Flamelite (S) Pte Ltd and Others v Lam Heng Chung and Others
[2001] SGHC 66

Case Number : Suit 2352/1998

Decision Date : 31 March 2001

Tribunal/Court : High Court

Coram : MPH Rubin J

Counsel Name(s) : Steven Seah and Eric Chew (Drew & Napier) for the plaintiffs; Wong Siew Hong and Lim Hsiao Kang (Yeo Wong & Thian) for the defendants

Parties : Flamelite (S) Pte Ltd; Flametech (S) Pte Ltd; Glaverbel S A (Brussels Register of Commerce No 383768) — Lam Heng Chung; Sim Bee Hoon both trading as K D M Metal Glass Works; Swissflame Pte Ltd; Wu Kum Fai

JUDGMENT:

1 The dispute in this action concerns copyright issues over certain sketches of a framing system for fire-rated or fire-resistant glass doors and glass screens. The second head of the claim straddles issues pertaining to breach of confidence.

The parties

2 The first and second plaintiffs who initiated the proceedings are companies incorporated in Singapore. They are in the business of manufacturing and installing fire-rated glass-doors and glass screen systems.

3 The third plaintiffs a Belgian company came into the picture much later. They are also in the business of making and selling fire-rated glass and are said to be owners of copyright in drawings of their own framing systems.

4 The first and the second defendants were partners of a firm trading as KDM Metals Glass Works (KDM). The third defendants are a private exempt company incorporated by the first and second defendants. The third defendants are also in the business of manufacturing and installing fire-rated glass doors and fire-rated glass screen systems.

5 The first and the second defendants are the only two shareholders in the third defendants. For the period between 6 August 1994 and 20 December 1997, the first defendant was a director of the third defendants. Although the first defendant ceased to be a director of the third defendants with effect from 20 December 1997, he continued to hold himself out as the managing director of the third defendants.

6 The second defendant had been a director of the third defendants and that the first and second defendants have also been responsible for the day to day running of the third defendants business.

Claims based on copyright infringement

7 The first and the third plaintiffs have instituted these proceedings for copyright infringement of their reportedly, original works. In this regard the first plaintiffs have sued the first, third and fourth defendants for infringing their copyright in the *preliminary sketches* of their framing system used in relation to fire-rated glass doors and fire-rated glass screens. The third plaintiffs have sued the first and the third defendants for infringing their copyright in an artistic work consisting of the design of their framing system used in relation to fire-rated glass screens. [Highlight added].

Claims based on breach of confidence

8 The first and second plaintiffs in the same action have also sued their former sub-contractor, the first defendant for committing a breach of his obligation of confidence for allegedly using and disclosing, without the consent of the first and second plaintiffs, confidential information belonging to the first and second plaintiffs to the latters detriment.

9 The first plaintiffs have also sued their former employee, the fourth defendant, for breaching his obligation of confidence for allegedly using and disclosing confidential information belonging to the first plaintiffs to others without the consent of the first plaintiffs.

10 As regards the second defendant, it transpired in the course of the trial, that the action against her had been discontinued by the first and second plaintiffs with costs to the second defendant to be taxed if not agreed. The third plaintiffs did not at any time make any claim against the second defendant.

Pleadings

Plaintiffs claims

11 In order to provide a proper perspective of the contestants claims and denials, reference must be made to certain segments of the parties respective pleadings. The first plaintiffs averments (which includes the second plaintiffs) as regards copyright infringements as pleaded by them in paras 9 to 13 of the statement of claim are as follows:

> Copyright Infringement
>
> 9. At all material times, the 1st Plaintiff is the owner of the copyright in preliminary sketches containing designs of certain structural frames (hereinafter referred to as "the said structural frames") used in fire rated glass doors and fire rated glass screen systems (hereinafter referred to as "the original artistic works") as evidenced by or contained in the drawings annexed hereto as "A" and "B".
>
> Particulars of copyright ownership
>
> (1) The said structural frames were designed and the original artistic works were created by one Loke Gim Tay in Singapore.
>
> (2) The original artistic works pertaining to the designs of the said structural frames used in fire rated glass doors and fire rated glass screen systems as evidenced by or contained in Annexure "A" were created sometime around May 1991.
>
> (3) The original artistic works pertaining to the designs of the said

structural frames used in fire rated glass doors as evidenced by or contained in Annexure "B" were created sometime in August 1993.

(4) The said Loke Gim Tay created the original artistic works as evidenced by or contained in Annexure "A" as an employee in the course of his employment with the 2nd Plaintiff, and the original artistic works as evidenced by or contained in Annexure "B" as an employee in the course of his employment with the 1st Plaintiff.

(5) Under s.30(6) of the Copyright Act (Cap. 63) copyright in the works of an employee belong to the employer.

(6) At all material times, the said Loke Gim Tay was a "qualified person" within the meaning of s.27(1)(a) of the Copyright Act (Cap. 63), in that, he was a person resident in Singapore.

(7) On or about 15 April 1994, the 2nd Plaintiff assigned to the 1st Plaintiff the copyright in the original artistic works as evidenced by or contained in Annexure "A".

(8) The above assignment is evidenced by or contained in a *nunc pro tune* Deed of Assignment entered between the 1st Plaintiff and the 2nd Plaintiff dated the 21st day of May 1999.

10. From a date unknown to the 1st Plaintiff until the issuance of this Writ, the 3rd Defendant has been reproducing, and knowingly offering for sale and selling fire rated glass doors and fire rated glass screen systems with structural frames which designs are identical or substantially similar to the designs of the Plaintiffs structural frames.

11. By reason of the 3rd Defendants aforesaid acts, they have infringed the 1st Plaintiffs copyright in the original artistic works.

12. The plaintiffs are unable to enumerate the infringing

acts of the 3rd Defendant until further discovery but will seek to recover damages in respect of each and every such act. The short particulars which the Plaintiffs can give at this stage are set out below.

Particulars of infringement

(1) The 3rd Defendant supplied fire rated glass doors and/or glass screen systems with structural frames which infringed the 1st Plaintiffs copyright in the original artistic works in the following projects:

(a) Reuters Computer at Science Park Road in 1995;

(b) IOH/NDC project at Outram Road in 1996;

(c) Merchant Court Hotel at Merchant Road in 1997;

(d) Pebble Bay Condominium at Tanjong Rhu 1997; and

(e) Costa Rhu Condominium at Tanjong Rhu in 1997.

(2) The 3rd Defendant reproduced structural frames and/or drawings which infringed the 1st Plaintiffs copyright in the original artistic works as shown in the following test reports:

(a) SISIR Test Report No. G168640 dated 12 September 1995;

(b) SISIR Test

Report No. G169176 dated 3 November 1995;

(c) Warrington Fire Research Group Report WFRS No. SC1535 dated 29 January 1997; and

(d) Warrington Fire Research Group Report WFRS No. SC1635 dated 29 January 1997.

(3) The 3rd Defendants undated leaflet for a hour fire rate glass door with insulation.

13. As the 1st Defendant and 2nd Defendant are responsible of the day to day running of the 3rd Defendant, they have also infringed the 1st Plaintiffs copyright in the original artistic works.

12 The third plaintiffs averments as regards copyright infringement against the first and third defendants appear at paras 40 to 46 of the statement of claim and they read as follows:

40. The 3rd Plaintiffs are the owner of the copyright in an original artistic work ("the Work") consisting of the design of a framing system used in relation to a fire rated glass screen.

Particulars of Ownership

(1) Robert Vanderstukken is the author of the Work ("the Author").

(2) The 3rd Plaintiffs are and at all material times have been resident in Belgium.

(3) The Author is and at all material times has been resident in Belgium.

(4) The Author created the Work as the 3rd Plaintiffs employee in the course of employment sometime in 1985.

(5) Under Belgian copyright law, copyright subsists in the

Work and that copyright belongs to the 3rd Plaintiffs as employer of the Author.

(6) By virtue of Regulation 3 of the Copyright (International Protection) Regulations as amended by Regulation 5 of the Copyright (International Protection) (Amendments) Regulations 1996 (S 486/96), the Work enjoys copyright protection in Singapore, with effect from 15 November 1996.

41. The Work is contained in and evidenced by drawings of the same illustrated in the following:

(1) the University of Ghent No. 5244 Report dated 10 May 1985 prepared on behalf of the 3rd Plaintiffs;

(2) the University of Ghent Report No. 5673 dated 18 June 1987 prepared on behalf of the 3rd Plaintiffs;

(3) the University of Ghent Report No. 6223 dated 10 May 1990 prepared on behalf of the 3rd Plaintiffs; and

(4) the promotional leaflet for 3rd Plaintiffs "Pyrobel" fire-resistant glass printed in July 1992 and distributed by Schr-Mont Pte Ltd, the sole agents for "Pyrobel" products in Singapore.

42. From a date unknown until the issuance of this Writ, the 3rd Defendants have infringed the 3rd Plaintiffs copyright by manufacturing framing systems which designs are substantially similar to the 3rd Plaintiffs designs without the licence of the 3rd Plaintiffs.

43. The 3rd Plaintiffs repeat paragraph 12 above.

44. The 1st Defendant, as the controlling mind of the 3rd Defendants, is also liable to the 3rd Plaintiffs for infringement of its copyright.

45. By reason of the matters aforesaid, the 3rd Plaintiffs have suffered loss and damage.

46. Unless and until the 1st and 3rd Defendants are restrained by this Honourable Court, they intend and threaten to infringe the 3rd Plaintiffs copyright as specified in paragraph 42 above.

13 The averments of the first and second plaintiffs under the heading breach of confidence against the first and second defendants appear at paras 15 to 28 of the statement of claim and they read as follows:

Breach of confidence

15. After the incorporation of the 2nd Plaintiff on 14 February 1991, the said Loke Gim Tay set out to develop a fire rated glass door and fire rated glass screen systems which included the structural frames. After about 3 months of experiment and research, the said Loke Gim Tay developed structural frames which are original and peculiar to 2nd Plaintiffs only.

16. The above structural frames are evidenced by and contained in Annexure A.

17. The above structural frames were different from the structural frames prevailing in the market in 1991.

18. Sometime in August 1993, the said Loke Gim Tay modified and created the structural frames as evidenced by or contained in Annexure "B".

19. At all material times, the designs of the said structural frames are kept strictly confidential by the 2nd Plaintiff and the 1st Plaintiff.

20. The Plaintiffs said that the designs of the said structural frames have not entered the public domain.

21. Sometime between about 6 February 1992 and 30 June 1994, the 1st Defendant and 2nd Defendant trading as KDM were engaged by the Plaintiffs as a sub-contractor to fabricate and install their fire rated glass doors and fire rated glass screen systems as well as the structural frames which are the subject matter of the original artistic works.

22. The 1st and 2nd Defendants received from the Plaintiffs copies of the shop drawings and detailed specifications pertaining to the designs of the above structural frames all of which are confidential. They also received from the Plaintiffs confidential information regarding the design and construction of the Plaintiffs fire rated glass doors.

Particulars of confidential information

(1) For the first job carried out by KDM, apart from handing over and explaining to the 1st Defendant, the shop drawings and detailed specifications of the Plaintiffs fire rated glass door, Loke also showed the 1st Defendant a prototype in the factory and brought him to one of the sites to explain how the Plaintiffs fire rated glass door should be installed.

