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Introduction

[1] Steelbro New Zealand Ltd (Steelbro) and Tidd Ross Todd Ltd (TRT) compete in the design and manufacture of sideloading trailers, which are used to transport shipping containers. Chisholm J found that Steelbro had infringed TRT's copyright in the drawings of a sideloading trailer called the TRT Triple. The Judge found that there was a causal link between the TRT design and the Steelbro design, that there was substantial similarity between the designs, and that the similarities between the two designs could not be explained by engineering and regulatory restraints.

[2] Steelbro appeals against that judgment.

Background

[3] Steelbro was founded in 1878 in Christchurch, and has since expanded to become an international operation. TRT commenced business in Hamilton in 1968. Both companies began specialising in trailers and container handling in the 1980s and 1990s.

[4] Sideloaded container trailers (otherwise known as sidelifters or sideloaders) self load and unload shipping containers, using hydraulic cranes fixed to the trailer chassis. At issue in this case is the development, design, and production of Steelbro's sideloader (the SB121) and TRT's sideloader (the TRT Triple).

[5] In the past, sideloaders operated by means of one crane at each end of the trailer. They were therefore limited to loading either one 40 foot container, one 20 foot container, or two 20 foot containers locked together so as to have the same footprint as a 40 foot container. Locking and unlocking 20 foot containers is a difficult and time consuming process. In the mid 1990's, as a result of discussions with a major customer, TRT recognised a market for a sideloader trailer that could handle two 20 foot containers independently, as well as being able to handle a 40 foot container.

[6] In order to handle two 20 foot containers individually, a third crane was required in between the two containers. That crane needed to be capable of being stowed in such a way that a single 40 foot container could be placed across the top.

[7] Following early design work in 1992 (an initial concept drawing) and further design work in mid 1994, the TRT Triple was manufactured and tested. It was supplied to Tapper Transport Ltd in November of 1994. A second version TRT Triple was subsequently produced (again for Tapper) in July 1995. It differed from the first design in the way in which the centre crane and stabilisers (structures that reach out and brace against the ground to prevent the trailer rolling during operation) were fitted to the trailer chassis. In the first unit, the centre crane and stabilisers were mounted around, and bolted or welded to, the chassis. In the second unit, the crane and stabilisers were mounted on a central mounting box. The trailer chassis

was separated into front and rear sections, which were then attached on either side of the mounting box. On each side of the mounting box the chassis were tapered so that, looking side on, the chassis had a V-shaped dip where they met the mounting box.

[8] TRT successfully marketed and sold the TRT Triple. In September 2000, TRT and Steelbro had discussions about the possibility of Steelbro selling the TRT Triple in New Zealand and overseas. During the course of these discussions, TRT supplied Steelbro with a quote for the TRT Triple, the specifications, a marketing drawing, and a copy of its publicity brochure. No agreement was reached, and discussions were abandoned in late 2000.

[9] Towards the end of 2002, Steelbro identified an increase in customer interest in a Triple crane sidelifter. According to Steelbro, some customers mentioned the TRT Triple but said that they had been unhappy about the quality of that product and expressed concerns about certain safety issues. Graham Steel, a director of Steelbro, decided that the company should develop a Triple crane sidelifter that would be designed to meet the (then draft) European crane standard EN12999. By the end of 2002, Mr Steel had secured orders for two units.

[10] On 21 January 2003, the then managing director of Steelbro, Peter Batcheler, met with the engineering manager, Alan Swarbrick, to discuss Mr Steel's requirements for the Triple crane sidelifter and to initiate the design process. In late January, Mr Swarbrick measured and recorded dimensions from a TRT Triple. The parties differ as to the use that was made of that information.

[11] The design process comprised several steps. First, Steelbro developed the design specification. According to Steelbro, this was based on discussions with customers. It was also around the time that the TRT Triple measurements were taken. The next stage involved working out the design parameters according to the design standard. That part of the process is uncontroversial. The third step was the use of a geometry optimisation computer programme to determine the fundamental geometric requirements that a design would have to achieve to meet the required

performance criteria. There followed a detailed design and modelling process, which included more geometry optimisation.

[12] Towards the end of 2003, Steelbro produced its Triple crane sideloader, the SB121. TRT identified a dramatic drop in sales of its own sideloader coinciding with the introduction of the SB121 to the New Zealand market. Whereas eight units had been sold in each of 2002 and 2003, only one was sold in each of 2004 and 2005. TRT became aware that Steelbro had manufactured a sideloader which TRT believed to be a direct reproduction of its own unit. Correspondence between the parties' solicitors failed to resolve the matter, and proceedings were issued in the Christchurch High Court on 5 July 2004.

High Court proceedings

TRT's case

[13] In the High Court, TRT alleged that Steelbro's centre crane and chassis were copies, or copies of a substantial part, of the TRT Triple. TRT's case was summarised in the opening submissions of counsel, as recorded in Chisholm J's Judgment (HC CHCH CIV-2004-409-1386 7 April 2006 at [19]):

[T]he shape and configuration of the individual components of the centre crane and stabiliser assembly are substantially similar to the same components depicted in TRT's drawings. Moreover, when assembled and viewed collectively those individual components take a substantial part of the drawings depicting TRT's complete centre crane and stabiliser assembly. Finally, the SB121 features the same v-shaped chassis arrangement, and the entire centre crane/stabiliser assembly mounted in that v-shaped chassis arrangement takes a substantial part of TRT's drawings depicting the same.

[14] TRT called five witnesses. By consent, Bevan Olsen, a mechanical engineer, and Warren Sherman, a design draftsman, gave evidence by written briefs.

