Unlawful Competition  
— A Substitute for  
Infringement of Copyright  
in Technical Works?  

by Owen Dean

Copyright as a means of protecting industrial utilitarian products against slavish copying or so-called "reverse engineering" is on the retreat all around the world. This manner of use of copyright in artistic works manifested itself mainly in the UK and in the developed British Commonwealth countries as well as in South Africa, a former member of the British Commonwealth and a country having a British copyright heritage. In Canada, Australia, New Zealand and in the UK itself recent changes have been made to the copyright laws which curtail or prevent artistic copyright from being used to prevent the reverse engineering of industrial utilitarian products. In the UK this form of copyright protection has been substituted to a large extent by the unregistered design right — which is, perhaps, copyright in another guise — but in the Commonwealth countries nothing or very little has been put in the place of the erstwhile copyright protection. The same has happened in South Africa.

During the past decade South Africa has been in the vanguard of developments relating to the protection of industrial utilitarian products against reverse engineering by means of copyright. In 1983 South Africa already provided for a qualified measure of protection of this nature and the protection now granted in the UK by means of the unregistered design right is not unlike the 1983 South African measures. In 1988 South Africa for all practical purposes abolished this form of protection and the basis for the "forfeiture" of protection of industrial utilitarian products via artistic copyright has largely been emulated in Commonwealth countries such as Australia and New Zealand.

The new pattern which has developed in South Africa in regard to protection of utilitarian industrial products against reverse engineering has been that the largely fleged law of unlawful competition appears to be stopping into the breach left by the departure of copyright protection. In this article the demise of copyright in this field and the contemporaneous rise of unlawful competition in its stead in South Africa are described. Perhaps these developments in South Africa fore-shadow a trend which will be repeated elsewhere.

The recession of copyright

In the Copyright Act 1978, as amended by the Copyright Amendment Act 1983, the definition of "artistic work" reads as follows:

irrespective of the artistic quality thereof

(a) paintings, sculptures, drawings, engravings and photographs;

(b) works of architecture, being either buildings or models of buildings;

(c) works of artistic craftsmanship, or works or craftsmanship of a technical nature, not falling within either paragraph (a) or (b).

Since 1983 the definition of "drawing" has read "includes any drawing of a technical nature or any diagram, map, chart or plan". This definition confirms the earlier case law. See for instance Pan African Engineers (Pty) Ltd v Hydro Pipe (Pty) Ltd & another 1972 (1) SA 470 (W); Ehrenberg Engineering (Pty) Ltd v Topka & Topka Manufacturing & Engineering, Case No.1 865/77 in the TDP — unreported; Scaw Metals Ltd v Apex Foundry (Pty) Ltd & another 1982 (2) SA 377 (D); and Klep Valves (Pty) Ltd v Saunders Valve Co Ltd 1987 (2) SA 1 (A).

The original version of the definition of "artistic work" did not include the category "works of craftsmanship of a technical nature" but this category was added by the 1983 amendment. Unlike in earlier copyright legislation, the phrase "irrespective of the artistic quality thereof" applies to all the categories of artistic work and not only to category (a). This means, inter alia, that the category "works of artistic craftsmanship", which the British courts have held to necessarily have artistic merit (see George Hensher Ltd v Restwhile Upholstery (Lancs) Ltd 1975 RPC 31), does not have to meet this requirement.

In the light of the above, technical works and three-dimensional objects which constitute them or which are derived from them can enjoy protection under the 1978 Act in the form of drawings, works of artistic craftsmanship and works of craftsmanship of a technical nature. Any technical drawing of any type of article, including utilitarian articles, will constitute a "drawing". Most, if not all, prototypes of utilitarian industrial articles will constitute either a work of artistic craftsmanship or a work of craftsmanship of a technical nature. In regard to the latter category, our courts have already held that the glass fibre hull of a boat or a mould for making it (Butt v Schultz & another 1984 (3) SA 568 (E); Schultz v Butt 1986 (3) 667 (a)), the prototype of a motor car silencer (Boas v Afrika (Pty) Ltd v Grapnal (Pty) Ltd & another 1985 (4) SA 882 (C)), a wooden model of a kitchen appliance (Kambrook Distributing v Haz Products & others Case No.21810/84 in the WLD — unreported), and a valve (Insamoor (Pty) Ltd v Machienfabliek Slinger Stalder AG v Sistag & another, 1987 (4) SA 860 (W)) are included in it. Consequently, in principle the 1978 Copyright Act grants comprehensive protection to works in the technological field.