(2) The 1st Defendant was shown on how to affix the door straps and the aesthetic cladding.

(3) The above methods are confidential.

23. The Plaintiffs say that, as a sub-contractor to the Plaintiffs, the 1st and 2nd Defendants owed the Plaintiffs a fiduciary duty to keep confidential and only to

use for the benefit and interest of the Plaintiffs the designs of the said structural frames.

24. The Plaintiffs say that the 1st and 2nd Defendants fiduciary duty to keep confidential and only to use for the Plaintiffs benefit and interest the designs of the above structural frames as long as the said designs do not enter the public domain. To date, the said designs have not entered the public domain.

25. On or about 30 June 1994, the Plaintiffs terminated the services of KDM as the quality of its works deteriorated.

26. On or about 6 August 1994, the 1st Defendant and 2nd Defendant incorporated the 3rd Defendant, a private exempt company to manufacture and install fire rated glass doors and glass screen systems using structural frames which are identical or substantially similar to the designs of the Plaintiffs structural frames without the Plaintiffs consent.

27. By their aforesaid acts, the 1st and 2nd Defendants have breached the fiduciary duty referred to in paragraphs 23 and 24 above.

Particulars of Breach

The Plaintiffs repeat paragraph 12 above.

28. By reason of the 1st and the 2nd Defendants breach of fiduciary duty, the Plaintiffs have suffered and are likely to suffer damage.

14 It should be recalled however, that the first and second plaintiffs had abandoned and discontinued their claims against the second defendant in the course of the proceedings.

15 The first plaintiffs claim based on breach of confidence against the fourth defendant are set out in paras 29 to 37 of the statement of claim and they read as follows:

The 4th Defendant

29. Between 19 November 1992 and 30 June 1994, the 4th Defendant was employed by the 1st Plaintiff as a Technical Sales Executive.

30. During the 4th Defendants employment with the 1st Plaintiff, he was entrusted in confidence with the designs and detailed specifications pertaining to the 1st Plaintiffs said structural frames.

31. Further the 4th Defendant knew or ought to have known that the copyright subsisting in the designs of the 1st Plaintiffs said structural frames belong to the 1st Plaintiff.

32. Yet in the course of his employment with the 3rd Defendant, the 4th Defendant knowingly assisted the 3rd Defendant in approaching the 1st Plaintiffs

customers to promote and sell fire rated glass doors and fire rated glass screen systems using structural frames which are identical or substantially similar to the 1st Plaintiffs said structural frames. By his aforesaid acts, the 4th Defendant has infringed the 1st Plaintiffs copyright.

33. The short particulars which the 1st Plaintiff are able to provide at this time prior to discovery are set out below.

Particulars of Infringement

(1) On or about 20 October 1995, the 4th Defendant wrote to Kumagi Gumi Co Ltd to offer to sell a fire rated door with a structural frame which infringed the Plaintiffs copyright.

(2) The Plaintiffs repeated paragraph 12(2)(b) and (c) above and say that the 4th Defendant was the applicant for the Warrington Fire Researchs reports.

34. Moreover, the 1st Plaintiff says that the 4th Defendant owed and still owes the 1st Plaintiff a fiduciary duty to keep confidential and only to use for the Plaintiffs benefit and interest the designs of the above structural frames.

35. In breach of his fiduciary duty, the 4th Defendant disclosed and used the designs of the above structural frames other than for the 1st Plaintiffs benefit and interest.

36. The short particulars which the Plaintiffs are able to provide at this time prior to discovery are set out below.

Particulars of Breach

The 1st Plaintiff repeats paragraph 33 above.

37. By reason of the 4th Defendants acts of infringement and breach of his fiduciary duty, the 1st Plaintiff has suffered and is likely to suffer damage.

Defence

16 Insofar as the first and third defendants are concerned, the defendants say amongst other things that annexures A and B adverted to in this case illustrate non-proprietary principles or methods and that the said method has been in common use in the fire-resistant glass door industry for about 20 years. They also claim that there is no infringement since the products of the defendants would not appear to persons who are not experts in relation to such doors to be reproductions of the plaintiffs alleged works. As regards the claim based on breach of confidence, the first and third defendants deny that the acts alluded to against them constitute a valid claim.

17 Insofar as is material, the relevant parts of the first and third defendants pleadings as appear in paras 4 to 8A and 10, 10A and

12B are reproduced hereunder:

4. The 1st and 3rd Defendants say that Annexures "A" and "B" (aside from the question of copyright) illustrates (sic) a non-proprietary principle or method of constructing fire rated glass doors and structural frames therefor (hereinafter referred to as "the Method"). The Method involves mounting fire resistant glass on a hollow steel section between fire-proof calcium silicate boards. The steel section and calcium silicate boards are then joined to form a structural frame. The gap between the fire-resistant glass and the calcium silicate board is filled using fire-proof materials.

5. The 1st and 3rd Defendants say that the Method is in common use in the fire-resistant glass door industry and has been in such use for approximately the last 20 years around the world including Singapore.

Particulars

a. The use of the Method is demonstrated in various test documents prepared by fire research laboratories, including:

i. the University of Ghent No 5244 Report dated 10 May 1985 prepared on behalf of Glaverbel Ltd (hereinafter "Glaverbel").

ii the University of Ghent Report No 5673 dated 18 June 1987 prepared on behalf of Glaverbel.

iii the University of Ghent Report No 6223 dated 10 May 1990 prepared on behalf of Glaverbel.

iv the University of Ghent Report No 6401 dated 24 September 1990 prepared on behalf of NV Ateliers Meyvaert and employing fire resistant glass manufactured by Saint-Gobain Exprover and sold under the trade mark "Contraflam".

6. The use of the Method was known and employed in Singapore on dates unknown but prior to the Plaintiffs copyright claim.

Particulars

(a) The 1st and 3rd Defendants repeat the Particulars in paragraph 5 herein and say that those reports were circulated in Singapore as part of the sales and promotional efforts of the manufacturers concerned.

(b) The Method was approved for use in Singapore in the Singapore Joint Civil Defence Foce letter dated 12 October 91 to M/s Esai Trading Pte Ltd.

(c) The use of the Method is illustrated in the promotional leaflet for Glaverbels "Pyrobel" fire-resistant glass distributed by Shr-Mont Pte Ltd, the sole agents for "Pyrobel" products in Singapore.

7. Save the Method (which is non-proprietary) had been employed in the construction of the glass doors and/or glass screen systems installed at the projects listed at Paragraphs 12(1)(a) to (e), the 1st and 3rd Defendants deny copying or reproducing the Plaintiffs structural frames, as alleged in Paragraphs 10 and 11 of the Amended Statement of Claim. The 1st and 3rd Defendants further say that any similarity or substantial similarity (which is denied) comes about solely as a result of form being dictated by function as well as the use of the Method as conceptualized and embodied in the test reports made available to the 1st and 3rd Defendants, including, inter alia, the University of Ghent Report No 6401.

8. Save that the 3rd Defendants supplied fire rated glass doors and/or glass screen systems to the projects listed paragraphs 12(1) of the Amended Statement of Claim and that the five (5) test reports referred to in Paragraph 12(2) of the Amended Statement of Claim are the 3rd Defendants Test Reports, the 1st and 3rd Defendants deny paragraph 12 of the Amended Statement of Claim.

8A. In any event, even if the sketches which are the subject matter of the claim herein, and/or Annexure "A" and/or Annexure "B" has been copied (which is denied), the Defendants say that there is no infringement as the doors of the Defendants would not appear to persons who are not experts in relation to such doors, to be reproductions of the Plaintiffs alleged works.

10. The 1st and 3rd Defendants deny paragraphs 15 to 20, paragraphs 22 to 26 and paragraphs 28 of the Amended Statement of Claim and puts the Plaintiffs to strict proof thereof.

Particulars

a. The Defendants admit to being shown sample doors and how the said doors were to be assembled.

b. The Defendants deny that the foregoing comprised confidential information and put the Plaintiffs to strict proof thereof.

c. The Defendants further deny that they were informed that the same comprised confidential information and put

the Plaintiffs to strict proof thereof.

10A. The Defendants put the Plaintiffs to strict proof that the matters pleaded in Paragraph 22 of the Statement of Claim comprises confidential information protectable by law.

12A. With respect of Paragraphs 40 and 41 of the Re-Amended Statement of Claim, the Defendants say they have no knowledge of the matters pleaded therein, and put the 3rd Plaintiffs to strict proof.

12B. With respect to Paragraphs 42 to 46 of the Re-Amended Statement of Claim, save that the Defendants have employed the Method in their glass doors, the Defendants deny having copied or substantially copied the 3rd Plaintiffs designs or in any way infringing the 3rd Plaintiffs copyrights (the existance and subsistence of which the 3rd Plaintiffs are put to strict proof). The Defendants repeat Paragraph 8A herein and says that the doors of the Defendants would not appear to persons who are not experts in relation to such doors, to be reproductions of the 3rd Plaintiffs alleged works.

18 As respects the fourth defendant, he, besides denying the first and the second plaintiffs averment that he was entrusted in confidence with the alleged designs and specifications, pleads in paras 2A, 3 and 5B as follows:

2A. In any event, even if the sketches which are the subject matter of the claim herein, and/or Annexure "A" and/or Annexure "B" has (sic) been copied (which is denied), the Defendants say that there is no infringement as the doors of the Defendants (sic) would not appear to persons who are not experts in relation to such doors, to be reproductions of the 1st and 2nd Plaintiffs alleged works.

3. Save that he has approached customers to sell fire rated glass doors and fire rated glass screen systems, the 4th Defendant denies paragraph 32 of the Amended Statement of Claim. The 4th Defendant puts the Plaintiffs to strict proof that the matters pleaded in Paragraph 29 to 32 of the Re-Amended Statement of Claim comprises confidential information protectable by law.

5B. With respect to Paragraphs 42 to 46 of the Re-Amended Statement of Claim, save that the 4th Defendant deny having copied or substantially copied the 3rd Plaintiffs designs or in any way infringing the 3rd Plaintiffs copyrights (the existence and subsistence of which the 3rd Plaintiffs are put to strict proof). The 4th Defendant repeats Paragraph 2A herein and says that the doors of the Defendants would not appear to persons who are not experts in relation to such doors, to be reproductions of the 3rd Plaintiffs alleged works.

Agreed facts

19 Counsel for both parties, at the invitation of the court furnished the court with a set of agreed facts and the list of issues to

be decided in this case.

20 The agreed facts as submitted by the parties are as follows:

1. Sometime in May 1985, the 3rd Plaintiffs ("Glaverbel") Production Manager, Robert Vanderstukken ("Vanderstukken) created the design of frame for a fire rated fixed screen.

2. At all material times, Glaverbel was and still is a company incorporated and resident in Belgium and Vanderstukken was and still is a resident in Belgium.

3. The preliminary drawings of the frame design no longer exist. The frame design is illustrated in the University of Ghent Test Report No. 5244 dated 10 May 1985 ("PB/203-221"), Test Report No. 5673 dated 18 June 1987 ("PB/222-237") and Test Report No. 6223 dated 10 May 1990 ("PB/255-271").