[15] Robert Carden, the TRT engineering director, first gave evidence relating to the development of the TRT Triple. He then examined the Steelbro design. He concluded that the five major components of the SB121 were almost identical to the TRT Triple, and that the dimensions recorded in Steelbro's documents and drawings were either identical or close to identical to those in the TRT design. In particular,

he said that the method of attaching the Steelbro centre crane/stabiliser was essentially identical to that of the TRT Triple.

[16] Graham Eaton, a mechanical engineer specialising in heavy transport equipment, was called by TRT as an expert witness. He concluded the documents on Steelbro's file "did not provide clear evidence of a logical progression of ideas and sketches". Mr Eaton concluded that that Steelbro had used the TRT Triple as the starting point for its project.

[17] Kevin Chubb (managing director of TRT), Mr Olsen and Mr Sherman all outlined their involvement in the development of the TRT Triple. Mr Chubb described the discussions between TRT and Steelbro and the steps taken after TRT became aware of the existence of the SB121.

Steelbro's case

[18] Steelbro's response was that TRT did not have copyright in the concept of the sidelifting trailer with a flat folding centre crane. It raised three main areas of argument. First, a substantial number of the similarities between the units could be explained by functional restraints. Secondly, there were significant differences between the two units. Thirdly, the mere fact that Steelbro had access to the TRT Triple was not determinative of any causal connection; Steelbro had merely embarked on a legitimate exercise of assessing the capabilities of the TRT Triple for comparative purposes.

[19] Alan Swarbrick, Steelbro's engineering manager and the first of its five witnesses, was responsible for the development of the SB121 concept. He explained that Steelbro had built up a significant body of expertise in relation to sidelifters, and used extremely sophisticated computer-based design tools, with the result that design notebooks had not been used for many years.

[20] In January 2003, Mr Swarbrick was asked by Mr Steel to produce a Triple sideloader as quickly as possible. It was clear to him that the idea was to produce a sideloader that was competitive and was more effective than the TRT Triple. As part

of his research, he looked at a number of different products, including Steelbro's existing range of sidelifers, and recorded the dimensions of a TRT Triple for the purpose of working out its performance capacity. Mr Swarbrick emphasised the functional and regulatory constraints which impacted on the design process. He estimated that he must have gone through some 50 iterations as he experimented with variables, and emphasised that those iterations were not the results of the calculations he had run using the TRT dimensions.

[21] Mr Swarbrick continued to create calculation files while a design engineer, Yu Yin Wan, began the preparation of the layout. At the request of a customer, Mr Swarbrick obtained further dimensions from a TRT Triple, which were used to check that Steelbro's geometry was better than TRT's.

[22] Ms Wan gave evidence that she undertook a comprehensive and independent design process on the basis of an optimised geometry calculation, an AutoCad sketch, and the specifications, all given to her by Mr Swarbrick.

[23] Gregory Muirsmeath took over from Mr Swarbrick as engineering manager at Steelbro in 2005, having previously been a product development engineer with the company. He assisted Ms Wan with some modelling and geometry calculations, and was involved in design of some components and production of the prototype. Mr Muirsmeath gave evidence that he did not reproduce or copy any design features or other details from the TRT Triple, and was not aware of anyone else doing so.

[24] Richard Joyce, a registered mechanical engineer and owner of a heavy transport engineering company, was called as an expert witness. He disagreed with Mr Eaton's conclusion that there was a lack of documentary evidence in relation to the early stages of the SB121 design. In his view, the starting point for the SB121 was Steelbro's own family of container cranes that had been evolving since the early 1980s. Mr Joyce emphasised the considerable design constraints, and significant differences between the products. He concluded that there were no component design concepts that could accurately be described as originating from the TRT design. Any similarity was either confined to the overall concept or a natural consequence of design constraints common to both units.

[25] Finally, Mr Steel provided a brief history of the company and background to the development of the SB121 and the current dispute.

The decision

[26] It was common ground between the parties that TRT needed to prove the three elements described in *Wham-O-MFG Co v Lincoln Industries Ltd* [1984] 1 NZLR 641 (CA) at 666, namely that:

- the reproduction was either of the entire work or a substantial part of the copyright work;
- there was sufficient objective similarity between the infringing work and the copyright work, or a substantial part thereof; and
- there was some causal connection between the copyright work and the infringing work; the copyright work must be the source from which the infringing work is derived.

[27] The Judge identified the difficult issue in this case as whether Steelbro had simply, and acceptably, used TRT's idea or whether it had gone further and reproduced TRT's expression of that idea.

[28] Chisholm J found that the components that were the subject of TRT's complaint constituted a substantial part of TRT's copyright work. The issue then became whether there had been a reproduction of that substantial part. He went on to ask the question whether TRT had established a causal connection between its copyright work and the Steelbro design.

[29] Chisholm J thoroughly reviewed the development of the SB121 and the evidence of the expert witnesses. He reached conclusions about Steelbro's access to the TRT Triple, the objective similarity between the two units, and the causal connection. In summary, the Judge's reasoning was as follows.

[30] In relation to the orders received in January 2003, Mr Batcheler, responding to enquiries made by Mr Steel, referred to “1/.TRT / Tapper-type unit” and advised that Grant McLoughlan, of Tappers Transport Ltd, had not yet responded about Steelbro using his plans. Steelbro was under the impression that Mr McLoughlin held the copyright in the TRT Triple.

[31] Mr Batcheler then asked Mr Swarbrick to provide a design specification for a “TRT style Triple crane sidelifter”. He gave Mr Swarbrick the material that had been provided to him by TRT during the 2000 negotiations, comprising the TRT specification, the drawing of the side elevation of the TRT Triple, and the publicity brochure.