The copyright in an artistic work is infringed, inter alia, by the unauthorized reproduction of it, or of any substantial part of it, whether in two- or three-dimensional form and whether the original work or a two-dimensional or three-dimensional reproduction of it is copied. Reproduction of an artistic work by means of copying an intervening reproduction is commonly referred to as "indirect copying". Notwithstanding the broad protection given in principle to technological works in the Copyright Act, the right of the owner of the copyright in such a work to restrain reverse engineering of his work has been severely curtailed, to the extent that it barely exists any longer, by s.15(3A) of the Act as amended by the Copyright Amendment Act 1988.

When the 1978 Act was first passed, unlike its predecessors it gave unqualified protection to technical drawings and other artistic works against the making of three-dimensional reproductions, whether by direct or indirect copying, irrespective of whether a design corresponding to the artistic work was registrable under design legislation or had been used in practice. Accordingly, initially copyright was fully enforceable notwithstanding the fact that a corresponding design was inherently registrable under the designs legislation, or indeed that it was actually registered. It was possible for copyright infringement and infringement of a registered design to be claimed cumulatively in the same action. When s.15(3A) was inserted
in the Act in 1983 it provided that, in certain circumstances, the right of a copyright owner in a technological work to restrain reverse engineering of his work was forfeited after the lapse of ten years from the time when his own three-dimensional derivative article was first placed on the market anywhere in the world. In terms of the 1988 amendment to s.15(3A) the forfeiture of the right to prevent reverse engineering takes place immediately upon the fulfillment of the relevant conditions and not only after the lapse of ten years.

Section 15(3A), as it now reads, provides that where a copyright owner has directly or indirectly produced and sold three-dimensional derivative articles of his work anywhere in the world and such derivative articles primarily have a utilitarian purpose and are made by an industrial process, no infringement occurs thereafter by the making of unauthorized reproductions by means of indirect copying. More specifically, the right to restrain reverse engineering is forfeited under the following conditions:

- the artistic work must have been reproduced in a three-dimensional form with the authority of the copyright owner;
- such three-dimensional reproductions must have been made by an industrial process;
- such three-dimensional reproductions must have been articles primarily having a utilitarian purpose;
- such three-dimensional reproductions must have been distributed anywhere in the world.

Once these conditions have been met, trade competitors are entitled to make indirect copies of the authorized three-dimensional derivative products, or to reverse-engineer them, without exposing themselves to the risk of a claim of copyright infringement. The competitor can, however, only copy the derivative product and not the original work or a two-dimensional version of it in making his competing product. In the technological field this means in practice that, as soon as the copyright owner in a technological work has mass-produced derivative objects (which in the vast majority of cases would relate to a product which primarily has a utilitarian purpose), he can no longer rely upon copyright to restrain others from copying his product although he can still restrain the making of copies from his original work or a two-dimensional reproduction of it.

To sum up, under current law where a three-dimensional product primarily has a utilitarian purpose and is made by an industrial process, the right of the copyright owner in the basic work to control the making of three-dimensional copies of it falls away once the article has been industrially mass-produced and distributed to the public anywhere in the world. Until three-dimensional utilitarian industrially-produced derivatives of an artistic work have been issued to the public with the authority of the copyright owner, the work enjoys full copyright, including the right to restrain making three-dimensional reproductions of the work whether by direct or indirect copying. Even after authorized three-dimensional utilitarian industrially produced derivatives of the work have been issued to the public, the copyright owner can still restrain the making of three-dimensional articles by direct copying. What is excised from the copyright, or, "forfeited", is the right to restrain the making of three-dimensional reproductions or adaptations by indirect copying from an authorized reproduction, i.e. reverse engineering. For the rest the copyright remains intact.

