Contour Optik Inc and Others v Pearl's Optical Co Pte Ltd and Another [2002] SGHC 238

Case Number : Suit 147/2000, 371/2001

Decision Date : 14 October 2002

Tribunal/Court : High Court

Coram : Lee Seiu Kin JC

Counsel Name(s) : Steven Seah and Kelvin Tan (Drew & Napier LLC) for the plaintiffs; Wong Hur Yuin (Wee Swee Teow & Co) for the 1st defendant in S 147/2000; Alban Kang, Chow Kin Wah and Koh Chia Ling (Alban Tay Mahtani & de Silva) for the 2nd defendant in S 147/2000 and 1st defendant in S 371/2001; Wong Siew Hong and Selvi Singaram (Infinitus Law Corporation) for the 2nd defendant in S 371/2001

Parties : Contour Optik Inc; Dalmink Fashion Products 1989 Pte Ltd; Chao Richard Hao-Chih — Pearl's Optical Co Pte Ltd; Peng Lian Trading Co (a firm)

Judgment

Cur Adv Vult

GROUNDS OF DECISION

1 By order of Court of 14 June 2001 Suit No 147 of 2000 and Suit No 371 of 2001 were consolidated, and they were tried before me. At the end of the trial and after hearing submissions from counsel, I reserved judgment on 4 October 2002. I now give my judgment and the written grounds thereof.

The Patents in dispute

2 The actions were brought by the Plaintiffs under s 67 of the Patents Act ("the Act") in respect of the following patents ("the Patents") granted by the Registry of Patents, Singapore:

(i) Patent No 47151, granted on 16 November 1998 ("47151 Patent"); and

(ii) Patent No 60169, granted on 17 August 1999 ("60169 Patent").

3 The Patents are both in respect of spectacle frames, comprising a primary and an auxiliary frame. The primary frame is for housing prescription lenses while the auxiliary frame is for tinted lenses. The latter is widely known as clip-on sunglasses. The inventions comprised in the Patents are the methods by which the auxiliary frame is attached to the primary frame. In both Patents, magnets are used for this purpose. In the 47151 Patent, a pair of magnets is mounted in the temple area of the primary frame near the hinges and a second pair is mounted in the corresponding area of the auxiliary frame. This will be referred to as the temple-mounted frame. In the 60169 Patent, one or two magnets are mounted on the bridge of the primary frame and the corresponding number of magnets are mounted on the bridge of the auxiliary frame. This will be referred to as the bridge-mounted frame.

The parties

4 The first Plaintiffs in these two suits, Contour Optik, Inc ("Contour Optik") are a company registered in Taiwan. They are the assignees of the 47151 Patent and the proprietors of the 60169 Patent. The second Plaintiffs in the two suits, Dalmink Fashion Products 1989 Pte Ltd ("Dalmink"), are a Singapore registered company. Dalmink are the exclusive licensees of the 47151 Patent by virtue of a licence and distribution agreement dated 1 February 1997 and of the 60169 Patent by virtue of a similar agreement dated 1 January 1998. The third Plaintiff in Suit No 147 of 2000, Richard Chao, is a Director of Contour Optik. He is the proprietor of the 47151 Patent and the inventor of both Patents.

5 The first Defendants in Suit No 147 of 2000, Pearl's Optical Co Pte Ltd ("Pearl's Optical"), are a company registered in Singapore. They are retailers of frames for spectacles and sunglasses. The second Defendants in that Suit, Peng Lian Trading Co ("Peng Lian") are a

company registered in Singapore. They are distributors of optical products.

6 The first Defendants in Suit No 371 of 2001, AZ Optics Centre ("AZ Optics"), are retailers of optical products. The second Defendants in that Suit, Lee Meng Eyewear Fashion Centre ("Lee Meng"), are also retailers of optical products.

The issues

7 At the conclusion of the trial the Plaintiffs' claims against the four Defendants crystallised into the following:

> (i) against Pearl's Optical, for infringements of both Patents in the following manner:
>
> > (a) on 5 April 1999, by sale of a pair of Gekko spectacle frame (model number CE 9648 46-20-140 J.Jo) which infringed the 47151 Patent; and
> >
> > (b) on 23 December 1999, by sale of a pair of Giacoma Puccini spectacle frame (model number GP081 46' 19, Color 14) that infringed the 60169 Patent.
>
> (ii) against Peng Lian, for infringements of both Patents in the following manner:
>
> > (a) by supplying to Pearl's Optical Gekko spectacle frames that infringe the 47151 Patent and being the distributor of the Gekko spectacle frame sold by Pearl's Optical on 5 April 1999;
> >
> > (b) by disposing of, offering to dispose of, using or keeping products embodying the invention in the 60169 Patent; and
> >
> > (c) on or about 3 November 1999, by selling to Honour Optical Contact Lens Centre infringing Giacoma Puccini spectacle frames.
>
> (iii) against AZ Optics, for infringement of the 60169 Patent on or about 23 March 2001 by sale of a pair of Arcadia spectacle frame (A1370 48' 18-135).
>
> (iv) against Lee Meng, for infringement of the 60169 Patent on or about 6 December 2000 by sale of a pair of Ferra spectacle frame (F292 52' 18-140).

8 Against the respective Defendants the Plaintiffs claim the following relief:

> (1) a declaration that the Patents are valid and that they have been infringed by the respective Defendants;
>
> (2) an injunction to restrain the respective Defendants from any further infringement of the Patents;
>
> (3) an order for delivery up or destruction of any infringing product;

(4) damages or alternatively, at the Plaintiffs' option, an account of profits;

(5) interest; and

(6) costs.

9 The Defendants dispute (i) that the Patents are valid; and (ii) that the Patents have been infringed. Furthermore, in respect of the 47151 Patent, Pearl's Optical and Peng Lian claim that at the time of the alleged infringement they were not aware, and had no reasonable grounds for supposing, that the Patent existed and therefore, pursuant to s 69(1) of the Act, the Plaintiffs are not entitled to damages or an account of profits. In addition, all the Defendants, except for Peng Lian, do not admit the fact of sale of the items as claimed by the Plaintiffs. Finally in respect of both Patents, the Defendants claim relief under s 75 of the Act.

10 In the case of Peng Lian, it is pleaded in their Defence, at the third sentence of paragraph 2, that the Particulars of Infringement at paragraphs 8 and 10 are admitted. The relevant part of paragraph 2 of Peng Lian's Defence states as follows (emphasis added):

> … It is admitted that [Peng Lian] is the distributor of the article referred to in the affidavit of Yo Peng Sia filed on 17 May 2000. Paragraph 8 and 10 of the Particulars of Infringement <u>are admitted</u>. …

Paragraphs 8 and 10 of the Particulars of Infringement, which relate to the 60169 Patent, provide as follows:

> 8. [Peng Lian] has, without the Plaintiffs' consent, infringed claim 1 or, alternatively, claim 2 of the 60169 Patent by disposing of, offering to dispose of, using or keeping products embodying the invention.
>
> …
>
> 10. [Peng Lian] has since admitted to being the distributor of the article shown in the affidavit of Yo Peng Sia filed in this action on 17 May 2000.

Yo Peng Sia ("Yo") is the proprietor of Peng Lian and the relevant passage in his affidavit of 17 May 2000 is found in paragraph 2 which states as follows:

> I have reviewed the Statement of Claim filed under these proceedings and I have also reviewed the photographs taken by the Defendant's solicitor of the alleged infringing article referred to in paragraph 5b(i) of the said Statement of Claim. Annexed and marked "YPS-1" is a copy of the said photographs and I confirm that [Peng Lian] is the distributor of the alleged infringing article.

11 On the last day of the trial, after counsel have completed their submissions, counsel for Peng Lian applied for leave to amend paragraph 2 of the Defence by inserting the word "not" so that the words underlined above would read "are not admitted". This would have the effect of completely reversing the admission in that sentence. The Plaintiffs objected in no uncertain terms. Counsel for Peng Lian said that it was a typographical error. Be that as it may, it would have meant that the relevant witnesses would have to be recalled in order to give the Plaintiffs an opportunity to prove those particulars of infringement, something they had not done on account of the admission. This application being made at the end of 15 days of trial and submissions, which if allowed would entail further evidence to be adduced, I did not think that I should exercise my discretion to give leave. Counsel for Peng Lian later argued that paragraph 2 of the Defence contains a denial of paragraph 9 of the Statement of Claim which states as follows;

> The 2nd Defendant has infringed and threatens and intends, unless restrained by this Honourable Court, to continue to infringe the Patents in the manner appearing in the Particulars of Infringement served herewith.

