridge* [1997] AC 728, only a few years before *United Wire*. Canon was complaining in Hong Kong about a defendant who made copies of Canon cartridges for Canon printers. Under the law as it stood there, the copy cartridges were regarded as indirect copies of Canon's technical drawings for their cartridges. So Canon alleged infringement of copyright. Originally the defendant had merely refilled used Canon cartridges (about which Canon had not complained) but then he branched out by copying the cartridges themselves. The defendant relied upon a so-called "spare parts" exception (based on *British Leyland v* 

- Armstrong [1986] AC 577). It was held not to apply, not least because fitting a new cartridge is not repair.
- 78. The significance of *Canon* is that it explicitly addresses what was obviously a concern of the Judge in the present case that if there was infringement Schütz would, as a commercial matter, have a monopoly in unpatented replacement bottles for their cages.
- 79. This essentially economic concern is not really an apt matter for patent law. In *Canon* Lord Hoffmann dealt with a similar argument in this way:

It is not necessary for the purposes of this appeal to form any view on whether the existence of copyright is capable of giving the plaintiff such economic power in the aftermarket as to be anticompetitive and contrary to the public interest. It is sufficient to recognise that the question is a complicated one which cannot be solved by broad generalisation. The courts are ill-equipped to pronounce upon such matters, which often involve questions of economic policy and are generally left to specialised bodies such as the Monopolies and Mergers Commission. [p.738]

80. Apply that here. Does it really matter if Schütz has a monopoly in replacing bottles for its cages? One cannot really say whether there is any public interest in the nature of freedom of competition seriously involved. If anything it would seem not. Schütz's actual customers would appear to be largely indifferent concerning the activities complained of. They simply want the used IBCs off their premises. They are not people who want their IBCs "repaired."

Wider considerations: sub-claims and consumables

- 81. In relation to the "whole inventive concept" approach, discussion took place about patent claims which include within them features which one could fairly say have nothing to do with the invention. One example was the case where a man invented a new steam whistle. No doubt he could have a patent covering the whistle, but what if he included a sub-claim (necessarily narrower so novel and non-obvious) to a battleship fitted with the whistle? I discussed some of the difficulties of this sort of claim in [1999] EIPR 40, but not in relation to the current "making?" point.
- 82. Another example, which brought the "economic" point sharply into focus, was the case of a patent for a new photocopier. Suppose a sub-claim for the new inventive machine when loaded with paper. You would only "make" the invention of that claim when you loaded the machine. So, it was said, the patentee could insist on ultimate consumers using his paper.
- 83. Yet another example was that of the Judge, a patent for a tennis racquet with a novel and inventive frame. "Could the patentee prevent re-stringing?" asked the Judge.
- 84. Generalising from these examples Mr Thorley submitted that patent law should not and did not go that far. And that the way to rein it in was via the whole inventive concept rule.

- 85. Mr Meade conveniently called this general problem the "restringing problem". He provided a variety of answers. First he suggested that the Patent Office required to refuse a patent claim which is not "supported by the description" (Art. 84 EPC) would refuse a claim to a battleship when fitted with the new whistle. I am not convinced of this. The claim would be novel, inventive and enabled. In any event it is difficult to suppose that the Office would spot a more subtle case of a claim including an "extra" and the law would have to cope with that. Indeed on one view this very case is an example: if you say the invention is really only the cage, then the claim to the IBC with a bottle is a claim which includes the "extra."
- 86. More generally he suggested that some cases of re-stringing would indeed be covered by licence, express or implied, or perhaps exhaustion. He submitted, for instance, that a sale of a tennis racquet with instructions on how to restring (or even specifying the sort of strings that would be suitable for re-stringing) would amount to a licence. So also if the product is sold into a market where there is a well-known custom of restringing. The same would go for the sale of a photocopier users would expect to be able to re-load with whatever paper they liked especially since the manual would probably provide instructions for tray filling.
- 87. Moreover submitted Mr Meade, if manufacturers did insist on consumers buying consumables only from them, there could be real market resistance. It was a question of economics and the market place, not a matter of patent law.
- 88. Further, of course, competition law itself may have a part to play. A patentee of a really important invention who tried to control the use of ordinary consumables might be abusing a dominant position.
- 89. Mr Meade accepted that *United Wire* appeared to say that implied licence "had no part to play" when one was considering "making" (see per Lord Hoffmann at [70]). But, he submitted, that should not be taken as a complete generality. A lot would depend on the facts of a particular case. Lord Hoffmann's statement of "no part to play" was immediately followed by this sentence: "The sale of a patented article cannot confer an implied licence to make another or exhaust the right of the patentee to prevent others from being made." That does not necessarily preclude such a licence if one has more than a mere sale, further facts which point to a licence. For instance further facts may result in a different result for re-making a patented tennis racquet by re-stringing it and remaking a United Wire frame by re-meshing it. In both cases there would be a making of the patented article but in the former it would be a licensed re-making whereas in the latter not. We did not have to consider the problem in a vacuum – it is clear by reason of the withdrawal of any defence of licence that it does not arise here.
- 90. I accept this last submission. It is not necessary for us to provide any general answer to the "restringing problem". It suffices to say that Delta, when it fits Werit bottles into Schütz cages, is making IBCs which fall within the Patent and are doing so without the licence of Schütz. That they themselves on their own website say they are "re-manufacturing" says it all.

#### The German Cases

- 91. Given that I think this case is determined by *United Wire* the German cases to which we were referred cannot change the position. I will therefore discuss them only very briefly. There were *Impeller Flow Meter*, *Case* No X ZR 48/03, 4.5.2004 (BGH Bundesgerichthof); *Wheel Tread*, Case X ZR 45/05, 3.5.2006 (BGH); and *Pipette System* Case X ZR 38/06, 27.6.2007, [2007] GRUR vol. 9 p.769 (BGH).
- 92. None of these three cases has a direct parallel with the present case because in none of them did the defendant take the product of the patentee, "re-manufacture it" and sell it in competition with the patentee. They were all about whether ultimate consumers of the patentee's product could, by replacing parts, prolong the life of the product. The German approach is clearly not the same as here, as the Judge rightly held at [195]. Elements of implied licence, expectation of the consumer and so on enter into what appears to be a multi-factorial consideration.

#### **Conclusion**

93. I would allow the appeal and dismiss the cross-appeal.

#### **Lord Justice Patten:**

94. I agree.

#### **Lord Justice Ward:**

95. I also agree.