[32] In late January 2003, Mr Swarbrick went to Auckland and took dimensions from a TRT Triple. Over 30 dimensions were noted on a hand drawn sketch, indicating pin placements, pivot points, pin centres and overall dimensions (including those of the crane base and stabiliser). Mr Swarbrick claimed that this was for the purposes of working out the performance capacity of the TRT unit, in order to create a superior product. Chisholm J expressed scepticism about this explanation.

[33] The SB121 draft specification was prepared by 4 February 2003. Mr Swarbrick informed Mr Batcheler that it was based on “the material you have given me, and my own observations of similar units in Auckland”. In the context of discussions about the possibility of sub-contracting, a potential contractor, Meyer Consulting, observed in a letter that the project would be different from Steelbro’s existing range. On 12 March 2003, Steelbro discussed using a “twinked out” brochure or photo of the TRT Triple for marketing purposes. This possibly was not pursued.

[34] Geometry optimisation for design version one of the SB121 began on 15 April 2003. TRT asserted that the original input for the geometry optimisation was derived from the TRT Triple. Mr Swarbrick was forced to concede that “the inputted dimension and the dimension taken from the TRT Triple were exactly the same”. The Judge rejected Mr Swarbrick’s contention that this was merely a

coincidence, and concluded that Mr Swarbrick had tailored a Steelbro template to include dimensions taken from the TRT Triple.

[35] As part of the optimisation process, Mr Swarbrick had created a TRT Triple file. On his evidence, this was to determine the capabilities of the TRT Triple in comparison to the SB121. Overall, Mr Swarbrick inspected and recorded the dimensions of a TRT Triple on at least three occasions, with a Steelbro sales representative (Mr McLeod) also conducting an investigation.

[36] Mr Swarbrick briefed Ms Wan. He provided the sketches reproduced at Appendix B of the High Court Judgment. The Judge characterised the top sketch as illustrating the same shape and configuration as the TRT Triple. Mr Swarbrick asserted that they were sketches of a concept which was also used by TRT. However, the Judge determined (relying on Ms Wan's evidence) that the SB121 was the first Steelbro trailer that tapered the chassis down and then back up to create a V shape. Likewise, Steelbro had not previously produced a flat folding sidelifter crane with an inline stabiliser.

[37] When the first version of the SB121 was produced, it was discovered that it had the same flaw as the TRT Triple – a loud bang produced by the movement of the arm as it came to a stop.

[38] The Judge rejected Mr Joyce's conclusion that the SB121 was designed from the starting point of previous Steelbro products. Particularly significant was the absence in any previous products of a V-shaped chassis integrating a flat folding crane. Chisholm J noted the divergence between the two expert witnesses. Mr Eaton emphasised certain similarities between the two products and claimed that any differences were merely cosmetic. Mr Joyce disagreed and identified the differences in measurement between the two products.

[39] Chisholm J concluded that it was clear that Steelbro had access to TRT's product. While Steelbro may have added original work (and Ms Wan and Mr Muirsmeth had contributed their own skill and judgment), Steelbro had appropriated the labours of TRT. In this sense, the copying was indirect.

[40] In his conclusions, the Judge then went through each of the *Wham-O* requirements. The products were objectively similar (at [133]):

[The TRT Triple] represents [TRT's] original expression of the idea. The similarity between the two units cannot be explained on the basis that it is the natural consequence of constraints applying to both units. And I am also satisfied that when viewed objectively the individual components of the TRT Triple central section (crane/base/stabiliser/chassis) that have been taken by Steelbro represent a substantial part of [TRT's] work.

There was a causal connection between the SB121 and TRT's copyright. Steelbro's optimisation process drew on information derived from the TRT Triple and then, later, the design utilised sketches which appropriated TRT's design.

Submissions

[41] Steelbro submits that Chisholm J erred in finding that an infringement of copyright had been established. The SB121 does not reproduce the TRT Triple or a substantial part of it, and there was no causal connection. Steelbro argues that Judge's decision is inimical to the doctrines of competition and progress, which are important policy considerations in copyright law.

[42] Steelbro's submissions can be categorised as errors of principle and errors of primary fact.

[43] Steelbro contends that the trial Judge made the following errors of principle:

- (a) Finding that a substantial part of the work was copied because of a failure to properly distinguish between "concept" and "expression of design".
- (b) Finding that there was an objective resemblance between the two designs because:
 - he did not properly analyse the similarities relied upon by TRT, and failed to adequately address the appellant's explanations for

similarities, in particular the design, engineering and regulatory restraints; and

- he focussed on the concepts and preliminary sketches rather than the working drawings and concepts.

- (c) Finding that there was a causal connection between the TRT Triple and the SB121 because he relied on the idea of a “springboard”, which has no place in copyright law.

[44] In addition, the appellant submits that the trial Judge made five errors of primary fact, namely that:

- (a) The sketches at Appendix B are copies of the TRT design.
- (b) The SB121 geometry optimisations were influenced by Mr Swarbrick’s measurements of the TRT Triple.
- (c) There were alternatives to the centre fold down crane.
- (d) A particular 615mm measurement was a significant replication.
- (e) Mr Joyce’s evidence regarding design and engineering constraints should be rejected.

[45] TRT submits that it is not appropriate for this Court to interfere with the trial Judge’s assessment of the facts.

Errors of principle

Substantiality

[46] The first part of the *Wham-O* test requires that the plaintiff show that the defendant reproduced either the entire work or a substantial part of the copyright work. Steelbro submits that, in applying this test, the Judge erred because he failed

to distinguish between an “idea” or “concept” on one hand, and an “expression of design” on the other. Only the “expression of design” is relevant to the question of whether a substantial part has been copied. The “concept” does not attract copyright and thus is not relevant.