However in my view the admission made above is not affected by this denial. From the pleadings set out above, I hold that what Peng Lian have admitted to are as follows:

(i) they have infringed claim 1 or claim 2 of the 60169 Patent (if valid); and

(ii) they are the distributors of the article shown in the photograph annexed as "YPS-1" of Yo's affidavit of 17 May 2000.

12 But Peng Lian have made no admission of infringement in their Defence in respect of the 47151 Patent.

13 Pearl's Optical, Peng Lian and AZ Optics counterclaim against the Plaintiffs for declarations that the Patents are invalid and their revocation, and for groundless threats of infringement proceedings. They pray for the following relief:

(1) declarations that the Patents are invalid;

(2) orders that the Patents be revoked;

(3) declarations that the threats against the respective Defendants are unjustifiable;

(4) injunctions against the continuance of the threats to the respective Defendants;

(5) damages for any loss the Defendants have sustained by the threats; and

(6) interest and costs, with indemnity costs for Pearls' Optical.

14 The issues in these actions are as follows:

(1) In respect of the 47151 Patent, whether:

(a) the invention contained in the Patent was new;

(b) the invention contained in the Patent involved an inventive step;

(c) Pearl's Optical and Peng Lian have committed the acts of infringement; and

(d) Pearl's Optical and Peng Lian were aware of the existence of the Patent.

(2) In respect of the 60169 Patent, whether:

(a) the invention contained in the Patent was new;

(b) the invention contained in the Patent involved an inventive step;

(c) the Patent contains matter not disclosed by US patent application No 766,327 corresponding to US patent No 5,737,054 ("US 054 Patent"), and was therefore registered upon a misrepresentation;

(d) Contour Optik are entitled to claim the priority date of the US 054 Patent for the 60169 Patent; and

(e) Pearl's Optical, Peng Lian, AZ Optics and Lee Meng have committed the acts of infringement;

(3) In respect of both Patents, whether the Plaintiffs have made groundless threats of infringement proceedings.

(4) In respect of both Patents, whether the Plaintiffs are precluded from recovering damages by operation of s 75 of the Act.

15 To succeed in respect of issues (1) and (2) the Plaintiffs must succeed in every sub-issue. As for issue (3), the Plaintiffs admit that if they fail in respect of either Patent, then they would have made groundless threat in respect of that Patent to the relevant Defendant. For completeness in my findings, I shall examine each sub-issue irrespective of whether the Plaintiffs have succeeded in all of them.

Background

16 Richard Chao is named in the Patents as the inventor of the two inventions therein. He deposed that he had been in the eyewear business for about twenty years. He was responsible for the accounts and personnel matters for the Contour Optik. He had recently taken on the responsibility of overseeing sales in Taiwan. In the course of his employment he had, from time to time, been involved with the production of eyewear. He said that although he was never in charge of production and had never actually produced an eyewear with his own hands, he was fairly familiar with the production process.

17 Richard Chao said that around the second half of 1994, Contour Optik were making and selling magnetic frames, which were front-mounted. These front-mounted frames had magnets embedded at the left and right arms of the main frame and facing outwards, away from the face. The auxiliary frame had magnets embedded at the corresponding arms that faced inwards. The auxiliary frame was attached to the main frame by the attractive force of the magnets on the main and auxiliary frames. Contour Optik received feedback from their customers that the auxiliary frames of this design would frequently come off when the user engaged in physical activities like jogging or running. Some even complained that the cavities in the arms of the main frame for housing the magnets made the arms weak and vulnerable to breaking.

18 Richard Chao said that sometime in August or September 1994, the idea of placing the magnets in a top-down fashion at the temporal portions came to his mind. He told his brother, David Chao, who is in charge of sales and product design of this idea. David Chao thought that it was very promising. Richard Chao then met with the design and production staff to turn his idea into reality. He recalled that they discussed the problem associated with making cavities in the frames for housing the magnets. This was more problematic for the arms of the main frame than of the auxiliary frame because the main frame is often subjected to great stress when the optician or optometrist bends it to fit the user's face. Richard Chao said that he came up with the idea of making a separate piece for housing the magnets and soldering this piece to the arms of the main frame to avoid this problem. He also told the staff to make the housing for the magnets lower than the arms of the main frame and the arms or the magnets on the auxiliary frame extended slightly downward so that the auxiliary frame may be supported on the main frame. Richard Chao said that some months later David Chao and the staff produced a workable prototype. But it was much later before the Contour Optik were able to deliver the finished product to the customers.

19 In respect of the invention in the 60169 Patent, Richard Chao said that shortly after the temple-mounted frames were sold, they realised that the product was not designed to cater to situations where the user wished to take off the auxiliary frame with one hand, for example when the user is driving or carrying something with the other hand. The temple-mounted frames required the use of both hands to properly attach and remove the auxiliary frame. Richard Chao figured that this stemmed from the fact that the magnets were placed too far apart. He reasoned that if the magnets were placed closer together, the user needed only one hand to lift off and place the auxiliary frame. He considered placing the magnets closer together by placing them on the bridge.

20 Richard Chao told David Chao of this new idea. David's initial response was that he did not think that it was possible at all because he felt that the area at top of the bridge was too narrow to place any magnet. But after considering the idea further with the staff, they agreed

that it was feasible. In one of the discussions, Richard Chao told them the idea of placing a magnet on just one side with a magnetizable substance on the other to reduce the costs of production. The final result was a magnetic frame that was top mounted at the bridge portion.

21 Richard Chao said that David Chao took care of the patent filing of the two inventions. He said that in both cases David Chao showed him the drawings and the specifications before filing them and he was satisfied that the drawings and specifications covered the two inventions.

22 David Chao is also a Director of Contour Optik and has been in the eyewear business since about 1985. He is based in the United States and in charge of sales and product design. He is also in charge of patent filings for Contour Optik.

23 David Chao corroborated the evidence of Richard Chao in relation to the events leading to the inventions in the Patents. He elaborated that it took a long time from conception to shipment because there was a boom for normal metallic from 1994 to 1996 and the machinery and staff were fully occupied in meeting the orders. Contour Optik was then about nine to twelve months behind their delivery schedule.

24 David Chao deposed that around October 1995 he arranged for a patent in respect of the temple-mounted frame to be filed in the United States. On 7 November 1995, Patent Application No 08/554,854 was filed in Richard Chao's name with the United States Patent and Trademark Office. The application was granted on 22 October 1996 and issued as US Patent No 5,568,207. Subsequently, David Chao instructed their patent agents in Taiwan to apply for patent protection for that invention in various countries. In Singapore, an application was filed on 10 June 1996 and the 47151 Patent was granted on 16 November 1998.

25 As for the bridge-mounted frame, David Chao arranged for patent applications to be filed first in the United States and subsequently in other countries including Canada and Singapore. On 13 December 1996, a US application in respect of the bridge-mounted invention was filed in Richard Chao's name. The US 054 Patent was granted on 7 April 1998. On 11 December 1997, an application for the bridge-mounted invention was filed in Singapore and the 60169 Patent was granted on 17 August 1999.

26 The Defendants have not adduced any evidence to contradict this part of the evidence of the Plaintiffs.

Construction of patent

27 Section 113(1) of the Act provides for the manner in which the invention for a patent is to be construed:

> … an invention for a patent … shall, unless the context otherwise requires, be taken to be that specified in a claim of the specification of the … patent … as interpreted by the description and any drawings contained in that specification, and the extent of the protection conferred by a patent ... shall be determined accordingly.

Counsel agree that this means that the drawings and the description of the invention may be used in interpreting the claim, but only the words in the claim, so interpreted, may be used in construing the extent of protection conferred by the patent.