It is clear from the foregoing that, subsequently to the passing of the Copyright Amendment Act 1988, innovators of technology must performa look elsewhere for protection for the fruits of their endeavours. Copyright has for all practical purposes ceased to be a force to be reckoned with. The limited scope of protection which the law of copyright continues to offer is of very little worth or value to them in dealing with copying or reverse engineering of their products.

The rise of unilateral competition

The South African law of delict, which is derived from Roman Dutch law, provides a general remedy for wrongs to interests of substance, the infringement of which gives rise to patrimonial loss.

The remedy which is available in these circumstances is derived from the Lax Aquilia of the Roman Law and is "Aquilian". In an Aquilian action a plaintiff must show that the defendant's wrongful and culpable conduct caused him patrimonial loss.

Modern South African law recognizes an action for unlawful or unfair competition as a form of Aquilian remedy.

Before conduct can constitute unlawful competition it must satisfy the general requirements for Aquilian liability. These are that there must be:

- a wrongful act or omission;
- fault, which may consist either of negligence or intention;
- causation which must not be too remote; and

Competition as a damage-producing activity only gives rise to liability if it is wrongful or unlawful. In general, an activity is wrongful or unlawful towards a particular individual if it infringes a legal right which he possesses. If an individual has a legal or subjective right, others have a duty to respect that right. It is only in recent years that unlawful competition has begun to be recognized as an established branch of the law of delict.

This process in the past has been hampered by the lack of an appropriate yardstick or criterion by which the "wrongfulness" of conduct in a competitive situation could be determined.

The cornerstone for the test of wrongfulness or unlawfulness in an unfair competition situation was set in the case of Atlas Organiz Fertilizers (Pty) Ltd v Pikkewyn Gwano (Pty) Ltd & others (1981 (2) SA 173 (T)). Van Dijkhorst, J said in that case:

What is needed is a legal standard firm enough to form guidance to the court, yet flexible enough to permit the influence of an inherent sense of fair play.

I have come to the conclusion that the norm to be applied is the objective one of public policy. This is the general sense of justice of the community, the boni morae, manifested in public opinion.

In determining and applying this norm in a particular case, the interests of the competing parties have to be weighed, bearing in mind also the interests of society, the public weal. As this norm cannot exist in vacuo, the morals of the market place, the business ethics of that section of the community where the norm is to be applied, are of major importance in its determination.
Public policy as criterion for unlawfulness in a delict is well-known in our law; it has the stamp of approval of our highest court.

In Lorimar Productions Inc & others v Sterling Clothing Manufacturers (Pty) Ltd (1981 (3) SA 1129 (T)) Van Dijkhorst, J applied the boni mores test which he himself had formulated in the Atlas Organic case. He said the following:

In applying the norm of public policy in the present case, the following factors seem to me to be relevant: the protection already afforded by statutes and by established remedies, like passing off, under the common law; the morals of the market place: thereby I mean the ethics of the business community concerned; an inherent sense of fairplay and honesty; the importance of a free market and strong competition in our economic system; the question whether the parties concerned are competitors; conventions with other countries like the Convention of Paris.

The seal was placed on the boni mores as the test for the wrongfulness or unlawfulness of competition in Schultz v Butt (1986 (3) 667 (A)), a decision of the Appellate Division of the Supreme Court, the court of final appeal and the equivalent of the House of Lords in the UK or the Supreme Court in the USA. In that case Nicholas A J A said that in determining the unlawfulness of competition and in judging fairness and honesty

regard is to be had to boni mores and to the general sense of justice of the community

While fairness and honesty are relevant criteria in deciding whether competition is unfair, they are not the only criteria. As pointed out in the Lorimar Productions case and in the questions of public policy may be important in a particular case, e.g. the importance of a free market and of competition in our economic system.

The Appellate Division set the criterion as the boni mores and general sense of justice of the community as interpreted by the policy makers of the community such as the legislature and judges.

Where one person reverse engineers or copies another person’s three-dimensional utilitarian product in the industrial field with a view to selling his product in competition with the earlier product, his conduct will generally cause the first person patrimonial loss and such conduct on his part will have been either negligent or intentional. The only element about which there is doubt, as to whether a delict has been committed giving rise to the availability of an Aquilan remedy, is the issue of the wrongfulness of the copying of the product and selling it. In each instance of making a competing product by the process of reverse engineering and selling it one must have regard to all the facts and they must be tested against the criterion of the boni mores as endorsed by the Appellate Division in the Butt case. This is, however, easier said than done.