[47] Steelbro submits that it is not the originality of an idea which is protected by copyrights, but rather the form of its expression: *Wham-O* at 664. The fact that a plaintiff is the first to have given expression to a particular idea does not give it monopoly rights in that idea: *Gleeson & Anor v H.R. Denne Ltd* [1975] RPC 471 (Ch). This is the case even where the idea in question is in relatively complex form: *Carter Holt Harvey Roofing Aluminium & Glass Group Ltd v Trevor Bills Ltd* (1998) 2 TCLR 592 (HC). The rule is premised on the doctrines of competition and progress: *UPL Group Ltd v Dux Engineers Ltd* [1989] 3 NZLR 135 (CA) and *Billhöfer Maschinenfabrik GmbH v T H Dixon & Co Ltd* [1990] FSR 105 (Ch).

[48] Steelbro argues that the idea in question in this case is the concept of a flat folding crane fitting within a drop frame chassis. It takes issue with the trial Judge’s finding at [133] that:

... when viewed collectively the individual components of the TRT Triple central section (crane/base/stabilisers/chassis) that have been taken by Steelbro represent a substantial part of the plaintiff’s work.

Steelbro contends that these are features of the *concept*, and not the copyrighted expression.

[49] Steelbro argues that the Judge failed to distinguish between the unprotected concept and the protected expression of design. In support of this submission the appellant points out that Chisholm J had earlier referred to “ the concept of an inline centre crane, bases and stabiliser incorporating a v-shaped dip in the chassis”. In relation to the Appendix B sketches, the Judge had referred to the concept of the base passing through the chassis as being carried through from the sketches to the final design.

[50] In focusing on the similar concepts, the Judge overlooked significant differences. As a consequence, the judgment bans any competitor from producing a sidelifter with a flat folding centre crane which stows below deck.

[51] Steelbro argues the correct approach is as follows. Based on TRT's statement of claim, the TRT Triple has two central features as follows (appellant's emphasis):

- (a) The centre crane and stabiliser were incorporated in a central mounting box and *the chassis was split into front and rear sections that were welded to that central mounting box*; and
- (b) To accommodate the central mounting box, a dip was introduced *at the ends of the front and rear chassis sections that were welded to the central mounting box*. This gave the area of the chassis accommodating the mounting box a unique V-shape.

[52] Steelbro argues that these features were not copied. The SB121 has a continuous chassis and there are significant differences in the V-shape. Therefore the appellant did not reproduce a substantial part of the copyright work.

[53] TRT submits that Chisholm J clearly reminded himself of the need to distinguish between idea and expression. Even if this Court disagrees with the line which he drew in the present case, it is not appropriate for an appellate Court to supplant its own view in circumstances where the trial Judge clearly turned his mind to the issue and reached a reasoned decision based on the evidence available to him at the conclusion of an eight day trial.

[54] TRT's submission is that the idea in issue in this case is having a third crane and stabiliser. The expression of design is the particular shape and configuration of the TRT Triple's third crane and stabiliser assembly and the associated design of the chassis to incorporate those components.

[55] TRT argues that, even if the sidelifter with a flat folding crane was merely an idea, Steelbro's expression of design is unaccountably similar to the TRT design. Steelbro's failure to explore alternatives, coupled with the fact that it had access to the TRT Triple during the design process, lead to an inference of copying that Steelbro failed to rebut.

Objective resemblance

[56] In the second part of the *Wham-O* test, the plaintiff must show that there is sufficient objective similarity between the infringing work and the copyright work, or a substantial part thereof. Steelbro submits that the trial Judge erred in finding there was objective similarity between the SB121 and the TRT Triple because he failed to properly analyse the similarities, and overlooked the importance of the differences. In addition, it is said the Judge erred in focussing on the geometry optimisations and the Appendix B sketches, rather than the working drawings.

Similarities and differences

[57] Steelbro argues that the Judge failed to apply the following principles which should be taken into account in an analysis of a commercial design:

- (a) Resemblance may be due to common subject-matter or stock-designs; it is necessary to make a close analysis of detail to see whether there has been an infringement: *Bonz Group Pty Ltd v Cooke* [1994] 3 NZLR 216 (HC) at 226.
- (b) Designs embodying features dictated by manufacturing constraints will necessarily be similar: *Beckmann v Mayceys Confectionary Ltd* (1995) 33 NZIPR 543 (CA) at 546.
- (c) Where competing products are necessarily similar due to manufacturing constraints, differences will be significant: see *Rubbermark Industries Ltd v Trail Com Ltd* HC AK CP338/00 8 September 2000. Small

differences will be enough to rebut the inference of copying: *UPL Group Ltd* at 145.

- (d) In cases of industrial or engineering design, whether part of a work is substantial depends on the importance of particular dimensions and spatial arrangements, not the underlying idea. This question should be viewed from the perspective of an engineer rather than that of a lay person: *Billhöfer* at 122.

[58] Steelbro argues that the engineering solution to the problem of accommodating a flat folding crane below deck height was relatively straightforward, and thus required only a low level of originality. This impacts on the scope of protection; anything other than almost a direct copy will not be an infringement of copyright.

[59] Steelbro submits that the proper enquiry is whether the parts of the SB121 bear a sufficiently close resemblance to those of the TRT Triple and, if so, whether that resemblance is due to copying. The Judge gave no, or insufficient, weight to a range of factors which dictated that there would be a resemblance between the two sidelifters. The Judge did not undertake a careful analysis of the similarities alleged by TRT, and if he had done so he would have recognised that they are: confined to the overall concept, not the expression of design; the result of external constraints; or commonly used by other manufacturers.

[60] Steelbro identifies a series of constraints on the design process that restricted its options. First, both units use the Steelbro 7-pin configuration. Accordingly, it was inevitable that the sidelifters would share similarities in shape and configuration. That is not determinative of copying: *UPL Group* at 139 - 142. Secondly, best engineering practice accounts for the V-shaped recess in the chassis. Thirdly, Steelbro's customers required a TRT Triple style product. Fourthly, Steelbro was restricted by design standards and regulatory constraints.