4. By virtue of Regulation 3(3) and 4 of the Copyright (International Protection) Regulations 1990 edition, read with the Copyright (International Protection) (Amendment) Regulations 1996, copyright subsists in the preliminary drawings in Singapore with effect from 15 November 1996.

5. Any copyright subsisting in the frame design vests in Glaverbel as Vanderstukken created it as an employee in the course of employment with Glaverbel.

6. By reason of the above matters, Glaverbel enjoy copyright protection in its frame design for fire rated glass screen in Singapore.

7. The original preliminary drawings were not shown to Loke Gim Tay ("Loke") or the Defendants. **[The Plaintiffs rely on the 1st Defendants admission that he had seen the 3rd Plaintiffs test reports before Swissflame obtained their first test report WFRC Report No. SC 1262 dated 14 March 1995. See NE/1187-88.]**

8. Sometime between April and July 1991, Loke using Glaverbels Test Report No. 5592, 6223 and 5673 as precedents created preliminary drawings of frames for a fire rated glass and fixed screen as an employee in the course of his employment with the 2nd Plaintiffs ("Flametech").

9. Loke engaged a free-lance draughtsman to reproduce the preliminary drawings into shop drawings. The preliminary drawings were then destroyed or thrown away after the shop drawings were made. The frames contained in the preliminary drawings are illustrated in Annexures A and B to the Statement of Claim. The Defendants have never seen these preliminary drawings. For avoidance of doubt, the Defendants dispute having seen Annexures A and B. **[The Defendants say that Annexures A and B illustrate the arrangement of the components used to construct a fire rated glass screen and glass door. The Plaintiffs say that just as all the profiles of the *other* manufacturers illustrate the arrangement of the components used to construct a fire rated glass screen and glass door, each of these other**

profiles are different and can be the subject of copyright protection.]

10. At all material times, Flametech was and still is a company incorporated and resident in Singapore and Loke was and still is a resident in Singapore. The copyright subsisting in those preliminary drawings vests in Flametech as Lokes employers.

11. Sometime in October 1992, Loke left Flametech to form his own company, the 1st Plaintiffs ("Flamelite"). Sometime in April 1994, Loke acquired Flametech.

12. The copyright in the preliminary drawings made by Loke was assigned by Flametech to Flamelite with effect from 15 April 1994 by virtue of a *nunc pro tunc* Deed of Assignment dated 21 May 1999.

13. By virtue of the above assignment, Flamelite became the owners of the copyright in the preliminary drawings of frames made by Loke and as illustrated in the Annexures A and B to the Statement of Claim.

14. Between January 1992 and May 1993, Flametech engaged the 1st Defendant, Lam Heng Chung ("Lam") as a sub-contractor to fabricate and install Flametechs fire rated glass doors and fixed screen. Between December 1992 and June 1994, Flamelite also engaged Lam as its sub-contractor for the same purposes.

15. In the course of his engagement as a sub-contractor, Lam was given shop drawings of the Plaintiffs frames.

16. On 19 November 1992, Flamelite also employed the 4th Defendant, Wu Kum Fai ("Wu") as a Technical Service Executive. In the course of Wus work, he had access to Flamelites shop drawings.

17. Loke told Wu that these shop drawings were proprietary and confidential. Wu disputes this.

18. Wus employment was terminated on 30 June 1994, the same month in which Lams services were terminated. After working for Flamelite, Wu worked for Radiantech Engineering Pte Ltd from July 1994 to March 1995.

19. In August 1994, 2 months after Flamelite terminated Lams services as a sub-contractor, he incorporated the 3rd Defendant, Swissflame Pte Ltd ("Swissflame").

20. Swissflame was and is in the same business of fabricating and installing fire-rated glass doors and screens.

21. Sometime in September 1995, Swissflame employed Wu as a Technical Manager.

22. As Swissflames Technical manager Wu quoted, offered for sales and sold Swissflames fire-rated glass doors to various customers. **[See Swissflames letter to Liang Huat Aluminium Ltd dated 17 June 1996 ("PB/905") and to**

Kumagi Gumi Co Ltd dated 12 and 20 October 1995. ("PB/903-904")] Moreover, in Swissflames promotional pamphlet (undated) customers were told to contact Wu or Lam for more technical information or detail. [(**"PB/334-5"**)]

23. Sometime in January 1997 and September 1997, Wu also submitted for and on behalf of Swissflame, applications to Warrington Fire Research Consultancy Testing for Swissflames fire glass door and screen to be rated. **(See "PB/173-185" for WFRS No SC 1535 Report and Wus signature at "PB/178"; "PB/186-202" for WFRS No SC 1653 Report, Wus signature at "PB/191")**

24. At all material times, Wu knew or was familiar with the framing system used in relation to Flamelites and Swissflames fire rated glass doors and screens.

25. The Plaintiffs claim that Swissflames framing system is substantially similar to or a near exact reproduction of the Plaintiffs framing system. Whilst the Defendants admit that the general arrangement of components is similar, Swissflames framing system is not an exact reproduction nor a slavish copy of the Plaintiffs framing system in terms of materials and dimensions. Further, the Defendants say that the frame design is a non-proprietary method of construction and is largely dictated by function.

Issues to be determined

21 The list of issues to be determined at this trial, as submitted by counsel for the parties are:

Copyright issue

1. Whether the Defendants infringed the Plaintiffs copyright by copying both the idea and expression of the Plaintiffs copyrighted works or whether the Defendants copied only the idea (namely the method of construction) but not the expression of the Plaintiffs copyright.

2. Whether the Defendants established the "non-expert" defence provided under S 69 of the Copyright Act?

Breach of Confidence issue

3. Whether the Plaintiffs have sufficiently particularised their claim of breach of confidence in relation to the design of their framing system as illustrated in their shop drawings. [The Plaintiffs in their closing submissions abandoned the claims based on the cladding and the method of laying the door straps.]

4. Whether the information contained in the shop drawings were of a confidential nature.

5. Whether the Defendants received the shop drawings in circumstances imparting an obligation of confidence.

6. Whether there was unauthorised use of the Plaintiffs confidential information.

Maintenance issue

7. Whether 1st Plaintiffs agreement to underwrite the 3rd Plaintiffs costs of the action amounts to unlawful maintenance?

8. If the above agreement amounts to unlawful maintenance, should the Court penalise the 1st Plaintiffs by way of costs?

Plaintiffs evidence

22 The plaintiffs called four witnesses to support their case: Mr Robert Vanderstukken (Vanderstukken) (PW-1) of the third plaintiffs, Mr Loke Gim Tay (Loke) (PW-2) the managing director of the first and second plaintiffs, Mr Goh Mong Chew (Goh) (PW-3) a sub-contractor who undertook the stainless steel works at the first plaintiffs project at Shaw House and Mr Robert Tang (Tang) (PW-4) of Schr Mont Pte Ltd, the distributors of the third plaintiffs Pyrobel glass in Singapore.

Vanderstukken (PW-1)

23 Vanderstukken outlined in his evidence how he came to design the third plaintiffs framing system, more particularly illustrated in a report called University of Ghent Report No 5244 in 1985. He said that since about 1977 has been responsible for the sale and development of a fire-resistant glass which the third plaintiffs marketed under the brand Pyrobel. He was at this time the designer and author of a frame for holding the fire-resistant glass. The cross-section of the frame he designed is illustrated in four test reports prepared by the University of Ghent (Belgium) for the third plaintiffs. Copies of these test reports No 5244, 5592, 5673 and 6233 dated 10 May 1985, 16 December 1986, 18 June 1987 and 10 May 1990 respectively could be found at pages 203 to 271 of the plaintiffs bundle of documents. He added that he created these designs as an employee of the third defendants in the course of his employment with them.

24 Vanderstukken added that the third plaintiffs first sold their fire-resistant glass in Singapore sometime in 1985 in relation to a project in Marina Square, Singapore. *However, the third plaintiffs never sold any frames with glass in Singapore or elsewhere* (highlight added). Instead, the third plaintiffs granted manufacturers of steel frames in Singapore and elsewhere licences to manufacture frames according to the third plaintiffs designs. These licenses were granted orally. However, the third plaintiffs did not grant any licence to the defendants.

25 Vanderstukken detailed as to how the third plaintiffs orally licensed the first plaintiffs through the recommendation of Tang of Schr Mont Pte Ltd, the third plaintiffs agent in Singapore. He also said that he was aware that Tang from time to time gave copies of the third plaintiffs brochures and test reports to Loke.

26 He further said that he instructed Tang to consent to the first and second plaintiffs use of the design of the third plaintiffs framing systems as contained in their test reports, if they wanted them. He then went on to assert that he had seen the first and second plaintiffs drawings of their *framing systems and noted that the latter had developed their own framing systems for the fire-rated glass doors.* [highlight added]. The third plaintiffs framing system was only in relation to a fixed screen. The first and second plaintiffs added a steel capping and aluminium capping to the framing system and also modified the framing system for use in relation to a fire rated door.

27 Touching upon the first and third defendants alleged infringing acts, it is best that Vanderstukkens averments as appear in paras 18 to 20 of his affidavit are reproduced. They read as follows:

> 18. I am also advised that the Defendants produced copies of the test reports and brochure of the 3rd Plaintiffs glass and steel framing systems. As such, the Defendants clearly had access to the 3rd Plaintiffs design.
>
> 19. At paragraphs 5 and 7 of the Amended Defence of the 1st and 3rd Defendants, they admitted that their framing systems were reproduced (sic) by using the Method illustrated in the above test reports and brochure.
>
> 20. A comparison between the Defendants designs of their framing systems as evidenced in their drawings disclosed by them and the 3rd Defendants designs reveals a substantial similarity between the Defendants designs and the Plaintiffs designs. I therefore respectfully invite this Honourable Court to draw an inference that the 1st and 3rd Defendants copied the 3rd Plaintiffs design.

28 Under cross-examination, Vanderstukken agreed that the University of Ghent Report No 5244, the first one on the series, illustrated possibly an *elementary framing system* (page 179 of the NE) and a *simple principle of construction* (page 194 of the NE). He also disclosed that the first plaintiffs had in fact agreed to underwrite the third plaintiffs costs of the proceedings [highlight added].

Loke (PW-2)

29 Loke was the principal spokesman for all the plaintiffs in these proceedings. His evidence can be summarised as follows.

30 Loke is currently the managing director of the first and second plaintiffs. He is a graduate in Building Management from the National University of Singapore. After his graduation in 1983, he worked for the Singapore Government more particularly with its Fire Safety Bureau (FSB). He incorporated the second plaintiffs with the support of a company known as PD International Ltd (PD). Later he resigned from the second plaintiffs to set up the first plaintiffs although he is the majority shareholder in both the first and second plaintiffs. He said that shortly after he joined the second plaintiffs (incorporated in February 1991), he was handed a contract by PD to supply fire-rated glass doors. As he became aware that fire-rated glass doors could be sold at high prices (para 12 of his affidavit) he conceived the idea of manufacturing them.

31 He then started thinking about the overall design and construction of a fire-rated glass door to meet a one-hour fire rating. The structural frames or the framing system formed only a part of the overall design of the fire rated door.

32 He knew that the glass and frames must be fire-resistant. The frames must be strong enough to hold the glass, which generally weighs about 100kg or more. He did not want to use hinges at the sides of the door because fire could penetrate through the gaps between the hinges. Covering the gaps would be troublesome, time consuming and ugly. Regardless of where the hinges are located, they must be strong enough to hold the weight of the glass door and withstand the stress of the normal usage of a door.