28 In construing the invention for a patent, the Court adopts a purposive approach in favour of a literal one – *per* Lord Diplock in *Catnic Components Ltd v Hill & Smith Ltd* [1982] RPC 183 at p 242:

> … a patent specification is a unilateral statement by the patentee, in words of his own choosing, addressed to those likely to have a practical interest in the subject matter of his invention (i.e. "skilled in the art"), by which he informs them what he claims to be the essential features of the new product or process for which the letters patent grant him a monopoly. It is those novel features only that he claims to be essential that constitute the so-called "pith and marrow" of the claim. A patent specification should be given a purposive construction rather than a purely literal one derived from applying it to the kind of meticulous verbal analysis in which lawyers are too often tempted by their training to indulge. The question in

> each case is: whether persons with practical knowledge and experience of the kind of work in which the invention was intended to be used, would understand that strict compliance with a particular descriptive word or phrase appearing in a claim was intended by the patentee to be an essential requirement of the invention so that any variant would fall outside the monopoly claimed, even though it could have no material effect upon the way the invention worked.

29 However this approach does not allow one to incorporate features from the description or drawings that are omitted from the claims. It is not meant to fill gaps in the claims. In *Bean Innovations Pte Ltd & Anor v Flexon (Pte) Ltd* [2001] 3 SLR 121, the Court of Appeal set out the limitations to the purposive approach at paragraph 27:

> 27 We should add that the well-known principle that patent claims are to be given a purposive construction does not mean that the court in construing a claim is entitled to disregard the clear and unambiguous words used to describe the essential features of a claim. In *Socit Technique de Pulverisation STEP v Emson Europe* [1993] RPC 513 at 522, Hoffmann LJ said:
>
> > The well-known principle that patent claims are given a purposive construction does not mean that an integer can be treated as struck out if it does not appear to make any difference to the inventive concept. It may have some other purpose buried in the prior art and even if this is not discernible, the patentee may have had some reason of his own for introducing it …
>
> Laddie J in *Brugger v Medicaid* [1996] RPC 635 at 649, having referred to the preceding case quoted above, said:
>
> > The warning in STEP v Emson cited above has particular relevance here. If a patentee has chosen to define the characterising part of his claim in narrow terms it is not for the court to rewrite it in broader language simply because it thinks a wider form of wording would have been easy to formulate.
>
> Even adopting a purposive construction, one cannot write words into a claim that are not there or give a meaning to a term of a claim that is contrary to its language. A caution against blurring the purposive construction approach and the re-writing of a claim was given by Graham J in *Rotocrop International v Genbourne* [1982] FSR 241 at 255:
>
> > The question of equivalence and pith and marrow of course only arises in doubtful cases. The authorities establish that if it is clear from the description and claims as a whole that a particular feature is claimed as and must be regarded as essential to the invention, then that is an end of the matter. Either the defendant has taken it or he has not and accordingly he has infringed or not as the case may be.

30 In *Wheatley (Davina) v Drillsafe Ltd* [2001] RPC 133, Aldous LJ set out the proper approach to the construction of a patent under English law:

> 19 … The correct approach is to achieve a position between those extremes which combines a fair protection for the patentee with a reasonable degree of certainty for third parties.
>
> 20 Strict literal interpretation using the drawings and specification gives to third parties the most certainty. That has always been seen as being unfair to inventors and of course is outlawed by the Protocol. However, there must be a reasonable degree of certainty for third parties and therefore the language of the claim as interpreted in light of the drawings and specification cannot be disregarded. As pointed out by Hoffman LJ in *Socit Technique de Pulverisation Step v Emson Europe Ltd* [1993] RPC 513 at 522 an integer of a claim cannot be just struck out because it does not make any difference to the inventive concept. It may have been inserted by the patentee for some reason.
>
> 21 So far as the patentee is concerned it is important that the claim should be interpreted in accordance with his intention. A claim interpreted, on the one hand, too liberally can render the patent invalid and, on the other, too literally can allow third parties to avoid the monopoly.
>
> 22 The object of interpretation is to ascertain the intention of the author, in this case the patentee. This involves examining the words of the claim through the eyes of a person to whom the specification is directed, in the context of the specification as a whole. If the reader skilled in the art would have understood that the patentee intended that the claim should have a particular ambit, then to construe it as not confined to that ambit, either by strict or liberal construction, would be unfair to the patentee. It is the patentee that chooses the words and to widen the ambit contrary to his intention could invalidate the patent and to restrict the ambit could allow the use of the invention without payment.
>
> 23 As the task of the court is to ascertain objectively what meaning the words were intended to convey, the *Improver* questions, better called the Protocol questions, were proposed as an aid. It is reasonable to infer, absent words to the contrary, that the patentee intended to include within his monopoly what can be termed immaterial variants, in the sense that they were not material to the way the invention worked. Also it is reasonable to infer that a patentee did not intend to include within the ambit of his monopoly a variant which had a material effect upon the way the invention worked, otherwise his claims could, to the detriment of the patentee, include variants which had little if anything to do with what he had invented. However, third parties have to be considered and, therefore, they should not be held to infringe if it was clear that such a variant was not intended to be within the ambit of the monopoly, either because of the words chosen or because it would be seen to have materially affected the way the invention worked.

31 The monopoly of a patent is found in the claims of the specification. There is no infringement if the invention in dispute does not fall within the integers of the claims. In *Electric and Musical Industries Ltd v Lissen Ltd* [1939] 56 RPC 23 Lord Russell said at p 39:

> The function of the claims is to define clearly and with precision the monopoly claimed, so that others may know the exact boundaries of the area within

> which they will be trespassers. Their primary object is to limit and not to extend the monopoly. What is not claimed is disclaimed. The claims must undoubtedly be read as part of the entire document, and not as a separate document; but the forbidden field must be found in the language of claims and not elsewhere. It is not permissible, in my opinion, by reference to some language used in the earlier part of the specification, to change a claim which by its own language is a claim for one subject-matter into a claim for another and a different subject-matter, which is what you do when you alter the boundaries of the forbidden territory. A patentee who describes an invention in the body of a specification obtains no monopoly unless it is claimed in the claims. As Lord Cairns said, there is no such thing as infringement of the equity of a patent (*Dudgeon v Thomson* LR 3 App Cas 34).

32 On the question of expert evidence, O 40A, r 3(2) of the Rules of Court prescribes the following requirements of an expert report:

> An expert's report must –
>
> (a) give details of the expert's qualifications;
>
> (b) give details of any literature or other material which the expert witness has relied on in making the report;
>
> (c) contain a statement setting out the issues which he has been asked to consider and the basis upon which the evidence was given;
>
> …
>
> (e) where there is a range of opinion on the matters dealt with in the report –
>
> > (i) summarise the range of opinion; and
> >
> > (ii) give reasons for his opinion;
> >
> > (f) contain a summary of the conclusions reached;
> >
> > (g) contain a statement of belief of correctness of the expert's opinion; and
> >
> > (h) contain a statement that the expert understands that in giving his report, his duty is to the Court and that he complies with that duty.

33 As to the function of an expert witness, in *Brooks v Steele and Currie* (1896) 13 RPC 46, Lindley LJ said at p 73:

> It is necessary to examine the patent, and to ascertain first what the patented invention really is; and, secondly, whether the defendants have used that invention. In this, as in all cases, the nature of the invention must be ascertained from the specification, the interpretation of which is for the judge, and not for the expert. The judge may, and, indeed, generally must, be assisted by expert evidence to explain technical terms, to show the practical working of machinery described or drawn, and to point out what is old and what is new in the specification. Expert evidence is also admissible and is often required to show the particulars in which an alleged invention has been used by an alleged infringer, and the real importance of

> whatever differences there may be between the plaintiff's invention and whatever is done by the defendant. But, after all, the nature of the invention for which a patent is granted must be ascertained from the specification, and has to be determined by the judge and not by a jury, nor by any expert or other witness.

34 In *British Celanese Ltd v. Courtalds Ltd* (1935) 52 RPC 171, Lord Tomlin elaborated on and delineated the role of an expert witness in the following terms (at p 196):

> The area of the territory in which in cases of this kind an expert witness may legitimately move is not doubtful. He is entitled to give evidence as to the state of the art at any given time. He is entitled to explain the meaning of any technical terms used in the art. He is entitled to say whether in his opinion that which is described in the specification on a given hypothesis as to its meaning is capable of being carried into effect by a skilled worker. He is entitled to say what at a given time to him as skilled in the art a given piece would have taught or suggested to him. He is entitled to say whether in his opinion a particular operation in connexion with the art could be carried out and generally to give any explanation required as to facts of a scientific kind.
>
> He is not entitled to say … what the specification means, nor does the question become any more admissible if it takes the form of asking him what it means to him as an engineer or as a chemist. Nor is he entitled to say whether any given step or alteration is obvious, that being a question for the Court.