[61] Steelbro submits further that the Judge failed to consider the similarities in the context of the differences. It argues that the Judge wrongly concluded the

differences arose from modifying the TRT design, rather than as the result of an independent design process. In particular:

- (a) The top arm of the SB121 is longer, uses different materials and has the cylinder pins in a different position. All of the similarities alleged by TRT are directly related to functionality.
- (b) Mr Joyce identified five major differences in the bottom arm of the SB121. The similarities alleged are general in nature, and virtually inevitable due to space constraints.
- (c) The stabiliser outer uses different size and location of pivot and cylinder pins, and the outermost reinforcing strap is different. The similarities are general and dictated by function. Other manufacturers have used the same arrangement.
- (d) The poles of the stabiliser inner are of different lengths and the foot eyes are formed in different ways. The similarities are generic and reflect functional and common manufacturing choices.
- (e) The overall dimensions of the crane base are different, and the mounting boxes are welded through the chassis in different ways. The similarities are due to functionality. The concept of a torsional box is not unique to the TRT Triple.
- (f) The V-shape in the chassis is dictated by functionality, and is constructed differently.

[62] TRT's position is that the SB121 is an "altered copy" of the TRT Triple. That is, it is not an identical reproduction of the copyright works, but takes their essence. If the starting point of the defendant's design is a copy of the plaintiff's work, the level of effort which the defendant subsequently expends modifying the work may be irrelevant: *Bleiman v Mews Media (Auckland) Ltd* [1994] 2 NZLR 673 at 679 (CA), *Designers Guild v Russell Williams (Textiles) Ltd* [2001] 1 All ER 700

at 714 (HL). The importance of similarities is that they show whether something has been copied. Differences are only relevant to determine whether, notwithstanding the copying, sufficient changes have been made to avoid infringement. The ultimate test in the present case is whether the appellant appropriated part of the time, labour, skill and judgment contributed by TRT in creating the copyright works.

[63] TRT submits that it is readily apparent that the Judge turned his mind to the question of differences and similarities in reaching the conclusion that the degree of similarity was such that the SB121 could still be categorised as a copy of the respondent's Triple, and that degree of similarity could not be attributed to design/engineering or regulatory constraints. The Judge clearly reminded himself as to the need for caution in cases involving industrial design, and undertook a meticulous analysis of the evidence. It would not be appropriate for this Court to supplant its own view even, if it were to disagree with the ultimate conclusion of the Judge.

Failure to focus on working drawings

[64] Steelbro submits that the Judge failed to focus on the plaintiff's drawings, as required by law. It suggests that this omission may have been instrumental in leading the Judge into the error of focussing unduly on the geometry optimisation process and the Appendix B sketches. Steelbro draws a comparison in this respect with *Holdfast NZ Ltd v Henkel Kga* [2007] 1 NZLR 336 (CA).

[65] TRT submits that the Judge did in fact base his findings on a comparison between the copyright works and the alleged infringing product via the comparison made by the expert witnesses. This was a legitimate approach. It is not necessary, nor is it desirable, for the trial Judge to duplicate work carried out by independent witnesses on whom the Judge can reasonably rely: *Plix Products v Frank M Winstone* [1984] 3 IPR 390 at 403 - 404 (HC), *Copinger & Skone James on Copyright* 14ed 1999).

Causal connection

[66] The third part of the *Wham-O* test requires that the plaintiff establish that there is some causal connection between the copyright work and the infringing work. The copyright work must be the source from which the infringing work is derived. Steelbro submits that the Judge formulated an alternative “springboard” test that he applied instead of the *Wham-O* test to find an infringement of copyright. The test is unsupported by authority or principle, and in any event the key factors identified by the trial Judge in support of his conclusion are illusory.

[67] Steelbro submits that the fact that a defendant has inspected a plaintiff’s product, and even used it as a point of reference, does not of itself justify the finding of copying: see *UPL Group*; *Bonz*; *Billhöfer*. Competitors are at liberty to recognise each other’s design decisions and build on them to design something better. “Cross-pollination” stimulates progress and underlies development. A “springboard” is nothing more than an expression of innovation. It is a starting point for further development, which has never been prohibited.

[68] Steelbro further argues that causation was not established. It points out that the Judge acknowledged that the principal engineers who worked on the project, Ms Wan and Mr Muirsmeath, exercised their own skill and judgment in the design work which they undertook.

[69] In any event, Steelbro argues that the question of access (which can be equated with causation in this context) is subsumed by the question of substantiality. That is to say, even where a defendant has used a plaintiff’s product as a starting point, there will be no infringement if the part taken is not substantial. Ultimately, all of the SB121 dimensions are materially different to the comparable dimensions of the TRT Triple. Therefore, even if the Judge’s findings of fact are correct (which is not accepted), they do not establish infringement of copyright.

[70] The key findings of fact that are challenged in this regard are whether:

- the Appendix B drawings were concept drawings or sketches of the TRT Triple;
- the geometry optimisation process was premised on the TRT Triple dimensions; and
- the V-shaped recess in the chassis was copied from the TRT Triple.

We discuss each of these below in relation to issues of primary fact.

[71] TRT submits that the Judge was correct to draw an inference of copying from Mr Swarbrick's inspection of the TRT Triple. The Judge's approach was consistent with the authorities, which show that similarity, combined with proof of access to the copyright works, leads to a rebuttable inference of copying: *Wham-O; UPL Group*. The Judge found that Steelbro had had access to the TRT product, and came to the conclusion that the evidence was insufficiently reliable to rebut the inference of copying arising out of proof of access and similarity of appearance. This is a credibility issue with which an appellate Court should not interfere.