33 He ruled out pure aluminium frames even though aluminium is light because he knew that aluminium has a low melting point. He also felt that aluminium might not be strong enough to carry the weight of a glass door. Timber was also overruled because he felt that he would need to use thick timber to withstand one hour of fire. That would make the door too thick and cumbersome. If he were to use a pure steel frame, it would be heavy and might not be able to withstand intense heat. He also had to consider which fire-resistant glass to use. He then approached Tang of Schr Mont, the local agent of Pyrobel glass.

34 He told Tang he was trying to have a fire-resistant glass door made in Singapore and asked if he would agree to supply a few pieces of Pyrobel glass for use in testing. He told Tang that if the second plaintiffs were successful in their endeavours, they

would buy fire-resistant glass from Schr Mont. Tang was very supportive and agreed. This was a great help as the second plaintiffs did not have very much capital then. He then learnt from Tang that the third plaintiffs were his principals.

35 Sometime in May and June 1991 he received from Tang two test reports prepared by the University of Ghent on the Pyrobel glass. The framing system used by the third plaintiffs in the said two test reports was for a fixed screen. *Tang told him that the framing system was meant to be a suggestion or idea*. [highlight added] If the second plaintiffs wanted to use the third plaintiffs framing system, they had the third plaintiffs consent to do so. The second plaintiffs were also free to design their own framing system

36 Loke reiterated that the third plaintiffs test reports were in respect of a fixed screen and not a door. These reports would not have been acceptable to SISIR or FSB (Fire Safety Bureau) for the purpose of approving the fire door and panel that the second plaintiffs wanted to build. *The second plaintiffs needed to come up with their own framing system for their door and obtain their own SISIR test and FSB approval.* [highlight added].

37 *He noted that the fire-resistant glass in the third plaintiffs framing system was supported by the calcium silicate boards screwed to the steel core. He felt that the calcium silicate boards by themselves might not be strong enough to hold the heavy glass. He also noted that the calcium silicate boards cracked slightly when the screws were applied through them. He was also concerned that the calcium silicate boards might not be able to take the stress of normal usage of the door*. He learnt that he had to pass a cyclical test for the door, specifically that the door had to be able to turn 100,000 times without giving way. With the calcium silicate boards alone, the door might not pass the cyclical test [highlight added].

38 He was worried about the glass falling off if people were to lean on the glass door or panel. He felt that it was not safe to have the calcium silicate boards exposed because over passage of time, exposure to rain, mechanical impact and constant cleaning, the boards are likely to weaken and impair their ability to hold the glass firmly.

39 Moreover, the exposed calcium silicate boards might not look presentable and as such needed to be covered. After much thought, he decided to add steel-capping to the calcium silicate boards. The steel capping would not only protect the calcium silicate boards from the elements but it would also increase the framing systems resistance to fire.

He then set the screws through the steel capping, the calcium silicate boards and the hollow steel core. By this design, the weight of the glass would be supported by the steel-capping and core. Other ways of affixing the steel-capping such as putting the steel capping around the entire calcium silicate board or an inverted C steel-capping were considered and rejected. To the best of his knowledge, until the second plaintiffs did so, no one else had done this in Singapore.

41 *He added that by merely studying the third plaintiffs fixed screen, he could not convert the screen into a door. Making a door required considerations, among other things, to be given to*:

(a) *hanging the door*;

(b) *use of intumescent strips*;

(c) *capping*; and

(d) *fixing lock-sets and handles which require the cutting of an opening through the stiles and frame*.

[highlight added].

42 How should he then fix the fire glass door to the frame? Without hinges at the side of the door, the door had to be hung via the top and bottom rails. To him the answer lay in the use of pivot hinges which could support the weight of the door and withstand the stress caused by its swinging action.

43 The use of pivot hinges was common in the industry. There was nothing special about making this selection. The plaintiffs were not claiming proprietary right to such use. However, the way he laid the door-straps in the top and bottom rails of the plaintiffs door was peculiar to the plaintiffs and is confidential. This is not known to any one in the trade other than the sub-contractors who worked for and are working for the plaintiffs.

44 The door-strap cannot be fixed onto calcium silicate. Calcium silicate is brittle and would not be able to take the stress caused by the swinging action of the door. He had to attach the door-strap directly to the steel core. To do this, he removed a portion of the calcium silicate cladding. This however created two problems. First, the door- strap would be too low and only a short length of the pivot can be inserted into it. This may cause the pivot to slip out of the strap resulting in the door falling off. Next, there would be a gap through which fire can pass easily.

45 To solve the first problem, he reinforced the door-strap by placing steel plates on top of it, so that the pivot would not slip so easily. As for the gaps, he filled it up with intumescent strips. In the event of a fire, the strips would intumesce and seal the gap between the frame and the rails.

46 Each intumescent strip is made up of layers of intumescent material. He caused the strips to be laid in such a manner that they would fill the gaps as they expanded. How he used the intumescent strips is confidential to the plaintiffs.

47 He also used intumescent seals to address the gaps between the three sides of the door and the frame, and the meeting stiles of double leaf doors. As stated above, the intumescent material would expand under heat and cover the gaps to prevent fire penetration.

48 One of the things he did was to test the various types of intumescent fire seals to select one that he preferred. He tested with polysulphide based intumescent compound and palusol intumescent strips. He found that the polysulphide based intumescent compound became a loose cluster of spongy mass after burning. It disintegrated and was blown off easily by moving air. In contrast, the palusol intumescent strips formed a hard charcoal like compound after burning and did not disintegrate easily. He therefore selected the use of palusol fire seal.

49 *In referring to the tests done with the intumescent fire seals above, he said that he was not claiming proprietary right to the intumescent fire seal selected by him but was narrating a part of the process in arriving at the second plaintiffs design for their fire door. However, the steel capping did not look very nice. So he thought of adding an aesthetic capping to the steel-capping* [highlight added].

Creation of sketches and shop drawings

50 Before engaging a subcontractor to fabricate a specimen for testing, he needed to provide the subcontractor with shop drawings.

51 He was no draughtsman so he drew sketches of the elevation and cross sections of the framing system. At the suggestion of the foreman of PD, he included a fixed screen around the door. This was to enable the second plaintiffs to use the SISIR report to obtain FSB approval in the event that his company is asked to provide fixed screens without a door. He passed the sketches to a draughtsman who was doing freelance work called Seah Ke Wait (Seah) to reproduce the sketches in shop drawings for the second plaintiffs.

52 Seah was not required to and did not give any input to the designs of the fire-rated door, panel or frames. Seah just followed Lokes sketches and reproduced them into shop drawings. When Seah finished the drawings, he showed them to Loke for his approval. Loke believed that he made some amendments to the first shop drawings and asked Seah to incorporate the amendments, which the latter did. On behalf of the second plaintiffs, he paid Seah for the shop drawings.

53 He was not able to produce the sketches he drew as they had either been destroyed or thrown away after the shop drawings were made. He designed the fire-rated glass doors and panel and the framing system in the course of his employment with the

second plaintiffs.

54 *His design was not necessarily better than or an improvement over the prevailing designs at that time*. Whatever may be the merits or otherwise of his design, it is still his own creation made from his own knowledge, effort and time, and are not slavish copies of other designs. (highlight added)

Modifications/Additions to the third plaintiffs framing system

55 *Whilst he derived the idea from the third plaintiffs framing system, he did not copy the third plaintiffs drawings as illustrated in the University of Ghent Reports. At any rate, the third plaintiffs framing system was for a fixed screen and not a door. It was not possible to use the third plaintiffs framing system without any modifications at all*. [highlight added.]

56 He modified the third plaintiffs framing system by adding:

> (a) a steel capping over the calcium silicate board and putting the screws through the steel capping;
>
> (b) intumescent seals along the top rail, bottom rail and stiles of the door;
>
> (c) pivot hinges at the top and bottom rails of the door;
>
> (d) door handles; and
>
> (e) lock-sets.

57 The third plaintiffs framing system, however, did not have any of the above features.

The third plaintiffs consent

58 Insofar as the second plaintiffs framing system was derived from the third plaintiffs framing system, the second plaintiffs had the consent of the third plaintiffs to do so.

Confidential information

59 The following according to Loke are confidential information belonging to the second plaintiffs as well as the first plaintiffs:

> (a) the plaintiffs shop drawings containing the design of the plaintiffs framing system and the design itself;
>
> (b) the plaintiffs peculiar method of laying the door straps with steel plates and intumescent strips around them; and
>
> (c) the plaintiffs peculiar method of affixing the aesthetic cladding.

60 When he took over the second plaintiffs from PD, he assigned the copyright in the design of the framing system to the first plaintiffs. (see PB-411 for a copy of the copyright assignment made n*unc pro tunc* (now for then) and dated 21 May 1999).

Confidentiality

61 Loke asserted that he had told the first defendant that the door and glass screen system in the shop drawings were the plaintiffs design. He would not have given the first defendant the second plaintiffs drawings or showed him the second plaintiffs confidential methods if the first defendant was not about to be engaged as the second plaintiffs sub-contractor.

62 Besides KDM and other sub-contractors of the plaintiffs, drawings of the plaintiffs (but not the confidential methods) were shown only to Singapore Institute of Scientific & Industrial Research (SISIR) and Fire Safety Board (FSB), Warrington Fire Research, their main contractors, architects and their potential and actual customers.

63 In the case of SISIR, it was for the purpose of testing the fire-rating of the products. The practice of SISIR has always been to keep such drawings confidential and not pass them to other contractors for their manufacture or use.

64 In the case of FSB it was to get approval for the use of the fire-rated glass doors and/or glass screens in a particular building and/or area. Again, their practice has always been to keep these applications confidential.

65 Loke maintained that the design of the plaintiffs framing system has not entered into the public domain even though their fire-rated glass doors and glass screens have been installed in public places.

Employment of the fourth defendant

66 Loke said that on 19 November 1992, the first plaintiffs employed the fourth defendant as a Technical Services Executive.

67 Among his responsibilities were:

> (a) to deliver the technical/shop drawings to the sub-contractor, contractors and architects;
>
> (b) to ensure proper workmanship at the sites; and
>
> (c) to liaise with KDM.

68 The fourth defendant had access to the plaintiffs drawings and knew that those drawings were proprietary to the first plaintiffs because Loke told him so.

69 Loke terminated the fourth defendants employment with the plaintiffs on 30 June 1994. Subsequently and at a date unknown to the plaintiffs, the fourth defendant joined the third defendants.

70 Loke *added that as an ex-employee who had seen the plaintiffs drawings, the fourth defendant knew or ought to have known that the third defendants framing systems infringed the plaintiffs framing system. Yet he continued to offer to sell or sell the third defendants product. By doing so, he has infringed the plaintiffs copyright.* [highlight added]

71 Loke claimed that the fourth defendant owed the first plaintiffs a duty to act in good faith. That includes the duty not to disclose or use the first plaintiffs confidential information. Loke alleged that the fourth defendant breached this duty when he offered to sell or sold products based on the first plaintiffs confidential information.