35 It is clear from the authorities that the construction of a patent is a matter for the court and not the expert witness. This was put pithily by Neville J in *Joseph Crosfield & Sons Ltd v. Techno-Chemical Laboratories Ltd* 30 RPC 297 at p 310 (emphasis added):

> … It is sometimes sought to justify questions directed to elicit the opinion of an expert in the construction of a document – for example, in the case of a chemical Specification – on the ground that it is addressed to persons having technical knowledge, and that the Court is therefore entitled to know how such persons would read it. I think this contention is based on a fallacy. An expert would read a document precisely as any other man would read it who possessed his knowledge of the technical meaning of the words employed, and has such scientific information as might be necessary for the comprehension of the matter to which the words of the document refer. <u>It is this scientific information which the expert witness should be asked to give; not his opinion of the meaning of the document.</u>

Issue 1: 47151 Patent

36 The 47151 Patent relates to the temple-mounted frame. The Specifications for this Patent are found in Appendix 1 to this judgment.

37 Expert evidence given by witnesses for both sides were useful in explaining concepts and techniques in spectacle frame design and construction. Thus assisted, upon a consideration of the claims in the 47151 Patent, I find that the following three inventive concepts are claimed:

> (i) top-down attachment of the magnets at the temporal positions of the frames;
>
> (ii) use of separate projections for housing the magnets at the primary frame that are secured to the frame thereby maintaining the strength of the frame; and

(iii) positioning those projections lower than the upper side portion of the primary frame and extending downwards the arms and/or magnetic members of the auxiliary frames so as to create a hooking effect.

Concepts (i) and (ii) are found in Claim 1 and all three are found in Claim 2.

(a) Whether invention in 47151 Patent new

38 Section 13(1) of the Act sets out the three conditions that an invention must satisfy in order to be patentable, as follows:

> 13. —(1) Subject to subsection (2), a patentable invention is one that satisfies the following conditions:
>
> (a) the invention is new;
>
> (b) it involves an inventive step; and
>
> (c) it is capable of industrial application.

39 The conditions for novelty under s 13(1)(a) are set out in s 14 and the relevant sub-sections are as follows:

> 14. —(1) An invention shall be taken to be new if it does not form part of the state of the art.
>
> (2) The state of the art in the case of an invention shall be taken to comprise all matter (whether a product, a process, information about either, or anything else) which has at any time before the priority date of that invention been made available to the public (whether in Singapore or elsewhere) by written or oral description, by use or in any other way.
>
> (3) The state of the art in the case of an invention to which an application for a patent or a patent relates shall be taken also to comprise matter contained in an application for another patent which was published on or after the priority date of that invention, if the following conditions are satisfied:
>
> (a) that matter was contained in the application for that other patent both as filed and as published; and
>
> (b) the priority date of that matter is earlier than that of the invention.

40 In *General Tire v Firestone* [1972] RPC 457 at p 485, Sachs LJ set out the test for determining the novelty in a patent under s 32(1)(e) of the UK Patents Act, 1949 in the case of anticipation by prior publication:

> When the prior inventor's publication and the patentee's claim have respectively been construed by the court in the light of all properly admissible evidence as to technical matters, the meaning of words and expressions used in the art and so forth, the question whether the patentee's claim is new for the purposes of section 32(1)(e) falls to be decided as a question of fact. If the prior inventor's publication contains a clear description of, or clear instructions to do or make, something that would infringe the patentee's claim if carried out after the grant of the patentee's patent, the patentee's claim will have been shown to lack the

necessary novelty, that is to say, it will have been anticipated. The prior inventor, however, and the patentee may have approached the same device from different starting points and may for this reason, or it may be for other reasons, have so described their devices that it cannot be immediately discerned from a reading of the language which they have respectively used that they have discovered in truth the same device; but if carrying out the directions contained in the prior inventor's publication will inevitably result in something being made or done which, if the patentee's patent were valid, would constitute an infringement of the patentee's claim, this circumstance demonstrates that the patentee's claim has in fact been anticipated.

41 The Defendants contend that Claim 1 of the 47151 Patent does not satisfy the requirement of novelty. They do not challenge the novelty of Claim 2 on account of the hooking effect. They pursue the following particulars of objections:

> 1. The alleged invention the subject of Singapore Patent No. 47151 (the "47151 Patent") is not a patentable invention in that it is not new, the subject matter thereof having formed part of the state of the art as of the date of filing of application for the 47151 Patent.
>
> PARTICULARS
>
> (a) The disclosure of the Pentax Twincome eyeglass frame on the following occasions:
>
> …
>
> iii) The Plaintiff will also rely on the sale of the Pentax Twincome eyeglass frame in Malaysia and Japan in 1996 before the filing date of the application for 47151 Patent.
>
> iv) The newspaper named "Nihon Kogyo Shinbun" published on 15 December 1995 in Japan, in particular at page 15.
>
> v) Optical Monthly Gankyo published in December 1995, in particular at page 156

42 The Defendants' expert witness, Takashi Tega ("Tega"), said that the Pentax Twincome ("the Twincome") frame was sold in Japan before June 1996. But he did not have a sample of the model sold during that period. What he had was a copy of the newspaper "Nihon Kogyo Shinbun" published on 15 December 1995 which shows a photograph of part of the Twincome frame and an accompanying description of the frame.

43 The Plaintiffs concede that the Twincome anticipates the first inventive concept, i.e. top-down attachment of the magnets at the temporal positions of the frames. But they dispute that the Twincome anticipates the second inventive concept, i.e. the use of separate projections for housing the magnets at the primary frame that are secured to the frame. It is not completely clear from the photograph of the Twincome whether this is the case. The accompanying description is of no assistance. Tega said that he was 70% to 80% certain that the projection in the Twincome is a separate housing secured to the main frame. The same opinion was held by another of the Defendants' expert witnesses, Lee Byung-Chang ("Lee"). They both reasoned that this was apparent to them from the construction of the arm and leg and the fact that the hinge appeared to be welded to arm and leg. The Plaintiffs' experts did not give evidence on this point. I should add that the Defendants exhibited the current model of the Twincome (exhibit 1DE) in which the hinge is quite different from the model in the 1995

picture. The hinge in the current model is not welded to the arm and leg and the projection is also not welded to the arm. This supports the Defendants' position. I am of the view that Tega and Lee's evidence are reasonable and since they have not been rebutted, I hold on a balance of probability that the projection in Twincome has projections that are welded to the frame. Accordingly the second inventive concept in the 47151 Patent has been anticipated by the Twincome.

(b) Whether invention in 47151 Patent an inventive step

44 The Defendants contend that the invention in the 47151 Patent does not involve an inventive step and therefore does not satisfy s 13(1)(ii) of the Act. They have filed the following particulars of objections:

> 2. The alleged invention the subject of the 47151 Patent is not a patentable invention in that it involves no inventive step, the subject matter thereof being obvious to a person skilled in the art having regard to the following matter which formed part of the state of the art as at the date of filing of application for 47151 Patent.
>
> PARTICULARS
>
> Hereunder the Plaintiffs rely upon:
>
> (a) The publication of the references and disclosures cited in paragraph 1 above.
>
> (b) Common general knowledge in the art.

45 What amounts to involving an inventive step is set out in s 15 of the Act as follows:

> 15. An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 14(2) and without having regard to section 14(3).

46 It is not an inventive step if the alleged invention is merely a new use of a known contrivance or method. In *Hamilton E. Harwood and another v Director of Great Northern Railway Company* [1865] 11 ER 1488, the patentee used a "fish plate" for joining together the ends of rails. The evidence showed that this particular form of joint had been applied in various mechanical contrivances and notably in the joining together of pieces of timber used in bridge building, but not exactly the same kind of strains were involved. The court held that such use of a known contrivance cannot be considered as inventive. The reason why patent law is reluctant to give protection in such cases is explained by Lord Westbury LC as follows (at p 1499):

> … the question is, whether there can be any invention of the Plaintiff in having taken that thing which was a fish for a bridge, and having applied it as a fish to a railway. Upon that I think that the law is well and rightly settled, for there would be no end to the interference with trade, and with the liberty of any mechanical contrivance being adapted, if every slight difference in the application of a well-known thing were held to constitute a patent … No sounder or more wholesome doctrine, I think, was ever established than … that you cannot have a patent for a well-known mechanical contrivance merely when it is applied in a manner or to a purpose, which is not quite the same, but is analogous to the manner or the purpose in or to which it has been hitherto notoriously used.