[72] TRT further submits that, assuming the correct law has been applied to the relevant facts, it is not appropriate for this Court to interfere with the trial Judge's assessment: *Designers Guild* at 122.

Errors of primary fact

The Appendix B sketches

[73] Steelbro submits that the Judge erred in finding that both sketches at Appendix B are copies of the TRT design. They are concept drawings, and therefore cannot be evidence that the TRT design was used as a springboard to develop the SB121.

[74] The top sketch is a concept drawing only, not a sketch of the TRT Triple as found by the Judge. It is at most a diagrammatic representation of a flat folding

crane, base and stabiliser to be incorporated into the chassis. It contains similarities with both the TRT Triple and the SB121 because they both share the same concept. Mr Eaton frequently referred to the sketch as a “concept” rather than a “design.” Further, it is not substantially the same as the TRT Triple. Steelbro identifies six differences between the top Appendix B sketch, and the side elevation of the TRT Triple (Appendix A of the High Court Judgment).

[75] The lower sketch is also a concept drawing, and depicts a significant point of difference between the two units, namely that the Triple TRT chassis is in two parts, whereas the SB121 chassis is one continuous unit. The Judge correctly identified the difference, but entirely failed to recognise its significance as a major point of difference between the two designs.

The V-shape chassis design

[76] Steelbro submits that the trial Judge failed to recognise that, once Steelbro had decided to pursue a centre flat folding crane, it was inevitable that it would have to create a dip in the chassis, and, while each chassis contains a dip to accommodate the centre crane, each dip is entirely different.

[77] Steelbro argues that the trial Judge uncritically accepted TRT’s evidence in concluding that the similarities between the units were not dictated by design constraints. The V-shape employed in the chassis is a consequence of best engineering practice which dictates that, where a dramatic change is made in sectional properties, there should be an attempt to make that change as gradual as possible.

[78] The Steelbro design uses the same angle as other Steelbro chassis designs, and uses in-house fabricated plate flanges which are not parallel where they slope into the dip, whereas the TRT design uses standard off the shelf I-beams and the flanges are parallel. Steelbro did not investigate continuing the rear of the chassis at the lower level because the first TRT design had used that shape and it was clearly an inferior design.

[79] TRT contends that the engineering constraint argument is justification in hindsight. The documents clearly show that the SB121 was always going to be that shape, and no other measures were considered. Mr Eaton gave evidence that there was no strength advantage to thickening the rear portion of the chassis, yet Ms Wan did not investigate the possibility of continuing the rear part of the chassis at the reduced height.

The geometry optimisations

[80] Steelbro submits that the trial Judge erred in finding that the geometry optimisations were influenced by Mr Swarbrick's measurements of the TRT Triple.

[81] Steelbro argues that there were two separate strands to the geometry work: the geometry optimisation relating to the SB121 itself, and the TRT Triple comparison geometry. The former began with another Steelbro design, not the TRT model. The results of the comparative model did not cross back over into the SB121 optimisation. As a whole, the geometry optimisation exercise is evidence of independent and original design work rather than copying.

[82] The Judge failed to specify the way in which the Steelbro's drawings were in fact influenced or cross-pollinated by Swarbrick's awareness of the TRT dimensions. Steelbro submits that the Judge was led to the wrong conclusion by his analysis of the 615mm measurement. The Judge failed to appreciate that the dimension was in fact derived as a consequence of regulatory and functional constraints. The measurement was from Mr Swarbrick's notes on the TRT Triple, and related to the vertical dimension into which the centre crane must fold. The relevant part of the TRT unit was in fact 630mm. The final measurement on the SB121 was 620mm.

[83] TRT responds that it was not shown that the "second strand" geometry optimisation started with another Steelbro design, merely that the same template design was used. As the Judge found, there is simply no evidence of Mr Swarbrick's starting point. In addition, Mr Swarbrick admitted that the "relevant" previous Steelbro designs were only identified in the course of preparing for the High Court proceedings, as part of a search for similar design elements in earlier Steelbro

products. The fact that this project was different from prior projects is supported by the letter from Meyer Consulting which suggests Mr Swarbrick described the projects as different to Steelbro's existing product range. No similar previous product was identified at trial.

[84] Secondly, TRT submits that it is not credible that the measurements and geometry optimisation were for the purposes of comparison only. Mr Swarbrick noted every significant dimension of the TRT Triple, including a number of dimensions that were not necessary for the comparison. There is no logical basis for comparing a unit that, Mr Swarbrick assumed, had a 10 tonne capacity (it actually has a 12 tonne capacity) to compare with the design for a unit with a 12 tonne capacity. Moreover, the first so-called comparative analysis does not appear to contain any of the dimensions that Mr Swarbrick took from the TRT Triple.

[85] TRT submits that the discovered documents suggest that the TRT Triple measurements were used in the Steelbro optimisations. The evidence suggests that Mr Swarbrick took the TRT dimensions as a starting point for the SB121 centre crane, with the intention of making such amendments as were necessary to increase the loading capacity, and continued to re-check against the TRT Triple as the project progressed.

[86] The use of the erroneous 615mm measurement shows that Mr Swarbrick was determined to replicate what he had recorded about the TRT Triple. The 615mm measurement was not necessary to analyse performance. Furthermore, TRT argues, the measurement of 75mm from the nominal top of the arm to the twist lock must have been a direct input from Mr Swarbrick's observations of the TRT Triple. His suggestion that it was an "invented figure" based on previous experience is not credible. Similarly, the explanation for the 270mm measurement in the web height of the I-beam in the SB121 chassis, which corresponds exactly with the same measurement in the TRT Triple, is not credible.