Cross examination of Loke

72 It is not necessary at this stage to dwell at length on the replies Loke gave during his cross-examination. They will be referred to, if necessary at a later stage. However, two significant aspects require mention. In a set of brochures (PB-322 to PB-324) produced by Loke, there was a claim by the first plaintiffs that one of their glass-frame designs called compartment lite was a patented product. When Loke was confronted by defendants counsel whether he had any patent for such a design, he conceded that it was not. He tried to explain that owing to the proximity of time between the printing of the brochures in the course of 1994 and 1996 and legal advice on the matter, he did not have time to correct the false impression (pages 397 and 506-511 of the NE). It is pertinent to observe at this stage that a false claim of having a patent most certainly offends s 100(1) of the Patents Act (Cap 221) which provides that:

> 100.-(1) If a person falsely represents that anything disposed of by him for value is a patented product, he shall, subject to this section, be guilty of an offence and shall be liable on conviction to a fine not exceeding $10,000 or to imprisonment for a term not exceeding one year or to both.

Goh (PW-3)

73 Goh Mong Chew, the sole proprietor of one Unique Stainless Steel and Iron Works who were in the business of supplying, fabricating and installing stainless steel and iron works said in his evidence that sometime in 1992, he was asked by Loke to fabricate and instal stainless steel framing systems for use in relation to fire-rated glass screens and doors at Shaw House, Singapore. In the course of such works he agreed at Lokes request that the provision and installation of the fire-resistant glass be carried out by Lokes sub-contractor, Lam Heng Chung (DW-1) (Lam). After the Shaw House project, Goh had no business dealings with Lam. However, sometime in 1996 Lam approached him and asked for the plaintiffs shop drawings in respect of the Shaw House project but his request was rejected by Goh.

74 An observation is appropriate at this stage. It would seem that the purport of Gohs evidence was to show that Lam was bent on copying the plaintiffs shop drawings. The immateriality of Gohs testimony was however admitted by the plaintiffs counsel when he said *(page 832, lines 15 to 19 of the NE) "actually the impression I had was that Mr Lam needed the drawings from Mr Goh so that he could copy them. That impression has since been removed by the production of the defendants drawings"* (pages 832 to 834 of the NE) [highlight added.]

Tang (PW-4)

75 Tangs evidence can be summarised as follows. He is presently a director of Schr-Mont Pte Ltd (Schr-Mont), the local agent for the third plaintiffs architectural glass and mirrors and has been importing the Pyrobel brand of fire-resistant glass from the third plaintiffs. Schr-Mont sells only fire-resistant glass without the framing system. In his testimony, he said that he gave Loke copies of the third plaintiffs test reports prior to Loke embarking on his designing exercise. He claimed that he facilitated Lokes design process by sending it to the third plaintiffs for their comments and acted as a conduit between them. He conceded that he could not read technical drawings.

Defendants evidence

76 There were altogether six defence witnesses: Mr Lam Heng Chung (DW-1), (Lam) the first defendant (who is also a shareholder and director of the third defendants); Mr Wu Kum Fei (DW-2) (Wu) the fourth defendant; Mr Chan Chee Kien

(DW-3), a technical sales manager of Saint-Gobain Exprover (St Gobain), manufacturers of architectural and fire-proof glasses; Mr Chan Hon Lam (DW-4), the managing director of a company known as Esai Trading Pte Ltd which largely deals in glass products; Mr Chew Chye Heng (DW-5), an Associate Professor in the Department of Mechanical and Production Engineering in the National University of Singapore and Mr Stephen Kettle (DW-6), the Regional Manager of a company known as Warrington Fire Research (S) Pte Ltd. The second defendant Sim Bee Hoon who is the wife of the first defendant was not required to make her appearance since proceedings had been discontinued against her.

Lam (DW-1)

77 The evidence of Lam is as follows.

78 He is a shareholder and director of the third defendants. He first came to know Loke of the plaintiffs around 1992. He was introduced to him because Loke needed someone to continue the completion of the works on some doors which the first plaintiffs were installing at Ocean Building at Raffles Place. Apparently, the first plaintiffs had engaged another subcontractor to undertake those works but that subcontractor had abandoned the works halfway. The first plaintiffs needed someone to complete the works and it was then that he came into the picture.

79 Lam had previous experience in installing aluminium and steel-framed doors and windows. However, when he was told that the doors in question were to be fire-rated glass doors, he was a little apprehensive because he had not undertaken such work before but he was prepared to give it a try.

80 In the event, one Ms Michelle Loke of the first plaintiffs took him to their factory and showed him around. *He learnt during that visit that the only difference between ordinary metal-framed glass doors and fire-rated glass doors was that fire-rated glass was used in place of ordinary plate glass, and the joint between the glass and the metal frame was covered with a piece of fire-board before the external metal capping was applied.* [highlight added]

81 Lam was neither told that there was any secret in respect of the first and second plaintiffs method at that meeting; nor was he informed that the method of construction alluded to was confidential in any way before, during or after that visit. He felt confident that he could undertake the works in a good and professional manner. Consequently, he accepted the assignment and did complete the works. The first plaintiffs were evidently happy with his work since they continued to engage him for subsequent jobs. Over the next several years, he undertook numerous jobs for the first plaintiffs, including rectification works at Tanjong Pagar MRT Station which was first installed in the 1980s by a company known as Esai Trading. The glass was defective and had to be replaced. He undertook that particular job and completed it.

82 In all the jobs he undertook as a subcontractor for the first plaintiffs, the first plaintiffs would be responsible for ordering and supplying the glass in the specified size from the manufacturers. The fourth defendant, Wu would normally be the person who liaised with Lam on the dimensions of the steel frame and the thickness of the calcium silicate fire-board to be used. Instructions were relayed to Lam by the fourth defendant by way of rough hand-drawn sketches which set out the necessary dimensions. No copies of these sketches were ever kept. The materials for the steel frame as well as the calcium silicate fire boards were all standard material from third-party suppliers. Lam maintained that he had never, prior to these proceedings, seen the second plaintiffs drawings as shown in annexures A and B in the plaintiffs statement of claim.

83 The last job which he did for the first plaintiffs was the installation of fire-rated glass panels at Alfa Centre along Bukit Timah Road. Following a dispute with the first plaintiffs which is not relevant to these proceedings, his business relationship with the first plaintiffs and Loke ceased.

Relationship with the fourth defendant

84 Lam came to know Wu, the fourth defendant, when he undertook jobs from the first plaintiffs. Lam did not have contact with Wu for some time when Lam ceased working with the first plaintiffs after the Alfa Centre project. When Lam met Wu again, he learnt that Wu had left the first plaintiffs and had been working for sometime with one Radiantech Engineering Pte Ltd and later as a freelance fire-protection consultant.

85 Wu and Lam discussed the possibility of working together. Lam learnt that the fourth defendant had contacts with a few major glass manufacturers whereas for his part Lam had the requisite experience in metal fabrication. In the event, Wu joined the third defendants as their technical manager.

Business of the third defendants

86 Lam mentioned that the third defendants were able to obtain distributorship rights for the following major glass manufacturers:

(a) Pilkington Glass Ltd;

(b) Saint-Gobain Exprover;

(c) Securiglass Company Ltd;

(d) Schott Glas; and

(e) Promat International

87 Lam asserted that the third defendants designs (which the plaintiffs complain as being infringement of their copyright) were put together by them using the fire-rated glass of the manufacturers whom the third defendants represent. Neither Wu nor Lam did, in any way, refer or try to reproduce the sketches of the first plaintiffs from the time KDM did work for the first plaintiffs. Lam added that although there are similarities in the designs, they are dictated by the shape of the door and a common method known in the industry. According to Lam, a detailed examination of the allegedly infringing drawings and annexures A and B would show that the dimensions all differ. Only the method is common.

88 Lam averred that to his knowledge, the method mentioned is the most commonly used framing system and has been in existence for as long as the insulating glass market. Lam added that the method mentioned is the simplest, easiest and most basic means of constructing a fire rated glass door. He said that the plaintiffs are trying, by means of this suit, to claim proprietary rights over the said method for the purposes of stifling competition and stopping legitimate competitors from using the said method. He said that the plaintiffs should not be allowed, by employing a copyright claim, to gain a monopoly over the said method which is a basic means of assembling fire rated glass doors.

Wu (DW-2)

89 The evidence of the fourth defendant, who is the technical manager of the third defendants, is as follows.

90 He was employed by the first plaintiffs as a technical sales executive from about December 1992 until June 1994. Prior to joining the first plaintiffs he worked in the construction industry and was involved in general construction work. He had some exposure to the work of manufacturing and assembling doors, structural frames, screens and panels. One of his previous employers was the now-defunct South Seas Construction Pte Ltd.

91 Sometime in mid-1994, he left the employ of the first plaintiffs after a disagreement with Loke. This disagreement came about over works undertaken by the first plaintiffs at a project in Alfa Centre along Bukit Timah Road. There was a dispute between the first plaintiffs and the main contractor over the type of steel finishing for the project. Loke felt that Wu was to blame for the dispute, a view Wu declined to accept. He therefore tendered his resignation and left the employ of the first plaintiffs.

92 After he resigned from the first plaintiffs, he joined one Radiantech Engineering Pte Ltd from July 1994 to March 1995. During the period of his employment with Radiantech, he gained much insight into the workings of the fire-protection industry. Later he left Radiantech and after six months of freelance work joined the third defendants as their technical manager on or around March 1995.

Scope of duties with the first plaintiffs, Flamelite (S) Pte Ltd

93 During his employment with the first plaintiffs, he was mostly assigned to supervise on-site work. He was also assigned tasks like taking delivery of supplies ordered by the first plaintiffs, convening and attending site-meetings as the first plaintiffs representative; and generally ensuring that works were carried out properly and in accordance with the contract entered into. He was also responsible for taking site measurements and relaying them to the first plaintiffs for further action. He denied that he was ever given or entrusted with information which was told to him to be confidential by the first plaintiffs.

94 One of his duties whilst in the employ of the first plaintiffs included relaying instructions to the other parties. In this connection, Loke would sometimes sketch out technical instructions and give them to him for onward transmission to subcontractors. These sketches were very rudimentary. He often had to redraw Lokes sketches as neatly and legibly as he could before they were sent to sub-contractors and/or architects for action.

95 He was aware that the first plaintiffs had technical documents from the manufacturer of the "Pyrobel" glass. However, throughout his employment with the first plaintiffs he never saw any of those documents as Loke kept them strictly "under wraps". He had also never seen the drawings in annexures A and B of the statement of claim and the first time he had sight of them was when he was served with the Writ of Summons in this action.

96 Subsequently when working for the third defendants, his employers, he designed fire-rated door frames wherein the fire-rated glass was mounted on a steel frame and the gap between the glass and steel was covered with calcium silicate. To his knowledge, this is the most basic method of constructing fire-rated glass doors. He asserted that he did not in any way copy Lokes sketches as he did not think about them at any time.

97 He further said that throughout the period of his employment with the first plaintiffs, his employers never imparted to him any knowledge or skill pertaining to fabricating or assembling the components of the fire-rated glass systems nor did they provide him with any special training in this field. To the best of his knowledge and belief, he received no confidential information or material whilst in the first plaintiffs employ. He denied that he ever disclosed any information or material of a confidential nature belonging to the first plaintiffs to the third defendants or to anyone else at any time.