47 In *Merck & Co Inc v Pharmaforte Singapore Pte Ltd* [2000] 3 SLR 717 the Court of Appeal approved the test for inventiveness found in the judgments of the English Court of Appeal and High Court in *Genentech Inc's Patent* [1989] RPC 147. Chao JA said at

paragraphs 61-62:

> 61. At the end of the day, to determine whether there is an inventive step, what is claimed to be patentable must not be obvious. In the words of the trial judge `a person who is skilled in the art must not be able to apply known processes, forming part of the state of the art, to the manufacture of the claimed product.` He also cited the following rather helpful passage of Dillon LJ from *Genentech* [1989] RPC 203 at
>
> 276:
>
> ... in a case like the present, which does not involve a simple leap from the prior art to the invention ... but rather entails a journey with numerous steps taken in sequence, the court must ask itself by what routes it would have been possible to proceed to the goal from the starting point. Then the court must see what obstacles the skilled man would have faced on these routes, and must inquire how he could have overcome them, either in the way that the inventor himself overcame the obstacles on his chosen route or by circumventing or overcoming them in some other way, or by choosing another route from the outset, or by abandoning one route and choosing another. ... Having identified these various expedients, the court must finally ask whether they could have been overcome by pertinacity, sound technique or trial and error, with no more, or whether there would have been required a spark of imagination beyond the imagination properly attributable to the man skilled in the art.
>
> 62. We also find the following observations of Whitford J, the first instance judge in Genentech, cited with approval by Dillon LJ in the Court of Appeal, highly illustrative:
>
> > to render an invention obvious it was not necessary that the material in question should have been the first choice of the notional research worker; it was enough that the material were 'lying on the road' and there for the research worker to use.

48 In *Windsurfing International Inc v Tabur Marine (Great Britain) Ltd* [1985] RPC 59 at p 73, the English Court of Appeal identified the following four steps to be taken in considering whether something involves an inventive step (or obviousness):

> (1) identify the inventive concept embodied in the patent in suit;
>
> (2) assume the mantle of the normally skilled but unimaginative addressee in the art at the priority date and impute to him what was, at that date, the common general knowledge in the art in question;
>
> (3) identify what, if any, differences exist between the cited prior art and the alleged invention; and
>
> (4) ask whether viewed without any knowledge of the alleged invention, those differences constitute steps which would have been obvious to the skilled man or whether they require any degree of invention.

49 Applying the first *Windsurfing* step, the inventive concepts in the 47151 Patent are (i) top-down magnetic attachment at temporal positions; (ii) separate projections for the magnet housing at the primary frame; and (iii) hooking effect. Moving on to the second step, I have found above that the Twincome frame has anticipated concept (i). It is therefore obvious and does not involve an inventive step. I have also made a finding of fact that the Twincome has also a separate projection for the magnet housing and therefore concept (ii) also does not involve an inventive step. However if I am wrong in that finding, then I would require to take concept (ii) through the remaining steps of the *Windsurfing* analysis.

50 I turn to the third step, identification of the differences between the cited prior art and the alleged invention. In respect of concept (ii), if the Twincome does not reveal a separate magnet housing projection, then this would be a material difference as it materially increases the strength of the frame. In respect of concept (iii), it is again a material difference in that the hooking action is an additional feature in securing the auxiliary frame to the primary frame.

51 The fourth step of the *Windsurfing* analysis is whether it would have been obvious to the skilled person. Dealing first with concept (ii), the Defendants submit that the use of welding as a method of attachment is obvious. Of that I have no doubt, but the issue is not the use of welding as a method of attachment. In my view the substantive idea is the use of a separate piece, welded to the primary frame, to house the magnet instead of excavating or casting a cavity in the main frame which would result in a weaker design. In my view, this would have involved an inventive step if it were not anticipated by the Twincome frame. Concept (iii), the hooking effect, is an idea that appears obvious with the benefit of hindsight. However many brilliant ideas have appeared simple with hindsight and the fact that it is not one of the features in the Twincome, although it takes very little to incorporate it, indicates that it does involve an inventive step and I so hold.

(c) Whether Pearl's Optical and Peng Lian committed the acts of infringement

52 Pearl's Optical admit that they had, on 5 April 1999, sold a pair of Gekko spectacle frame (model number CE 9648 46-20-140 J.Jo) ("the Gekko trap purchase"). But they do not admit that such act is an infringement of the 47151 Patent (if valid) and put the Plaintiffs to strict proof.

53 Here the Plaintiffs' case got bogged down. Although they have called expert witnesses to give evidence on spectacle frames alleged to be the Gekko trap purchase, they did not call the person who made that trap purchase, or anyone who may have witnessed it, to identify an exhibit as the Gekko trap purchase. Therefore the Plaintiffs' case falls because of this break in the chain of evidence.

54 Peng Lian have not admitted to anything in respect of the 47151 Patent. The admissions in their Defence relates to the 60169 Patent. Hence the Plaintiffs have not proved that Peng Lian had committed any act of infringement in respect of the 47151 Patent.

55 In view of the fact that there is no evidence before me of the items sold by the parties that are alleged to infringe the 47151 Patent, it is not necessary for me to consider expert evidence as to whether the exhibits examined by them infringe the patent.

(d) Whether Pearl's Optical and Peng Lian aware of existence of 47151 Patent

56 Pearl's Optical state that they were not aware, and had no reasonable grounds for believing, that the 47151 Patent had existed at the date of the infringement. They rely on s 69(1) of the Act to absolve them of any liability in damages or to render an account of profits. Section 69(1) provides as follows:

> In proceedings for infringement of a patent, damages shall not be awarded and no order shall be made for an account of profits against a defendant who proves that at the date of the infringement he was not aware, and had no reasonable grounds for supposing, that the patent existed; and a person shall not be taken to have been so aware or to have had reasonable grounds for so supposing by reason only of the application to a product of the word "patent" or "patented", or any word or words expressing or implying that a patent has been obtained for the product, unless the number of the patent accompanied the word or words.

57 Koh Lian Buck ("Koh"), the director of Pearl's Optical, deposed to the following. Pearl's Optical ordered most of their goods from local distributors like Peng Lian. They sold goods to customers and buyers on a retail basis. He denied the Plaintiffs' allegations that Pearl's Optical was a wholesaler, importer and exporter of optical products, branded sunglasses and spectacles.

58 Koh said that Pearl's Optical received a letter dated 8 April 1999 from M/s TM Hoon & Co ("TMH"), the former solicitors of Dalmink and Richard Chao, alleging that Pearl's Optical had sold spectacle frames that apparently infringed the 47151 Patent. They were told to stop importing, buying, stocking, distributing and retailing such models, and to destroy such products. The Plaintiffs also demanded that they provide them with information on inventory and sales and other business information and that they publish an apology in the newspapers as well as execute an undertaking.

59 Koh immediately consulted his solicitors, M/s Wee Swee Teow & Co ("WST") on the matter. WST subsequently advised that the Plaintiffs had indeed registered the 47151 Patent. This surprised Koh as he felt that such frames were commonplace in the market and had been around for at least a few years. However he was not certain as to the evidence of that fact and did not wish to incur the expense of appointing patent agents to do a full search and investigation into this matter as Pearl's Optical were only retailers. Furthermore, this type of spectacle frame was just one of many types of spectacles and sunglasses they sold. So they decided to stop selling the product. On WST's advice, Pearl's Optical immediately stopped selling any model that could possibly be said to infringe the 47151 Patent. Accordingly all primary-auxiliary spectacle-sunglasses frames that had magnets in the region of the temple as their attachment points were withdrawn from their shelves and disposed of.