It is instructive to examine the facts and issues of the Butt case not only because it gives important insight into the application of the Appellate Division’s test for wrongfulness but also, because in a case which was brought on the basis of both copyright infringement (the case was decided in terms of the law of copyright as it existed prior to the 1988 amendment) and unlawful competition, it neatly encapsulates and illustrates the problems relating to the copying of utilitarian industrial products for the future.

Butt, the applicant, designed and made the hull of a catamaran ski-boat. He did this by making a concrete "plug" which embodied the shape of the hull in the inverted position. He

made a fibreglass mould from the plug, which moulds were thereafter used for making hulls for his catamaran boats. The design of the hull of Butt’s boat was made and perfected over a number of years and a great deal of time, trouble and money was expended in achieving a satisfactory result. Butt was required to make numerous experiments and to draw heavily on his experience as a seaman in perfecting the design of his catamaran hull. Butt’s boats were very successful and were highly regarded and he developed a good market for them. Butt’s boat was called the "Butt-Cat".

Schultz requested Butt to sell him a disused mould for the Butt-Cat hull. Schultz claimed that he wanted to make one boat for his private use but Butt was sceptical about this because he knew Schultz had in the past manufactured and sold boats. He accordingly declined to sell the mould in question to Schultz. Thereafter a certain Beary acquired a complete Butt-Cat hull from Butt who sold it to him as a reject because the finish was considered to be unsatisfactory. Schultz acquired this hull from Beary and used it as a "plug" from which he made a mould. This mould was used to manufacture catamaran ski-boats in competition with Butt. The hulls of the boats sold by Schultz were substantially identical to the hull of the Butt-Cat although there were slight differences. Schultz’ hulls were, however, clearly copies of the Butt-Cat hull. Schultz registered the design of the hull of his boats as a design under the Designs Act.

Schultz did not deny that he had copied the hull of a Butt-Cat but he claimed that he had made modifications to Butt’s hull which had caused him to spend 600 man hours and employ considerable labour and material.

Butt instituted court proceedings against Schultz based on copyright infringement (through indirectly copying and making a reproduction of a substantial part of his catamaran hull, it being a work of craftsmanship of a technical nature) and unlawful competition. The court of first instance upheld both these claims.

It granted an injunction restraining Schultz from using Butt’s catamaran hull or any mould made from Butt’s catamaran hull for the purpose of making competing boats, and from trading in any boats manufactured by him in this way. Schultz was not restrained from copying or reproducing Butt’s catamaran hull in general but simply from utilizing Butt’s catamaran hull or a mould made from it to make and sell boats in competition with him.

In dealing with the unlawful competition claim in the court of the first instance Mullins J drew a distinction between simply copying Butt’s hull, on the one hand, and making a reproduction of it by actually using one of Butt’s hulls to make a mould, on the other hand. He appeared not to take umbrage at the former but he did not at the latter. In this regard he said the following:

The sale of an object such as a boat inevitably releases the design thereof, and in casu the hull, to the purchaser. This does not entitle the purchaser or anyone else, in my view, to make a mould therefrom and to copy that hull for commercial purposes. A rival manufacturer is entitled to examine hulls designed by his competitor and to incorporate in his own design whatever he regards as the most desirable features thereof. He may not, however, in my view, copy such hull, the product of another’s inventiveness and experience, in a manner which does not require him to apply his mind to such a design or to

Copyright World, Issue Nine March/April 1990
exercise his own inventiveness and experiences, even if he only uses it as a starting point and makes modifications thereof.

There is no question of granting applicant a monopoly in regard to the design of his hull. Anyone is entitled to design a hull with similar features. What applicant is entitled to be protected against is the use by first respondent of applicant’s hull as a starting point. First respondents must start from the beginning, not on the second or third rung of the ladder. Applicant is not entitled to be protected against another person evolving his own design similar to that of applicant, or even against the copying of his design, but he is entitled to be protected against the use of one of his hulls to form a mould, with or without modification. See Callman on Unfair Competition para 4.60.