Associate Professor Chew (DW-3)

98 The evidence of Associate Professor Chew and Mr Stephen Kettle (DW-4) was that the plaintiffs framing system is elementary and basic. Insofar as is material, paras 1, 2, 3, 14, 15 and 16 of Associate Professor Chews report dated 8 February 2000 require reproduction and read as follows:

> 1) This report has been prepared at the request of Swissflame Pte Ltd to examine, compare and contrast, from an engineering experts point of view, a

series of test reports on fire rated systems.

2) The reports in question are as follows:

a. Annexures A & B in the Statement of Claim in this action.

b. The University of Ghent Report Nos 5244 and 6401.

c. SISIR Test Report G169176.

3) The tests carried out by the University of Ghent/SISIR were designed to prove and verify the efficacy of various types of insulating glass as well as their framing systems; to demonstrate and establish that the glass in question, when incorporated into a particular framing system, is capable of withstanding fire and heat for a specified period of time.

14) In all cases, the insulating glass is mounted onto a steel frame. The steel frame is enclosed with either by a slab of cemenboard or calcium silicate secured to the steel frame to improve its fire resistance. The gap between the frame and glass is filled with intumescent seal which allows the relative thermal movement of the glass and the frame and to seal the gap between the glass and frame effectively to improve its fire resistance.

15) The materials for the frames (i.e., the steel frame, cemboard and calcium silicate) in all cases appear to be constructed from "stock" materials commonly available.

16) *It is therefore my opinion that the framing systems in the reports illustrate the simplest and most fundamental method of constructing a fire-rated glass door, from the engineering point of view*. [highlight is added]

Mr Stephen Kettle (DW-4)

99 Mr Stephen Kettle who holds a diploma in Advanced Timber Technology and an Associate of the Institute of Wood Science and a person involved in the fire protection industry for over 20 years, testified that there are two basic approaches to assembling a framing system. According to him, either the component providing mechanical support is located in line with the edge of the glass and both sides are clad with an insulating component or the insulating material is placed in line with the glass edge and steel plates or beads are applied to both sides (para 21 of his affidavit of evidence-in-chief). In his opinion the plaintiffs used the first method.

100 According to Mr Kettle the entire system generally comprises the following:

(a) The glass panel;

(b) An intumescent fire seal;

(c) A structural frame made out of a hollow mild steel section;

(d) Calcium silicate building boards;

(e) Metal capping for the calcium silicate boards; and

(f) Edge sealing materials.

101 After examining the drawings of glazed construction by both the plaintiffs and the defendants, he opined in paras 26 and 27 of his affidavit as follows:

> 26. *I express no opinion whatsoever on whether the Defendants drawings have been copied from the Plaintiffs. However, I would state that all the drawings appear to be typical examples of the first method of constructing a framing system mentioned in Paragraph 21 herein, i.e., mounting the glass within a steel frame and "sandwiching" the glass between two outer layers of insulating material.*
>
> 27. *It is my understanding that technically similar basic designs have been in existence for some time, and have been previously tested by others in conjunction with other proprietary types of insulating glass.* [highlight added]

Chan Hon Lam (DW-4)

102 Chan Hon Lams evidence insofar as is material, can be stated as follows.

103 He first became involved in the glass industry sometime around 1980. Up till about 1985, he worked for Lindeteves Jacoberg Ltd (Lindeteves Jacoberg), which is the exclusive agent for St Gobain glass in Singapore. He left Lindeteves Jacoberg in late 1986 or early 1987 to set up Esai Trading Pte Ltd.

104 The St Gobain glass systems which Lindeteves Jacoberg dealt with, were imported from Europe fully assembled. They were then installed on site. The imported systems have already been tested and certified by the relevant testing authorities such as the University of Ghent to European standards. Authorization to install these systems in Singapore is issued by the Fire Safety Bureau (FSB) based on the accompanying test reports and manufacturers certificates.

105 After he left Lindeteves Jacoberg and set up Esai Trading Pte Ltd in late 1986 or early 1987, he continued the practice of importing fully assembled systems. He purchased his product from a Belgian company manufacturing frames, known as Arteliers Meyvaert (Meyvaert). Maeyvert uses Contraflam glass (also manufactured by St. Gobain) in their systems.

106 Sometime in 1987, Meyvaert offered to grant him a license to assemble their glass systems in Singapore. From the test reports it can be seen that the principle involved in the construction of the Meyvaert system is simple *the fire-rated glass is mounted on a steel channel and sandwiched between fire insulating boards made of calcium silicate or vermiculite and then capped with a metal finish. Such systems are relatively easy to construct.*

Chan Chee Kien (DW-3)

107 Chan Chee Kien, the technical sales manager of St. Gobain, produced two reports: EMPA No 46245 dated 27 July 1982 and EMPA No 43171 dated 10 February 1981 (DB-376 to DB-402). If one were to view the drawing in DB-389 (read with the translation thereof in DB-382) and also DB-402 with DB-396, the framing system bespoken had been in existence in Europe since about 1981.

Issues, arguments and conclusion

108 With the foregoing evidence in the background, I now propose to deal with the issues raised in this case.

The first issue

Whether the defendants infringed the plaintiffs copyright by copying both the idea and expression of the plaintiffs copyrighted works or whether the defendants copied only the idea (namely the method of construction) but not the expression of the plaintiffs copyright.

109 The plaintiffs counsels submission in regard to this issue (para 32(a) to (g))is that:

> (a) *copyright subsists in the preliminary sketches of the first plaintiffs framing systems though the latter may look simple. The sketches thus made are not slavish copies of the third plaintiffs drawings which are limited only to a fixed screen. The sketches adverted to include a framing system for a door and a C-channel for the frames, elements of which are material embellishments to the third plaintiffs drawings. Moreover, the third plaintiffs acknowledged that the copyright in Lokes drawings belonged to the first plaintiffs and not to the third plaintiffs in Mr Vanderstukkens affidavit.* [highlight added]
>
> (b) The third defendants drawings and products made in accordance with them clearly infringed the plaintiffs copyright. This is evidenced by the first defendants access, and through him the third and fourth defendants access, to the plaintiffs drawings and test reports, coupled with the substantial similarities (to the extent of near exact reproduction) between the plaintiffs drawings and the defendants drawings.
>
> (c) As a matter of law and contrary to the defendants contention, there is no requirement in this case for the plaintiffs to prove that the defendants products were near exact reproduction of the plaintiffs drawings to the extent that the same dimensions and the same materials must be used.
>
> (d) In any case, the defendants drawings are near exact reproductions of the plaintiffs drawings even if different materials are used and/or slightly different dimensions are used.
>
> (e) In this case, contrary to the defendants contention that they copied only the idea in the plaintiffs drawings, the defendants copied the material expression of the plaintiffs works.
>
> (f) A notional non-expert is entitled to look at the internal parts of the defendants products to compare the same with the plaintiffs drawings so as to determine whether they are substantially similar. So comparing, the non-expert will find that the defendants drawings are substantially similar to the plaintiffs drawings even to the extent of being near exact reproduction.
>
> (g) For the reasons above, the first, third and fourth defendants have clearly

> infringed the first plaintiffs copyright in the preliminary sketches of their framing system.

110 In addition, plaintiffs counsel endeavoured to highlight in para 74 of his submission that the plaintiffs who had a concept as to how to make their framing system, put that concept into a material expression ie, the sketches and from these sketches the shop drawings were made. And from those shop drawings the fire doors and glass screens were produced. The plaintiffs, he argued, are seeking to protect their copyright in their material expression.

111 At this stage it is perhaps instructive to recall a few well-established principles on the laws of copyright as annotated by the authors of Copinger and Skone James on Copyright (14th Edn). They say in paras 7 to 10 of their work:

> In dealing with the question of copying, there should be borne in mind the well established principle that there is no copyright in mere ideas, concepts, schemes, systems or methods. Rather, the object of copyright is to prevent the copying of the particular form of expression in which these things are conveyed. If the expression is not copied, copyright is not infringed. Thus, to be liable, the defendant must have made a substantial use of this form; he is not liable if he has taken from the work the essential idea, however original, and expressed the idea in his own form, or used the idea for his own purposes. Protection of this kind can only be obtained, if at all, under patent law or the law relating to confidential information.

112 The authors go on to comment later in the same para:

> It is not a correct statement of English law that because a copyright work contains the expression of an idea it may be copied; nor that if there is only one way of expressing an idea, then that way cannot be the subject of copyright; nor that where the expression of an idea is inseparable from its function, it form part of the idea and is not entitled to copyright protection. The correct position is that although copyright cannot prevent the copying of a general idea, where the idea has been worked out in detail in the form of writing, drawings, etc., it will be an infringement if the labour which went into the expression of the idea is appropriated. In such a case, it is not the idea which has been copied but its detailed expression.

113 The foregoing principles are extracted from a number of leading cases, chief amongst them are: ***LB (Plastics) Ltd v Swish Products Ltd*** [1979] RPC 551 at 619, 633, HL; ***Johnstone Safety Limited v Peter Cook (Int) PLC And Another*** (1990) FSR 161 (CA); and ***Harman Pictures N V v Osborne*** [1967] 1 WLR 723 at 728.

114 In this context, it is equally important to remember that the fact that the plaintiffs work might have been the chief prod or inspiration for the defendants output will not of itself render the defendants work an infringement (para 8-54, Copinger 13th Edn and ***Baumann v Fussell*** [1978] RPC 485).

115 An obviously discordant feature in the plaintiffs case is that what apparently started as a claim for an infringement of copyright in the "*plaintiffs engineering shop drawings, designs and systems on the fabrication and construction*" (see the deleted para 2 of the original statement of claim) transformed itself into a claim for an alleged infringement of the *plaintiffs copyright in the "preliminary drawings"* which a little later metamorphosed into an infringement of the plaintiffs "*preliminary sketches*". The said preliminary sketches themselves are admittedly lost according to the plaintiffs. What they have now is a set of drawings (annexures A and B to the statement of claim) which, they say, evidence or contain the original authentic works.

116 The defendants position as advanced by their counsel is this: That the annexures A and B referred to by the plaintiffs in this

suit illustrate nothing but a non-proprietary principle or method which has been common use in the industry in Singapore since at least since 1991 and in Europe since last 1981 in relation to the construction of fire-rated glass doors and structural frames. The method, according to the defendants, involves mounting fire resistant glass on a hollow steel section, sandwiched between calcium silicate boards before being capped. The defendants assert, secondly that the method adverted to has come about as a matter of form following function. Additionally, the defendants stoutly deny that they had ever seen or had possession of those preliminary sketches. In fact it would appear from the evidence that those sketches are no longer in existence; nor is there any suggestion that the defendants have made reproductions of those preliminary sketches. Both annexures A and B as well as the University of Ghent Reports and the accompanying drawings are said to be nothing but evidence of the said drawings.

117 The first and second plaintiffs through Loke claim that Loke developed the design on his own although he is admittedly no expert in technical matters of fire protection. Loke said that his redoubled effort in developing his own design and the consequent copyright therein had been wrongfully infringed by the first and the third defendants. Oddly, however, the third plaintiffs who seemed to have made their entry rather late in the proceedings also maintain that their copyright (in respect of the drawings in the Ghent Report) had also been infringed by the defendants.