60 Through WST's letter of 16 April 1999, Pearl's Optical informed TMH that they had stopped dealing in those goods. This point was repeated and emphasised in WST's letter of 27 April 1999 to TMH in which it was made clear that whether or not the other matters could be settled, and even while negotiations by letters were going on, Pearl's Optical had already stopped infringing the 47151 Patent and had instituted a voluntary embargo on any goods that could possibly fall under that Patent.

61 However after an exchange of without prejudice correspondence, certain matters could not be resolved. By letter dated 23 September 1999, TMH wrote to ask if Pearl's Optical were still keeping to their undertaking not to sell any potentially infringing items, had removed all such stock from their stores, and would not sell, restock or display the same from then on pursuant to WST's letter of 27 April 1999. WST replied on 29 September 1999 to confirm that Pearl's Optical had continued and were continuing with their promise not to sell or offer to sell such products. Koh said that he was surprised that, notwithstanding these undertakings, Dalmink and Richard Chao instituted Magistrates Court Suit No. 604802 against Pearl's Optical for infringement of the 47151 Patent. That MC Suit has since been discontinued in favour of the present suit commenced on 11 April 2000.

62 On 23 March 2000 WST wrote a without prejudice letter to TMH affirming Pearl's Optical continuing undertaking not to infringe the 47151 Patent. Despite this, the Plaintiffs included the claim in respect of the 47151 Patent in the present suit. Koh said that in reply to WST's request for particulars of acts of infringement, the Plaintiffs' said that they were relying on the sale of an allegedly infringing item which took place on 5 April 1999. This was before the Plaintiffs' letter of demand of 8 April 1999 which must have been the same act upon which that letter of demand was based. On the evidence before me I find that Pearl's Optical had no knowledge of the 47151 Patent on 5 April 1999.

63 As for Peng Lian their proprietor, Yo, testified that he had heard rumours about a patent for the temple-mounted auxillary frames but when he asked Dalmink's sales representatives, they did not know anything about it. It was not until Pearl's Optical returned the stocks to Peng Lian sometime in April 1999 and Koh told him about this that Yo became aware of the 47151 Patent. The Plaintiffs did not produce any evidence that contradicted this. In the circumstances I find that Peng Lian did not have knowledge of the 47151 Patent until after 8 April 1999.

Issue 2: 60169 Patent

64 The 60169 Patent relates to the bridge-mounted frame. The Specifications for this Patent are found in Appendix 2 to this judgment.

65 The Plaintiffs submit that the inventive concepts in the 60169 Patent are as follows:

(i) An eyeglass device where the auxiliary frame can be attached to the primary frame by means of magnetic members in a top-down manner at the bridge portion with the use of one hand by the user. This concept is found in claims 1 and 2.

(ii) An eyeglass device with the above features and where only the magnetic members of one of the bridges of the primary and auxiliary frames need to be magnets and the other bridge need only be made of magnetizable substance. This concept is claimed in claims 3 and 4.

66 In respect of concept (i), the Plaintiffs intend the expression "top-down" to mean the situation where the magnetic contact is at a horizontal plane. This would be reflected in Figs 4, 6 and 8 in Appendix 2. However this is not the case in Fig 5, where the plane of magnetic contact is at an angle to the horizontal, and Fig 7 where the magnetic contact is at a vertical plane. Counsel for the Plaintiffs submit that the words of the Claim prevail over the drawings, which is correct, and relies on the following words in Claim 1: *"an auxiliary spectacle frame ... including a middle bridge portion having a projection extending over and for engaging with said middle bridge portion of said primary spectacle frame"*. With respect, I cannot see anything in those words that limit the magnetic contact to the horizontal plane. It only limits the invention to an auxiliary frame that has a projection that extends over and engages with the middle bridge portion of the primary frame. I do not see any ambiguity in the words of the claims, but even if there is, the use of the drawings and description to aid interpretation would surely lead to the same conclusion because there are specific descriptions and drawings of "tilted" bridges and magnetic member "extended downward". As for the second inventive concept, I agree with the Plaintiffs' characterisation. I therefore hold that the inventive concepts in the 60169 Patent are:

(i) An eyeglass device where the auxiliary frame can be attached to the primary frame with one hand by means of magnetic members secured at the bridges of the frames, the bridge of the auxiliary frame extending over and engaging with the bridge of the primary frame. This concept is found in claims 1 and 2.

(ii) An eyeglass device with the above features and where only the magnetic members of one of the bridges of the primary and auxiliary frames need to be magnets and the other bridge need only be made of magnetizable substance. This concept is claimed in claims 3 and 4.

(a) Whether invention in 60169 Patent new

67 The Defendants contend that the invention in the 60169 Patent does not satisfy the requirement of novelty under s 13(1)(i) of the Act. They have filed the following particulars of objections:

3. The alleged invention the subject of Singapore Patent No. 60169 (the "60169 Patent") is not a patentable invention in that it is not new, the subject matter thereof having formed part of the state of the art as of the earliest claimed priority date for the 60169 Patent.

PARTICULARS

…

(b) Hereunder the 2nd Defendant will rely upon the prior publication of:

…

iv) International Patent Application PCT/DE90/00098 published 23 August 1990 as W090/09611

…

xi) Taiwan Utility Model 107096 published 1 January 1989

xii) Japanese Utility Design Registration 3,031,881 published 3 December 1996

68 I do not find that the prior publication of items (iv) and (xi) above anticipated the 60169 Patent as they concern attachment of auxiliary frames by frontal insertion of a magnet at the bridge. However item (xii), which I shall call the Miki design, has anticipated the first inventive concept of the 60169 Patent. The Miki design was filed on 3 December 1996, some ten days before the priority date claimed in the 60169 Patent. The magnetic contact shown in the Miki design is in the vertical plane and all other integers of the first inventive concept are satisfied.

69 As for the second inventive concept, the use of a magnet and magnetizable substance instead of a pair of magnets, the Defendants did not adduce any evidence of anticipation and I hold that it is new.

(b) Whether invention in 60169 Patent an inventive step

70 The Defendants contend that the invention in the 60169 Patent does not involve an inventive step and therefore does not satisfy s 13(1)(ii) of the Act. They have filed the following particulars of objections:

> 4. The alleged invention the subject of the 60169 Patent is not a patentable invention in that it involves no inventive step, the subject matter thereof being obvious to a person skilled in the art having regard to the following matter which formed part of the state of the art as of the earliest claimed priority date.
>
> PARTICULARS
>
> Hereunder the Plaintiffs rely upon:
>
> (a) The publication of the references cited in paragraph 3 above.
>
> (b) Use of clip, hooks or hinge for attaching or affixing secondary spectacle frames or lenses to primary spectacle frames at the bridge before 10 June 1996.
>
> (c) Common general knowledge in the art.

71 Because the magnets in the Miki design are found in the bridges, the shifting of the magnets from the temple in the 47151 Patent to the bridges in the 60169 Patent is obvious.

72 However I find that the use of a magnet and magnetizable substance pair is an inventive step.

(c) Whether 60169 Patent registered upon a misrepresentation

73 In respect of this issue, the Defendants have filed the following particulars of objections:

> 5. The 1st Plaintiff, as the applicant for the Patent, has furnished information to the Registrar of Trade Marks & Patents which, in a material particular, was false.
>
> PARTICULARS
>
> (a) The application for grant of the 60169 Patent was made pursuant to Section 29(1)(c) of the Patents Act ("Section 29(1)(c)") by relying on US patent

application number 766,327 (corresponding to granted US Patent No. 5,737,054 (the "054 US Patent")). Pursuant to Section 29(1)(c), the 1st Plaintiff filed with the Registrar of Patent the Notice of Allowability issued by the United States Patent Office ("USPTO") in respect of the 054 US Patent Application.

(b) Subsequent to the 054 US Patent Application, the 1st Plaintiff applied for another patent application number 08/963,299 at the USPTO (corresponding to US granted patent no. 6012811 (the "811 US Patent")).

(c) By claiming to rely on the 054 US Patent Application in application for the grant of 60169 Patent Application, the 1st Plaintiff represented that 054 US Patent Application was a corresponding application in that the subject matter in the 60169 Patent Application and the 054 Patent Application are the same or substantially the same invention. However, the specification of the Singapore 60169 Patent contains matter which extended beyond the subject matter of the 054 US Patent Application and/or is different from the subject matter of the 054 US Patent Application and as granted. The differences are set out in the Schedule attached hereto.