The Appellate Division in essence upheld the decision of the court of first instance. In the Appellate Division, Nicholas A J A adopted a similar approach. He said the following:

Anyone may ordinarily make anything produced by another which is in the public domain: One may freely and exactly copy it without his leave and without payment of compensation ... But the question to be decided in this case is not whether one may lawfully copy the product of another but whether A, in making a substantially identical copy, with the use of B’s mould, of an article made by B, and selling it in competition with B, is engaging in unfair competition.

He answered the above question which he had posed himself by saying the following:

There can be no doubt that the community would condemn as unfair and unjust Schultz’ conduct in using one of Butts’ hulls (which were evolved over a long period, with considerable expenditure of time, labour and money) to form a mould with which to make boats in competition with Butt. He went further. Having trespassed on Butts’ field, he added impudence to dishonesty by obtaining a design registration in his own name for the Butts Cat hull, with the object no doubt of hindering the field to other competitors.

In South Africa the Legislature has not limited the protection of the law in cases of copying to those who enjoy rights of intellectual property under statutes. The fact that in a particular case there is no protection by way of patent, copyright or registered design, does not license a trader to carry on his business in unfair competition with his rivals.

In finding Schultz’ conduct reprehensible, both the court of first instance and the Appellate Division placed emphasis on the manner in which Schultz went about the process of the copying and his conduct generally associated with such copying. There is some doubt whether, if Schultz had taken one of Butt’s catamaran hulls and had measured it in fine detail and thereafter constructed his own concrete “plug” so as to conform with the measurements which he had taken and thereafter made a mould for his hull and subsequent hulls in the normal manner utilized by boat builders, the

innovators
of functional designs
for utilitarian industrial products should be entitled to protection against having their products slavishly copied

courts would have held his conduct to be wrongful. However, on the strength of the above, unauthorized reproduction of utilitarian industrial objects can in certain circumstances constitute unlawful competition; but at the present state of the development of the law the circumstances perhaps have a narrow ambit.

Conclusion

I belong to the school of thought which holds the view that developing and perfecting utilitarian industrial products which do not qualify for patent or design protection often involves the utilization of considerable expertise, effort and entrepreneurial spirit and that it is inequitable that a competitor should be able to reap the benefits of all of this and simply copy an earlier product, thereby placing himself in a position where he can compete with that product with the minimum of trouble and expense and probably at a cheaper price because of his lower development expenses and cost structure. I believe that, in deserving cases, innovators of functional designs for utilitarian industrial products should be entitled to protection against having their products slavishly copied. I therefore take encouragement from the fact that the South African courts appear to be willing to contemplate continued protection of this nature despite the demise of the copyright remedy. The form of the remedy is not important. What is important is its substance. It is perhaps ironical that in reasoning the existence of a remedy of unfair competition in the Butt case the court utilized very much the same criteria as would be required for the availability of a remedy of copyright infringement. The entitlement of Butt to protection under the common law was justified on the basis which corresponds closely with the requirement of "originality" in copyright law while the culpability of Schultz' conduct was determined largely by the substantiality of his copying. It matters not how the courts name or identify the remedy as long as they are prepared to restrain unfair instances of slavish copying.

Schultz v Butt falls short of establishing a general remedy in South African law for restraining slavish copying of industrial products but it is a step in the right direction. The South African law of unlawful competition is one of the fastest-evolving branches of South African law and, in applying the principles of unlawful competition to copying in other fields besides utilitarian industrial products, the courts have shown a willingness to regard reaping benefits where one has not sown on a fairly general basis as constituting unlawful competition. There are grounds for optimism that in South African law, copyright infringement by reverse engineering may be reincarnated as unlawful competition but probably without some of the excesses which have characterized these forms of copyright infringement matters in the past. Unlawful competition enables the courts to adopt a more flexible and pragmatic approach than was allowed under the law of copyright. Perhaps the law of unlawful competition is after all the proper home for a remedy to restrain slavish copying of industrial products.

© Owen Dean 1990. The author is a partner in the Pretoria, South Africa, law firm of Spoor & Fisher.