118 In my opinion, there is first of all, a perceptible inconsistency between the claim of the first and the second plaintiffs and that of the third plaintiffs. Let me amplify. Lokes evidence (para 32(a) of the plaintiffs counsels submission) is that the framing system developed by the third plaintiffs was for fixed screens only. Furthermore, Tang who has been representing the third plaintiffs at the relevant period has intimated to Loke that the third plaintiffs framing system is no more than a suggestion or idea and that Loke had the blessings of the third plaintiffs to make use of their design whatever its worth (para 27 of Lokes affidavit). According to Loke (para 55 of his affidavit) his design in relation to screen as well as door is his own creation born of his own thinking, effort and time and is certainly not a slavish copy of any others.

119 If the foregoing assertions are correct, can the third plaintiffs, whose designs are admittedly mere ideas, having expressly authorised the first and second plaintiffs to make use of their designs in the development of the latters altogether a fresh and new-fangled design, now come to court and mount an independent claim against the defendants? Did the defendants copy the works of the first and the second plaintiffs or that of the third plaintiffs? If the claim of the first and the second plaintiffs is correct, then the third plaintiffs who had given their consent to the first and the second plaintiffs to enhance their framing system have, by simple deduction, no legitimate basis to maintain this claim. In my view, there appears to be a degree of unwitting duplication and double-counting as well as a substantial measure of inconsistency between the claims of the first and the second plaintiffs on the one hand and that of the third plaintiffs on the other.

120 To compound the issue, a surprise revelation was made by Vanderstukken during the proceedings, admitting that there is in existence an agreement between the first and the second plaintiffs with the third plaintiffs whereby the latters costs in this action would be underwritten by the former. This disclosure no doubt raised the spectre of abuse of legal process and is indeed suggestive that there is a concerted effort by the plaintiffs to maintain a vindictive process against the defendants. In my view, insofar as the third plaintiffs claim is concerned, besides the admission by Vanderstukken that his design is somewhat elementary and involves a simple principle of construction, it also seems to collapse under its own inconsistency adverted to earlier. I shall return to this later.

121 Reverting to the first and second plaintiffs claim, there is in my view no satisfactory evidence to conclude that the defendants had copied or appropriated the first and second plaintiffs preliminary sketches. In this respect, what Lam, the first defendant, says in para 10 of his affidavit is as follows:

> 10. In all the jobs I undertook as subcontractor for the 1st Plaintiffs, the 1st Plaintiffs would be responsible for ordering and supplying the glass in the specified size from the manufacturer. I had no contact with the clients or the glass manufacturer. The 4th Defendant would normally be the person who liaised with me to give instructions on the dimensions of the steel frame to be used, as well thickness of the calcium silicate fire-board to be used. Instructions were

> relayed to us by the 4th Defendant vide rough hand-drawn sketches setting out the necessary dimensions. No copies of these sketches were kept.

122 In my determination what Lam says above appears to have an impress of truth. At any rate, the plaintiffs claim based on copyright infringement in the plaintiffs preliminary sketches does not take them far.

123 I need at this stage to make reference to a decision by the English Court of Appeal in ***Johnstone Safety Limited v Peter Cook (Int) PLC And Anor*** [1990] FSR 161. The facts of this case bear a close resemblance to the facts in the present case. The facts of the case and the decision as appear from the report can be summarised as follows.

124 The plaintiffs sued the defendants for infringement of copyright in a drawing relating to a hollow, stackable traffic cone to be made of plastic material; this was referred to as the 18-inch C-type cone. They also relied, *inter alia*, on drawings of an earlier design of traffic cone namely the B-type cone. The trial judge (Whitford J) held that copyright in the drawing for the C-type cone had been infringed by the defendants 18-inch cones, there having been copying by the defendants of a substantial part of the drawing for the 18-inch C-type cone. The defendants appealed and on appeal challenged the originality of the drawings for the C-type cone in the light of the earlier drawings for the B-type cone. The defendants also challenged the trial judges finding as to the credibility of M, the plaintiffs former director, who had later joined the defendants to supervise the production of the 18-inch traffic cones in issue. There was no defence based on section 9(8) of the Copyright Act 1956 (non-expert defence).

125 After agreeing that the plaintiffs drawing for the 18-inch C-type cone was original, the Court of Appeal in allowing the appeal of the defendants held that the plaintiffs had no right to prevent the use of functional ideas incorporated in the traffic cones which they produced. This included certain design features, namely the hexagonal base, the collar above the base and the skirt with step and upturned lip, which were all known in the industry.

126 The authors of Copinger (13th Edn) list three types of infringements in relation to architects plans and works of architecture. They are: infringement of plan by plan; infringement of plan by building and infringement of building by building. Insofar as the plaintiffs grievances appear somewhat similar to the infringements listed, it bears to reproduce what the authors of Copinger say in paras 8-72 to 8-75:

> **Architects plans and works of architecture.** It has already been seen that copyright may subsist in both architects plans and in the works of architecture themselves. Architects are therefore concerned with infringements of their rights in three different forms. These are the copying of plans in the form of other plans, the copying of plans in the form of buildings, and the copying of a building by another building. The copying of a building by a two-dimensional representation, such as a photograph or drawing, is not an infringement.
>
> **Infringement of plan by plan.**
>
> Where plans are alleged to be infringed by other plans or sketches, the question to be decided is similar to that arising in connection with other artistic works.
>
> **Infringement of plan by building.**
>
> As an example of the second type of infringement, it has been held that an architects elevation representing a shop front was infringed by the erection of an actual shop incorporating the elevation, on the ground that the same was a reproduction of the elevation "in a material form." It is submitted that this decision is confined to cases in which the apperance of the complete building appeals to the eye as being a reproduction of what appears on the architects plan or elevation, and that it would not be an infringement of the copyright in a plan, such as a ground plan, to erect a building based thereon, if the resulting erection bore no resemblance to the plan except when dissected and measured. But if a completed structure appears to the eye to be a reproduction of what appears in a floor plan then it will be an infringement.

Infringement of building by building.

> The third form of infringement is confined to copying that in which copyright subsists, namely the features of the building having artistic quality. Copyright is infringed by something which, to the eye, is a copy of the original, and the use of processes or methods of construction would not, it is thought, constitute an infringement. Naturally it will be more difficult to prove infringement of copyright in an ordinary building than in one showing marked originality. An architect, who has erected a faade showing six windows and a door, clearly could not complain of another building showing the like number of windows and doors, for each architect may have drawn from common sources. *But if his ordinary building has been slavishly copied down to the smallest detail, there seems no good reason for depriving him of the right to complain. Slight differences between buildings of no marked originality will prevent them from being held to be copies of each other*, which would not be the case if the buildings were of an original character. [Highlight added]

127 It would appear from the manner in which the case is fought, the plaintiffs position appears to be that the defendants have copied their work in the door frames and screens both externally and internally. In this connection if one were to retrace the events laboriously narrated by Loke in his affidavit, it would seem that he lay great emphasis on the skill and labour devoted by him to develop the idea he had conceived and hence the now-lost preliminary sketches. The annexures A and B are admittedly of a much later origin. But the settled law is that "[w]*hat is protected is the skill and labour devoted to making the "artistic work" not the skill and labour devoted to developing some idea or invention communicated or depicted by the artistic work*." (see ***Catnic Components Limited And Another v Hill & Smith Limited*** [1982] RPC 183 (CA) at page 223, approved in ***Interlego AG v Tyco Industries Inc & Others*** [1989] 1 AC 217). I must also add that the simpler and more commonplace the copyright drawing (which is the situation in the present case) the more closely must the alleged infringer adhere to it in order for liability to exist (see ***Dixon Investments Pty Ltd v Hall and Another*** (1990) 18 IPR 481).

128 Returning specifically to the case at hand, I had the benefit of the comparison chart produced by defendants counsel (DB-677 to 678 including the continuation statement). In my view besides the differences as to dimensions, not all the features which appear in the plaintiffs product can be found in the defendants design. Besides, looking at the products from the standpoint of details, I am also in agreement with defendants counsel that the design alluded to by the plaintiffs has been demonstrably elementary and this aspect, insofar as the fourth plaintiffs designs are concerned, it had been conceded, albeit rather gingerly, by Vanderstukken (page 179 of the NE) that they were elementary. The addition of the much-talked about armour cladding by Loke too does not take their case any further as it is not claimed that that feature forms part of the infringement. In my determination, annexures A and B illustrate nothing but a non-proprietary principle or method of constructing the fire-rated glass doors and structural frames. I agree in this regard with the testimonial assertions by the defendants, that the method referred to involves the commonplace mounting of fire-resistant glass on a hollow steel section between fireproof calcium silicate boards. The steel section and calcium silicate boards are then joined to form a structural frame. The gap between the fire resistant glass and the calcium silicate board is filled using fireproof materials. I must further mention that I accept as valid the opinion of Associate Professor Chew that the framing system alluded to illustrate the simplest and most fundamental method of constructing a fire-rated glass door from an engineering point of view. I also accept as valid, Mr Kettles view that technically similar basic designs have been in existence for sometime and have been previously tested by others in conjunction with other proprietary types of insulating glass. One other observation which requires inclusion here is that any likeness or close resemblance between the plaintiffs and the defendants drawings is mainly owing to the function and functionality of the method which I accept as elementary.

129 Additionally, Lokes assertion in the brochures that his designs had been patented does not set him in good light. His bombast is admittedly untrue and has in a manner exposed him to the attendant consequences for possible breach of s 100 of the Patent Act. Be that as it may, his action herein is plainly an attempt at stymying competition in the market and in this the plaintiffs had patently roped in the third plaintiffs late in the show to destabilise the defendants. As I observed earlier the third plaintiffs claim for copyright seems to implode under its own inconsistency. Having maintained that the third plaintiffs had allowed the first and second plaintiffs to make use of their drawings to develop the latters design, the third plaintiffs in my view have little legal basis to maintain a claim against the defendants when the first and the second plaintiffs themselves reiterate that it is their copyright in their work which has been infringed. Conversely, as stated in Copinger (paras 8-69, 13th Edn) that: if the

plaintiffs drawing is based partly upon an earlier drawing and all that the defendant has appropriated is the work of the earlier draughtsman, there will be no infringement of the drawing in which the plaintiff claims copyright.

130 As observed by me earlier, what the first defendant had done here is that he had developed his design as submitted by the defendants counsel having regard to a common method known in the fire-rated glass industry over a long period of time. No doubt, he had the benefit of working for the first and the second plaintiffs earlier. But judicial process cannot be enlisted to stymy skilled workmen from carrying in their cerebra, the skills they had learnt in the course of their employment for use later for their advancement. Of course if the matter complained of is a method, process or a design subject to protection by patent or by design registration, different considerations will apply. However, in the absence of any patent or design rights, the present attempts by the plaintiffs to monopolise an elementary and non-proprietary principle cannot, in my view, be supported by the court.

131 In the premises the first issue is to be answered in favour of the defendants; and that none of the defendants has infringed the copyright either of the first and the second plaintiffs or of the third plaintiffs.

Issue No 2

Whether the defendants have established the non-expert defence provided under section 69 of the Copyright Act.