[87] TRT submits that the question mark on Mr Swarbrick's drawing of the TRT Triple does not indicate a missing dimension, but marked the only part of the

design that he intended to change, and did in fact change. This supports the contention that the drawings were for the purpose of copying and not comparing.

[88] Finally, in cross-examination Mr Swarbrick referred to “changing” some dimensions, which can only be understood as a reference to a change from the initial TRT dimensions. The dates of modification of the optimisation documents justify the inference of the trial Judge that the documents were open and used simultaneously by Mr Muirsmeath and Mr Swarbrick, and that there was a sharing of information between the optimisations.

Alternatives

[89] Steelbro submits that the trial Judge erred in dismissing the explanations given in evidence as to why alternative options were not pursued.

[90] TRT acknowledges that, once it was decided to design a flat-folding centre crane, a drop in the chassis was inevitable. The only other options identified were a swing crane or a sliding centre crane. Steelbro submits that it was its customers who required a TRT Triple-style product. Their demands made it inevitable that there would be similarities between the products. This explains why the options of a swing through or sliding crane were not considered, quite apart from the point that these options did not fit with the seven-pin configuration or the regulations constraining trailer length.

[91] TRT contends that Steelbro’s suggestion that the configuration adopted was the only possibility is belied by the fact that other options were contemplated in Mr Swarbrick’s specification, for example “side by side stabiliser arms front and rear” (as opposed to underslung stabiliser arms at the rear) and “sliding crane version” (as opposed to the flat folding centre crane). The evidence of Mr Swarbrick and Ms Wan was that the key features were dictated to the design team by Mr Steel, rather than by the limits of functionality.

[92] TRT further argues that its own calculations showed that a variety of alternatives were possible.

Design standards and regulatory constraints

[93] Steelbro submits that the trial Judge wrongly rejected Mr Joyce's evidence that similarities could be properly explained by design and engineering constraints.

[94] Steelbro points out that the SB121 was designed for the international market and was therefore constrained by European regulations. These regulations provide a myriad of fixed dimensions which, in combination, dictate where the centre crane must be placed and how much space is available to accommodate it. Steelbro argues that the Judge was incorrect in finding that there were other options available to Steelbro, and that some flexibility remained in the dimensions. There was no flexibility in relation to height, and the maximum possible length was a relevant factor when the chassis was designed. In addition, customer preference made it desirable to have the greatest possible amount of space below the stabiliser to prevent it hitting the ground.

[95] TRT submits in reply that there is no evidence of manufacturing techniques or constraints being applied, other than to "tweak" the TRT design. It is impossible for Steelbro to ascribe similarity to manufacturing constraints when there is no evidence that it calculated the design windows or considered doing things differently from TRT.

[96] TRT points to the fact that the permissible length had been increased between the time that the TRT Triple was designed and when the SB121 was designed, even taking into account the European standard. The evidence shows that the height restriction was not as strict as claimed by Steelbro. The only manufacturing constraint that was common to both parties was the 2.5m maximum legal width for the trailer.

[97] In addition, TRT submits, it is readily apparent from the judgment that the Judge turned his mind to this issue, and that the finding that the constraints did not explain the similarities between the designs was open to him on the evidence. The design, engineering and regulatory constraints did not dictate the shape and configuration of the SB121. At best they were used to fine tune aspects of some

components, the shape and configuration of which had already been dictated by Mr Swarbrick's analysis of the TRT Triple.

Policy

[98] Steelbro argues that Chisholm J's decision strikes at fair competition and stifles technological progress. Particularly in the area of industrial design, a certain degree of copying and comparison is inevitable and desirable in a competitive market. Innovation based on prior design should not be unduly constrained. In support of this submission, Steelbro cites Hoffman J in *Bilhöfer* and Laddie J, writing extra-judicially in "Copyright: Overstrength, Over-Regulated, Over-Rated" [1996] EIPR 263 at 259:

The whole of human development is derivative. We stand on the shoulders of the scientists, artists and craftsmen who precede us. We borrow and develop what they have done; not necessarily as parasites, but simply as the next generation. It is at the heart of what we know as progress. ... [B]orrowing and developing has always been acceptable.

[99] TRT points out that, to varying degrees, all intellectual property laws confer on the holder of the right a monopoly preventing others from unlawfully exploiting that property for a finite time period. New Zealand's treatment of industrial designs is at odds with some major trading partners, and should therefore be seen as deliberate. If a change is to be made, it should be implemented by the legislature, not the courts.

[100] In any event, TRT submits that Steelbro's concerns are illusory. It is necessary to draw a line between copying leading to unfair competition, and innovation leading to technological progress. This case simply decides that, on the facts, Steelbro's conduct falls on the impermissible side of that line. Reversing the judgment would sanction replication of competing products with only minor variations, which would stifle, rather than encourage, creative innovation.

Discussion

[101] We can deal briefly with the competing policy arguments because their resolution depends, in our view, on the factual findings. If on the facts Steelbro substantially copied the design of TRT, there are no valid policy reasons for upholding that conduct. Conversely, if Steelbro's design represented an innovative development drawing upon but further developing existing technology, it should be welcomed and encouraged.

[102] There is a difficult issue in New Zealand as to whether the so-called copyright/design overlap, which allows potential copyright protection in this sort of area, is appropriate: (see generally, Frankel & McLay *Intellectual Property in New Zealand* (2002) at 371 et seq). There is however no doubt as to the present state of the law, and it was not argued before us that we should endeavour to deal with this issue judicially, by somehow recasting the appropriate boundaries of copyright and design law.

[103] This case therefore comes down to a question of fact: was Chisholm J correct in finding that Steelbro had illegitimately crossed the line into copying not only the concept of TRT but also the expression of that concept?