(d) (i) Further or alternatively, the 60169 Patent as filed and as granted contains subject matter that was not disclosed in the 054 US Patent Application or the 054 US Patent as granted, but contains matter disclosed or fall within the subject matter in the 811 US Patent Application

(ii) The 1st Plaintiff failed to disclose the 811 US Patent specification notwithstanding that the Applicant purported to include matters that are only disclosed in the 811 US Patent specification but not in the 054 US Patent specification.

(e) By reason of the differences in the subject matter the purported inventions disclosed in the 60169 Patent specification both as filed and as granted are not the same or substantially the same as the subject matter or purported invention of the 054 US Patent. The 1st Plaintiff has therefore furnished false information, which is in a material particular, false or misrepresented that the 054 US application was a corresponding application to the 60169 Patent.

(f) (i) Further or alternatively, the 1st Plaintiff has furnished the following false information, which is in a material particular, false or made the following misrepresentation in the 60169 Patent specification as filed and as granted that:

> "US Patent No. 5,568,207 to Chao comprise a primary frame having two magnet members provided on the upper side portions, and an auxiliary frame including a pair of arms each having a magnet member for engaging with that of the primary frame. Two hands are required for attaching the auxiliary frame to the primary frame."

(ii) The said representation is not true as the US Patent No. 5,568,207 does not require two hands for attaching the auxiliary frame to the primary frame.

6. The 60169 Patent was obtained on a misrepresentation.

PARTICULARS

The particulars to paragraph 5 above are repeated.

74 The Defendants' case essentially is this. The Plaintiffs have chosen to apply for a patent under s 29(1)(c) of the Act, which is one of the routes towards getting a patent granted in Singapore. This subsection provides as follows:

> Where an application for a patent complies with all the formal requirements referred to in section 28 (1), the Registrar shall notify the applicant who shall —
>
> (a) file a request in the prescribed form and pay the prescribed fee for a search report within the prescribed period;
>
> (b) file a request in the prescribed form and pay the prescribed fee for a search and examination report within the prescribed period; or
>
> (c) where the applicant has filed, alone or jointly with any other person, a corresponding international application for a patent, not designating Singapore, or a corresponding application for a patent at any prescribed patent office, furnish such detail as prescribed in the prescribed form and within the prescribed period, of all the corresponding international applications and the other corresponding applications filed by him, and if the applicant fails to make such request, pay the prescribed fee or furnish the prescribed detail within the prescribed period, the application shall be treated as having been abandoned at the end of the period prescribed under paragraph (a), (b) or (c), whichever is the latest.

75 Under this route, the patentee relies on the approval given to a corresponding application in a foreign jurisdiction. The alternative route is to proceed with a search and examination during the Singapore patent application. If the s 29(1)(c) route is taken, there is no formal examination by the Registry of Patents. Under this provision, the applicant must have filed a *"corresponding application"* for a patent at any prescribed patent office. That term is defined in s 29(12) as follows:

> In this Part, "corresponding international application" and "corresponding application", in relation to an invention, mean an application for protection filed, respectively, under the Patent Co-operation Treaty or with any prescribed patent office in respect of the same or substantially the same invention as that which is the subject of the application in suit, the application filed under the Patent Co-operation Treaty or with the prescribed patent office being —
>
> > (a) the basis for a priority claim under section 17 in the application in suit; or
> >
> > (b) subject to a priority claim based on the application in suit or an application which is also the basis for a priority claim under section 17 in the application in suit.

Another advantage of this route is that the applicant can rely on the priority date of an earlier foreign application. But that application must be *"the same or substantially the same invention"* as the one filed in Singapore.

76 The Plaintiffs have, on 13 December 1996, filed in the USA the patent application in respect of the US 054 Patent which was granted on 7 April 1998. The US Patent Office is a prescribed patent office: see r 41 of the Patents Rules. In their Singapore application, the Plaintiffs submitted the US 054 Patent as the corresponding application and the 60169 Patent was granted on the basis of that patent with the same priority date even though the Singapore application was filed almost a year later, on 11 December 1997.

77 The problem lies with the fact that the scope of the US 054 Patent is not the same as that of the 60169 Patent. The latter essentially follows the US 054 Patent but with (i) the addition of a drawing, Fig 9, which shows two magnets on each bridge, and the corresponding description; and (ii) the deletion of the following statement in the US 054 Patent:

> However, two pairs of magnet members are required such that the manufacturing cost is increased. In addition, the user have to align two pairs of magnet members.

An essential feature of the US 054 Patent therefore is that each bridge has only one magnet. However in the 60169 Patent, Fig 9 and the corresponding description feature two magnets on each bridge. The Plaintiffs submit that this is not a material difference and that the scope of the US 054 Patent is wide enough to cover two magnets on each bridge. However in my view the language of the claim in the US 054 Patent, as interpreted by the description and drawings clearly restrict it to a single magnet. The Defendants submit that this is reinforced by the fact that the Plaintiffs have applied for and obtained another US Patent for the double magnet configuration, which is US Patent No 6,012,811.

78 As the claim in the 60169 Patent is wider than that in the US 054 Patent, the latter is, in my view, not substantially the same invention as the former. The Defendants submit that the 60169 Patent ought to be revoked pursuant to s 80(1)(f) of the Act which provides as follows:

> Subject to the provisions of this Act, the Registrar may, on the application of any person, by order revoke a patent for an invention on (but only on) any of the following grounds:
>
> …
>
> (f) the applicant for the patent has failed to inform the Registrar about any corresponding international application or corresponding application filed by him as required under section 29(1)(c) or has furnished any information which in any material particular was false; …

In submitting the US 054 Patent as a corresponding application when it does not pertain to substantially the same invention, the Plaintiffs have furnished information which is false in a material particular. What the Plaintiffs have in effect gained by this is a dispensation of examination in respect of the widened scope of the claim, and an earlier priority date for that widened scope than they would otherwise have been entitled to. In my view this is sufficient for the Registrar to exercise the powers under s 80.

79 Pursuant to s 91(1) of the Act, this Court has the powers granted to the Registrar under s 80(1). However s 80(5) provides for mitigation of the rather blunt sword of revocation. That subsection states as follows:

> (5) An order under this section may be —
>
> (a) an order for the unconditional revocation of the patent; or
>
> (b) where one of the grounds mentioned in subsection (1) has been established, but only so as to invalidate the patent to a limited extent, an order that the patent should be revoked unless within a specified time the specification is amended under section 83 to the satisfaction of the Registrar.

In my opinion, it would be appropriate to exercise this power and give the Plaintiffs the opportunity to amend their application to conform

with the narrower scope of the US 054 Patent.

(d) Whether entitled to claim priority date of US Patent

80 In respect of this issue, the Defendants have filed the following particulars of objections:

> 7. The 1st Plaintiff is also not entitled to the priority date as claimed in the 60169 Patent application which was the date of the filing of the 054 US Patent Application. This is because invention to which the 60169 Patent relates is not supported by matter disclosed in the 054 US Patent Application.
>
> PARTICULARS
>
> By reason of the particulars set out in paragraph 5 above, the purported invention to which the 60169 Patent relates is not supported by the matter disclosed in the 054 US Patent Application.

81 Section 17(2) of the Act permits the applicant to claim an earlier filing date under certain circumstances. That provision states as follows:

> (2) If in or in connection with an application for a patent (the application in suit) a declaration is made, whether by the applicant or any predecessor in title of his, complying with the relevant requirements of the rules and specifying one or more earlier relevant applications for the purposes of this section made by the applicant or a predecessor in title of his and each having a date of filing during the period of 12 months immediately preceding the date of filing the application in suit, then —
>
> (a) if an invention to which the application in suit relates is supported by matter disclosed in the earlier relevant application or applications, the priority date of that invention shall instead of being the date of filing the application in suit be the date of filing the relevant application in which that matter was disclosed or, if it was disclosed in more than one relevant application, the earliest of them; and
>
> (b) the priority date of any matter contained in the application in suit which was also disclosed in the earlier relevant application or applications shall be the date of filing the relevant application in which that matter was disclosed or, if it was disclosed in more than one relevant application, the earliest of them.

82 The invention to which the 60169 Patent applies, so far as it relates to the use of two magnets on each bridge, is not supported by matter disclosed in the US 054 Patent. Accordingly s 17(2)(a) is not satisfied and the priority date of the 60169 Patent is not the date of filing of the US 054 Patent, at least in respect of the double-magnet feature.