132 Section 69 of the Act provides, inter alia, as follows:

> 69. For the purposes of this Act
>
> > (a) the making of an object of any kind that is in 3 dimensions does not infringe the copyright in an artistic work that is in 2 dimensions; and
> >
> > (b) the making of an object of any kind that is in 2 dimensions does not infringe the copyright in an artistic work that is in 3 dimensions,
>
> if the object would not appear to persons who are not experts in relation to objects of that kind to be a reproduction of the artistic work.

The defence under this section only arises after the plaintiffs have established that there has been what would otherwise be an infringement.

133 The foregoing provisions require no paraphrasing. As respects copyright infringement in different dimensions, the said section provides for a defence popularly known as non-experts defence and it owes its origin to s 9(8) of the UK Copyright Act of 1956, enacted following a recommendation by the Gregory Committee on Copyright (Cmnd 8662) that functional designs should receive no greater protection under copyright law than that which they were entitled to receive as a registered design (see *George Wei* at pp 173-174, para 7.30).

134 How the court should approach this non-experts defence is enunciated by the House of Lords in ***LB (Plastics) Ltd v Swish Products Ltd*** [1979] FSR 145, where Lord Wilberforce reiterates at p 152:

> The [defence] applies by way, and only by way of defence, ie after the issue of copying has been decided, and on the assumption that it has been decided in favour of the plaintiff. It is for the defendant to make it good. In relation to the

> subject matter, it was, as both sides seem to have accepted, for the judge, placing himself in his position of a non-expert to decide whether the respondents components appeared, or rather did not appear, to be reproductions of the appellants drawings. For this purpose he must be entitled to compare the objects with the drawing, and, in my opinion, to take account of any written matter on the drawing. In performing this task the judge must also be credited with some ability to interpret design drawings But the comparison to be made is, as I understand it, a visual comparison. The (non-expert) judge should not repeat the process which, as judge with the assistance of expert and other witnesses, he has gone through in deciding whether there has been copying or not.

135 I have already concluded that there is no infringement on the part of the defendants against the plaintiffs copyrights. Nonetheless, for the sake of completeness, I should state my ancillary findings which are as follows.

136 In my opinion, even if there had been a copyright infringement, which is not the situation here, the statutory defence as envisaged under s 69 of the Act is clearly available to the defendants.

137 The test to be applied in this connection is spelt out in Copinger (13th Edn, para 8-71). The authors say that although it may be more convenient to compare the defendants three-dimensional object with the plaintiffs three-dimensional object made from the plaintiffs original three-dimensional work, strictly the first should be compared with the last and it is the plaintiffs drawing taken as a whole which should be studied.

138 In the premises as submitted by defendants counsel one is required to look at the defendants final product, that is, the fully assembled door. When examined this way from the specimens submitted, I agree with the defendants submission that all one could see is the capping outside. No one will be able to see the steel frame, the calcium silicate boards or even the so-called armour capping. On this basis the court as the notional non-expert is unable to conclude that there has been copying of the original design drawing which the plaintiffs say is evidenced in annexures A and B.

139 In the premises, issue number 2 is answered in favour of the defendants.

Issue Nos 3, 4, 5 and 6

3 *Whether the plaintiffs have sufficiently particularised their claim of breach of confidence in relation to the design of their framing system as illustrated in their shop drawings. [The Plaintiffs in their closing submissions abandoned the claims based on the cladding and the method of laying the door straps.]*

4 *Whether the information contained in the shop drawings were of a confidential nature.*

5 Whether the Defendants received the shop drawings in circumstances imparting an obligation of confidence.

6 Whether there was unauthorised use of the Plaintiffs confidential information.

140 In this regard, a preliminary point is being raised by defendants counsel. He contends that the plaintiffs claims on this head should have been pleaded in detail but this has not been done in the present case and in the circumstances, such a failure is fatal to the plaintiffs claim. Reliance is placed on the case of ***Chiarapurk Jack & Ors v Haw Par Brothers International Ltd & Anor*** [1993] 3 SLR 285.

141 As regards the first defendant (the allegation against the second defendant has already been withdrawn), the averments as to the alleged confidential information disclosed to him as pleaded in para 22 of the claim is rather scanty and somewhat skeletal. The purported particulars bespeak: (a) handing over to him the plaintiffs shop drawings and specifications in relation to a project; (b) explaining to the first defendant the mode of installing the fire-rated glass doors and (c) explaining to him how to affix the door straps. The plaintiffs claim that these communications are confidential and that the first defendant had breached his duty which the plaintiffs label as "fiduciary".

142 The correct test to be applied in dealing with claims founded on breach of confidence is pithily stated by Laddie J in ***CMI-Centers For Medical Innovation GMBH And Anor v Phytopharm PLC*** [1999] FSR 235. He said

> For a plaintiff to succeed in a breach of confidence action he had to address at least four matters: (i) he had to identify clearly what was the information he was relying on; (ii) he had to show that it was handed over in circumstances of confidence; (iii) he had to show that it was information of the type which could be treated as confidential; and (iv) he had to show that it was used without his licence or there was a threat to use it.

143 I am of the view that the purported particulars provided under paras 22 of the statement of claim against the first defendant are regrettably inadequate and worse still what is alleged there does not, in my view, establish that it is information of the type which could be regarded as confidential. Showing workmen and contractors how to install doors and affix the straps in accordance with the plans can in no way be characterized as imparting aspects of confidential information. Secondly, the information relating to the affixing of door straps directly to the steel frame which is in the manufacturers recommended method of fixture as can be seen from the catalogues and instruction materials produced, was abandoned by the plaintiffs halfway through the proceedings. Next, the method joining the external cladding so as to give a clean or polished edge is again simple metal working theory which, in my determination, can be satisfactorily completed by any journeyman metal worker. This aspect also does not qualify as information of a confidential nature.

144 In my determination as concerns the first defendant (the second defendant is no longer in the suit) the so-called instructions or explanations given to him as to how to instal doors and affix straps cannot amount to imparting confidential information. At any rate, the first defendant was admittedly engaged for his experience in fitting and installing aluminium and steel-framed doors albeit his lack of experience in fitting fire-rated doors. In the result, showing him the components and how they are to be installed is out of pure necessity to have the work done in an efficient manner. In my finding, the claim based on breach of confidence is a late addition and one of reflection than substance. Here I accept the first defendants evidence that he was neither cautioned nor told that there was any secret or confidential process involved in such installation work.

145 In my opinion, insofar as the first defendant is concerned there is no acceptable evidence to warrant a conclusion that he was bound by a relationship of confidence with the plaintiffs. On the facts, the information alluded to lacks the requisite quality of confidentiality; neither does it possess the characteristic akin to a trade secret.

146 In the premises I find that the issues raised under the heading breach of confidence are to be answered as follows: (a) the plaintiffs have not sufficiently particularised their claim based on breach of confidence; (b) the information contained in the shop drawings, even if they were handed to the first defendant, which is denied, are not of a confidential nature except in its generic sense; (c) the first defendant received those drawings not in circumstances importing an obligation of confidence; and (d) there is no evidence of any unauthorised use of the plaintiffs' material by him to anyone so to speak.

147 I must add that a worker or contractor employed cannot in the absence of a specific contractual restraint be made to be denuded of any knowledge gained, expertise acquired or novelty learnt in the course of work undertaken by him in the course of his employment. To prevent him from using his experience in subsequent ventures, employment or enterprises is contrary to reason, fairplay and public policy.

Fourth defendant

148 As regards the fourth defendant who was in the first and second plaintiffs employ for less than two years, his purported duties according to Loke was merely to deliver technical/shop drawings to sub-contractors, contractual architects, to ensure proper workmanship and to liaise with KDM Metals.

149 The first and second plaintiffs complain that to their dismay the fourth defendant who was entrusted in confidence with designs and detailed specifications in relation to the fire-rated doors and screens started assisting his current employers, ie, the third defendants in approaching the first plaintiffs customers to promote and sell fire-rated doors and screen systems similar to that of the first plaintiffs. As a result, they contend that the fourth defendant is not only in breach of his duty to his former employers but also is said to have infringed the plaintiffs copyright (see paras 125 and 126 of Lokes affidavit of evidence-in-chief).

150 In my view, the plaintiffs claim against the fourth defendant is altogether hopeless. Their claim, if read objectively, seems to convey the impression that the fourth defendant should not have joined the third defendants and should not have marketed products similar to that of the first and the second plaintiffs especially when the fourth defendant whilst in the employ of the first plaintiffs happened to be dealing with the first plaintiffs designs and specifications. There is no averment however, that there has been any contractual restraint between the fourth and the first plaintiffs. In my determination, merely because the fourth defendant left the plaintiffs employ and later started working for the third defendants who are currently marketing systems similar to that of the first and the second plaintiffs, it does not even remotely justify the plaintiffs bringing this action against the fourth defendant for breach of confidence, breach of fiduciary duty and worse still infringement of copyright. Another irony in this case is that the first and the second plaintiffs had to embarassingly back-pedal on their allegations that the fourth defendant attempted to obtain the plaintiffs drawings from Goh. In my evaluation, the fourth defendants evidence that he had not seen annexures A and B whilst he was in the plaintiffs employment, appears to have a ring of authenticity. It is appropriate at this stage to observe that whereas the annexure A to the statement of claim has a month and year stamp: "November 1997", it is not in dispute that the fourth defendant had already left the plaintiffs employ sometime in June 1994. In any event, in my finding, whatever designs handed to him during the period of his employment with the plaintiffs were merely for the purposes of delivery to sub-contractors, architects and for the purposes of ensuring proper workmanship and that there was no satisfactory evidence placed before me to conclude that the so-called designs were handed to him in circumstances of confidence nor could those be treated as confidential.

151 In my opinion, the plaintiffs case against the fourth as well as the other defendants based on breach of confidence and or duty is wholly unmeritorious and in my view intended to thwart legitimate competition. The claims under this head against all the defendants consequently fail.

Issue Nos 7 and 8

7 *Whether the first plaintiffs agreement ought to underwrite the 7hird plaintiffs costs of the action amounts to unlawful maintenance?*

8 *If the above agreement amounts to unlawful maintenance, should the court penalise the first plaintiffs by way of costs.*

152 In this context, my observations and comments as appear in paras 118 to 120 and 129 of these grounds are relevant and apply here. In my opinion, the agreement between the first and the third plaintiffs whereby the first and the second plaintiffs are underwriting the costs of the third plaintiffs is unwholesome and almost borders on an abuse of legal process. Although counsel for the defendant characterizes this arrangement as amounting to maintenance, I am of the view this does not, within the guidelines provided in ***Giles v Thomson*** [1994] 1 AC 142, amount to a wanton and officious meddling by a third party without

justification, since the fourth plaintiffs appear to have a peripheral, albeit questionable interest in the subject matter of the claim. Although I am of the view the third plaintiffs late entry into this action would appear to have been contrived by the first and the second plaintiffs in order to exert pressure on the first and the third defendants and brow-beat them, all the facts considered, I am disinclined to penalise the first plaintiffs by awarding costs against them on an indemnity basis for their role in this saga, as is being suggested by the defendants counsel.

153 In the premises, issues 7 and 8 are to be answered in the negative.

Conclusion

154 For the reasons I have stated, the claims of the first, second and the third plaintiffs based on copyright infringement as well as the first and second plaintiffs claims based on breach of confidence against the respective defendants fail and are hereby dismissed with costs.

Order accordingly.

MPH Rubin

Judge

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