[104] We formulate the essential issue in this way because, although Steelbro has a right of appeal to this Court on fact as well as on law, it does, as the unsuccessful party in the Court below, have the burden of persuading us that the trial Judge was wrong.

[105] The discharge of that responsibility is particularly difficult where, as was the position on some of the issues raised by Steelbro, the trial Judge has, for reasons which he clearly articulated in his Judgment, made findings of credibility adverse to Steelbro.

[106] We are mindful of the observations of Lord Hoffmann in *Designers Guild*, where the English Court of Appeal had departed from the finding of the trial Judge

that the similarities between two designs were so marked as to warrant a finding that one had been copied from the other:

The question of substantiality is one of mixed law and fact in the sense that it requires the judge to apply a legal standard to the facts as found. It is, as I said, one of impression in that it requires the overall evaluation of the significance of what may be a number of copied features in the plaintiff's design. I think, with respect, that the Court of Appeal oversimplified the matter when they said that they were in as good a position to decide the question as the judge. I say this for two reasons.

First, although the question did not depend upon an assessment of the credibility of witnesses, there seems to me no doubt that a judge may obtain assistance from expert evidence in identifying those features of an artistic work which enable it to produce a particular visual effect. The plaintiff's expert Mr Herbert described his expertise as 'the art of visual literacy'. This seems to me to be right. So I think that the judge, having heard Mr Herbert, was well placed to assess the importance of the plaintiff's designer's brush strokes, resist effect and so forth in the overall artistic work. The Court of Appeal, on the other hand, adopted a reductionist approach which ignored these elements.

Secondly, because the decision involves the application of a not altogether precise legal standard to a combination of features of varying importance, I think that this falls within the class of case in which an appellate court should not reverse a judge's decision unless he has erred in principle (see *Pro Sieben Media AG v Carlton UK Television Ltd* [1999] 1 WLR 605 at 612-613. I agree with Buxton LJ in *Norowzian v Arks Ltd (No 2)* [1999] IP & T 223 at 230-231 when he said:

'... [W]here it is not suggested that the judge has made any error of principle a party should not come to the Court of Appeal simply in the hope that the impression formed by the judges in this Court, or at least by two of them, will be different from that of the trial judge'.

In my opinion the judge made no error of principle. His decision that the copied features formed a substantial part of the work should therefore not have been reversed. I would allow the appeal.

[107] As Lord Scott of Foscote put the point succinctly in the same case (at 718), a finding of copying is "particularly the province of the trial judge".

[108] There is a line between pure ideas and the expression of them. But it is notoriously ill-defined. In *Cornish and Llewellyn, Intellectual Property* (5ed 2003) at [11-06] it was said:

Judges who incline to the view that "what is worth copying is prima facie worth protecting may well stretch the notion of "expression" a considerable

way. Once convinced that the defendant unfairly cut a competitive corner by setting out to revamp the plaintiff's completed work, they will not easily be dissuaded that the alterations have been sufficient. In this approach the taking of ideas alone is confined to cases where the defendant does not start from the completed work at all, save in the sense that he goes through a similar process of creation: as where he paints for himself the scene that the plaintiff painted, or draws his own cartoon for the same basic joke.

[109] The sort of factors to which courts commonly have regard include: the "starting point" of the defendant's work; the extent of the defendant's alteration (i.e. whether a substantial part of the plaintiff's work survived in the defendant's so as to appear to be a copy of the original work); and generally the way in which the defendant has taken advantage of the plaintiff's work. In that respect, as Lord Reid sagely observed in *Ladbroke (Football) Ltd v William Hill (Football) Ltd* [1964] 1 WLR 273 at 276 (HL) "the question whether [the defendant] has copied a substantial part depends much more on the *quality* than on the quantity of what he has taken" (emphasis added).

[110] Whether there has been a substantial copying is thus, as leading academic commentators have said, "a major tool for giving expression to the Courts' sense of fair play": Cornish & Llewellyn at [11-06]. Or, as Laddie, Prescott & Vitoria *The Modern Law of Copyright* (3ed 2000) put it, at 135: "Where the courts find that a work B is not an infringement of the copyright in a work A because it is 'original' what they really mean is that B owes so little to A that it ought not to count as piracy".

[111] As the length of this judgment illustrates, Steelbro has cast its net wide in attempting to establish one or more material errors of fact in the judgment under appeal. In doing so, it has approached, if not reached, the position deprecated by Buxton LJ in *Norowzian* of coming to an appellate court in the hope that the impression of at least two members of the court will differ from that of the trial judge.

[112] In the event, Steelbro has not persuaded even one member of this Court that Chisholm J was in error. To the contrary, we are impressed by the careful way in which he analysed the complex factual background and came to well-reasoned conclusions on all the issues which arose.

[113] The key points are that Steelbro started with TRT's product distinctly in mind. That is a critical finding of the trial judge which we are not minded to disturb on appeal. In that sense the Steelbro product is derivative. Steelbro then endeavoured to replicate the TRT model, in the sense of building a better model of that kind. From time to time Steelbro "checked back" against what TRT had done. In fairness, there is no question Steelbro did a great deal of work itself. In the classic economist's phrase "it built a better mousetrap". Nevertheless, an inference of copying was possible, indeed probable, unless Steelbro could negative it by establishing that the similarity was not due to the copying.

[114] It cannot be said that the Judge erred in principle in his approach to this case. On the facts, it was open to Chisholm J to find as he did that Steelbro had "copied" the TRT product in the relevant legal sense. We are not persuaded he was wrong.

Result

[115] The appeal is dismissed.

[116] Steelbro is ordered to pay TRT costs of \$12,000 and usual disbursements.

[117] We certify for second counsel.

Solicitors:
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