(e) Whether Pearl's Optical, Peng Lian, AZ Optics and Lee Meng committed the acts of infringement

83 As in the case of the 47151 Patent, Pearl's Optical similarly admit that they had, on 23 December 1999, sold a pair of Giacoma Puccini Frame (Model GP08146, 19, Color 14) ("the Giacoma trap purchase"). And they similarly do not admit that it infringes the 60169 Patent (if valid) and put the Plaintiffs to strict proof. Again the Plaintiffs' case got into trouble on the evidence. They did not call any witness to identify the exhibit alleged to be the Giacoma trap purchase. Accordingly the Plaintiffs' case in this respect also falls.

84 However in respect of Peng Lian, they have admitted in the pleadings that:

> (i) they have infringed claim 1 or claim 2 of the 60169 Patent (if valid); and

(ii) they are the distributors of the article shown in the photograph annexed as "YPS-1" of Yo's affidavit of 17 May 2000.

Admission (i) above means that Peng Lian have committed the acts of infringement.

85 I turn now to the AZ Optics. Again the Plaintiffs' case falls short due to lack of evidence. The person who is alleged to have made the trap purchase was not called to give evidence and identify the item purchased. The Plaintiffs' witness for this purpose appears to be Teo Kim Men, the Managing Director of Dalmink. But he confirmed that he was not personally involved in the trap purchase from AZ Optics. As such he was not able to identify from his own knowledge the item concerned. I hold therefore that it is not proven that AZ Optics had committed any act of infringement.

86 The evidence against Lee Meng is similarly inadequate. Lee Meng rely on the fact that the infringing item in question was not identified. The trap purchase is alleged to be made by the same person as in AZ Optics. It is puzzling why he was not called, but he was not. Accordingly the Plaintiffs have failed to prove that Lee Meng have sold any item that infringes the 60169 Patent.

87 As in the case of the 47151 Patent, it is not necessary for me to consider expert evidence as to whether the exhibits examined by them infringe the 60169 Patent.

Issue 3: Whether Plaintiffs made groundless threats

88 Section 77 of the Act provide as follows:

> (1) Where a person (whether or not the proprietor of, or entitled to any right in, a patent) by circulars, advertisements or otherwise threatens another person with proceedings for any infringement of a patent, a person aggrieved by the threats (whether or not he is the person to whom the threats are made) may, subject to subsection (4), bring proceedings in the court against the person making the threats, claiming any relief mentioned in subsection (3).
>
> (2) In any such proceedings, the plaintiff shall, if he proves that the threats were so made and satisfies the court that he is a person aggrieved by them, be entitled to the relief claimed unless —
>
> > (a) the defendant proves that the acts in respect of which proceedings were threatened constitute or, if done, would constitute an infringement of a patent; and
> >
> > (b) the patent alleged to be infringed is not shown by the plaintiff to be invalid in a relevant respect.
>
> (3) The said relief is —
>
> > (a) a declaration to the effect that the threats are unjustifiable;
> >
> > (b) an injunction against the continuance of the threats; and
> >
> > (c) damages in respect of any loss which the plaintiff

has sustained by the threats.

> (4) Proceedings may not be brought under this section for a threat to bring proceedings for an infringement alleged to consist of making or importing a product for disposal or of using a process.
>
> (5) It is hereby declared that a mere notification of the existence of a patent does not constitute a threat of proceedings within the meaning of this section.
>
> (6) Nothing in this section shall render an advocate and solicitor or any other person liable to an action under this section in respect of an act done by the advocate and solicitor or the other person in his professional capacity on behalf of a client.

89 Pearl's Optical, Peng Lian and Lee Meng have counterclaimed against the Plaintiff for groundless threats. The threats made by the Plaintiffs in the form of warning notices and demand letters are not denied.

90 On behalf of Peng Lian, Yo gave evidence that after receiving notice of the Plaintiffs' threats Peng Lian stopped selling or distributing products that the Plaintiffs claimed infringed the 47151 Patent. He claimed he incurred losses as a result of the threat. He added that he had to collect back some 1000 to 2000 pairs of temple-mounted frames from his customers.

91 In view of my findings that the Pearl's Optical and Peng Lian have not committed the acts of infringement, it follows that the Plaintiffs have made groundless threats against them.

92 In relation to the 60169 Patent, the Plaintiffs have similarly failed to prove that Pearl's Optical and AZ Optics have committed acts of infringement. In respect of Peng Lian, no priority date can be claimed on the invention in respect of the double-magnet feature. There is no evidence that the acts of infringement admitted by Peng Lian relates to a spectacle frames with a single magnet on the bridges. Indeed none of the exhibits produced, whether admissible or otherwise, relate to a single-magnet feature. Therefore the Plaintiffs have made groundless threats against all four Defendants in respect of the 60169 Patent.

Issue 4: Recordals

93 Section 75 of the Act provides as follows:

> Where by virtue of a transaction, instrument or event to which Section 43 applies, a person becomes the proprietor or one of the proprietors or an exclusive licensee of a patent and the patent is subsequently infringed, the court or the Registrar shall not award him damages or order that he be given an account of the profits in respect of such a subsequent infringement occurring before the transaction, instrument or event is registered unless:
>
> (a) the transaction, instrument or event is registered within the period of 6 months beginning with its date; or
>
> (b) the court or the Registrar is satisfied that it was not practicable to register the transaction, instrument or event before the end of that period and that it was registered as soon as practicable.

94 Richard Chao is registered as the proprietor of the 47151 Patent. He assigned it to Contour Optik on 6 January 1997. This assignment was recorded on 26 August 2000. The exclusive licence agreement with Dalmink was executed on 1 February 1997. The recordal of that licence was done on 1 September 2000.

95 The Defendants submit that by operation of s 75 Contour Optik cannot claim damages for any infringement in respect of the 47151 Patent prior to 26 August 2000 as the recordals were done more than six months after the date of the agreements. Similary Dalmink cannot do so in respect of infringements before 1 September 2000.

96 In the case of the 60169 Patent, Contour Optik is registered as the proprietor. They executed a License and Distribution Agreement dated 1 January 1998 which granted an exclusive licence to Dalmink. This agreement was registered with the Registry of Patents on 25 August 2000. The Defendants submit that Dalmink may not claim damages for infringement of the 60169 Patent prior to 25 August 2000.

97 The Plaintiffs submit that although the instruments were not registered within the six-month window, the registrations were done within a reasonably practicable time, thereby falling within s 75(b). However this is a bare submission and the Plaintiffs did not adduce any evidence of their registering the instruments as soon as it was practicable to do so. The delays are not in terms of weeks or months, but years: in the 47151 Patent, the instruments were registered more than three and a half years after execution and in the 60169 Patent, more than two and a half years. In those circumstances I would have thought that it would take considerable evidence to prove that contention.

98 The Plaintiffs also point out that Peng Lian did not suffer any prejudice by the late recordal and ask the Court to take a benevolent view of the delay. However even if that is correct as a fact, it is not a relevant factor under the Act. For s 75(b) to be invoked two matters must be shown to the satisfaction of the court or Registrar: (i) that it was not practical for the registration to be effected within the six-month period; and (ii) that it was done as soon as practicable. In the circumstances of this case there is no evidence of either matter and hence there is no question that the Plaintiffs cannot rely on s 75(b).

Orders made

99 In view of the findings I have made above, I make the following orders:

(1) The Plaintiffs' claims against all four Defendants in both Suits are dismissed.

(2) There shall be an inquiry as to damages in respect of groundless threats made by the Plaintiffs against each of the four Defendants and an order for the Plaintiffs to pay the assessed damages and statutory interest thereon from the date of this judgment.

(3) The Plaintiffs shall pay the costs of the four Defendants to be agreed or taxed.

(4) There shall be an order pursuant to s 80(5) of the Act that the 60169 Patent shall be revoked unless the specification is amended under s 83 to the satisfaction of the Registrar within six months of this judgment.

(5) The parties are at liberty to apply for any further consequential orders.

Sgd:

LEE SEIU KIN

JUDICIAL COMMISSIONER

SUPREME COURT

Appendix 1: 47151 Patent

Appendix 2: 60169 Patent