## A FUNCTIONAL VIEW OF COPYRIGHT, DESIGNS AND PATENTS

In this article the state of New Zealand's intelletual and industrial property law Acts is examined following the decision JOHNSON v. BUCKO ENTERPRISES [1975] 1 N.Z.L.R. 311 which confirmed long held suspicions that the Copyright Act 1962 has application in the field of industrial design. The implications of this are examined and the author concludes with positive proposals for reform.

#### I INTRODUCTION

In 1974 P. S. Johnson & Associates Limited brought an action in the Supreme Court, Auckland, under the Copyright Act 1962 against Bucko Enterprises Limited and others in respect of a toilet pan connector.1 The plaintiff was successful. Chilwell J. held that copyright subsisted in drawings of a pan connector owned by the plaintiff and that this copyright had been infringed by the defendant's manufacture and sale of pan connectors substantially identical to the of the drawings. The rubber toilet pan connector comprised two cylindrical sleeve portions of different diameters joined by a short conical portion. Its purpose was to connect lavatory pans to soil pipes. That drawings of such a utilitarian device could be the subject of copyright caused some surprise, even within the legal profession. Newspapers, attracted by the apparent incongruity of artistic copyright apply to a toilet fitting gave the case unusual coverage. Later the case became the subject of a satirical article in the New Zealand Law Journal. 18 Even though there was English authority 16 to suggest that the Copyright Act 1962 extended to the purely industrial field, with the arrival of a New Zealand decision it is indeed opportune to reflect on the merits or otherwise of the breadth of this Act. Should the Copyright Act be concerned with drawings of industrial articles? How does the Copyright Act fit in with the Patents and Designs Acts? What are the functions of these Acts? Should their fields of application overlap? This paper examines these questions from a jurisprudential viewpoint and suggests some answers.

 <sup>[1975] 1</sup> N.Z.L.R. 311.
 The Ekatahuna Law Reports, [1975] N.Z.L.J. 689.

<sup>1</sup>b. The foundation case was Dorling v. Honnor Marine [1964] R.P.C. 160.

## THE COPYRIGHT, DESIGNS AND PATENTS SYSTEMS: BRIEF HISTORY AND CONVENTIONAL RATIONALE

## 1 — Copyright

"Copyright law is, in essence, concerned with the negative right of preventing the copying of physical material existing in the field of literature and the arts. Its object is to protect the writer and artist from the unlawful reproduction of his material. It is concerned only with the copying of physical material and not with the reproduction of ideas . . . "2

It is said that copyright constitutes property. "Nothing can with greater propriety be called a man's property than the fruit of his brains."

The subject matter of copyright, while originally only books (1709), has been extended over the years by successive statutes to include engravings (1734), sculpture (1797), dramatic and musical performances (1833), paintings, drawings and photographs (1862), sound recordings (1913), cinematograph films, radio and television broadcasts (1962). The term of copyright, while originally fourteen years renewable for a further fourteen years, but limited to the author's lifetime, is now generally the author's life plus fifty years. The limit imposed by the author's death was removed in an 1842 Act; the argument being that the original term was unfair to an older author since it denied his children the benefits of his copyright. Over the years the list of acts amounting to infringement has also been extended, an example being the holding that reproduction of a twodimensional work includes the reproduction of that work in threedimensions.4

## 2 — Designs

Although historically protection for industrial designs developed rather haphazardly and the motives for doing so varied, today protection is viewed as essential to the promotion of higher standards in the aesthetic design of consumer goods. Such high quality design will, it is reasoned, lead to higher sales both at home and abroad to the benefit of all. The need for the law to become involved in the sphere of industrial design has been expressed thus: "If good design is to be encouraged, those responsible for producing designs must be protected against the promiscuous taking by others of the fruits of their labour." The method of protection chosen was that of copyright by analogy with purely artistic works. However, because of the

p. 1, para. 3.

Copinger and Skone James on Copyright, (11th ed., 1971), p. 3, para. 1.
 Ibid., p. 4, para 3.
 King Features Syndicate v. O. & M. Kleeman Ltd. [1941] A.C. 417; now having statutory recognition — s. 3(1) Copyright Act 1962.
5. A. D. Russell-Clarke, Copyright in Industrial Designs, (4th ed., 1968),

industrial flavour of the subject matter, the nature of the protection provided became that of a legal monopoly as was the case with patents. That is, protection was no longer restricted by the necessity to show copying. It is interesting to note that although it is clear that the right conferred by registration is a monopoly the Designs Act 1953 still refers to "copyright" in the design.

The current legislation on industrial designs is contained in the Designs Act 1953 which is derived from the 1949 United Kingdom Act. This Act provides for the registration of new designs and registration so obtained confers on the proprietor the sole right to apply the design to a named article for a maximum period of fifteen years. Designs which are registerable under the Act are those which meet the definition of "design" given in Section 2 — "Design" means features of shape, configuration, pattern or ornament applied to an article by any industrial process or means, . . .". The words "features of shape, configuration... applied to an article" have been taken to mean simply the shape in which the article is made. The definition then goes on to qualify this statement. For example, "design" does not include "features of shape or configuration which are dictated solely by the function which the article to be made in that shape or configuration has to perform." This means that the shape must be more than the natural result of the functional requirements.8

As with copyright, the period of protection provided by designs legislation has been increased over the years. The first Act, the Designing and Printing of Linens, Cottons, Calicoes, and Muslins Act 1787, conferred protection for two months, but by 1907 the period had reached the fifteen years of today. The period of protection under the first Act was particularly short even having regard to the less powerful position of industry at that time. It was presumably in terms of months rather than years because of the nature of the subject matter. The textiles in question would have been considered to have a short life time and thus of the type subject to whims of fashion. Again, as with copyright, the subject matter protected has been extended with time as the first Act covered only patterns printed on textiles.

#### 3 — Patents

The accepted theory of the patent system has been expressed by Blanco-White in his book to as follows:

Copyright Designs Act 1839 No. 2 (U.K.). The first New Zealand Patents Act was enacted in 1860 and the first New Zealand Copyright Act was enacted in 1877. Accordingly, references to earlier legislation refer to British legislation.

Kestos Ltd. v. Kempat Ltd. and Kemp (1936) 53 R.P.C. 139, at 152.
 AMP Incorporated v. Utilux Proprietary Ltd. [1972] R.P.C. 103.
 Recognised as such in The British Patent System, Report of the Committee to Examine the Patent System and Patent Law (1970; Cmnd. 4407).
 Patents for Inventions and Protection of Industrial Designs (4th ed., 1974),

"The basic theory of the patent system is simple and reasonable. It is desirable in the public interest that industrial techniques should be improved. In order to encourage improvement, and to encourage also the disclosure of improvements in preference to their use in secret, any person devising an improvement in a manufactured article, or in machinery or methods for making it, may upon disclosure of his improvement at the Patent Office demand to be given a monopoly in the use of it for a period of sixteen years. After that period it passes into the public domain; and the temporary monopoly is not objectionable, for if it had not been for the inventor who devised and disclosed the improvement nobody would have been able to use it at that or any other time, since nobody would have known about it. Furthermore, the giving of the monopoly encourages the putting into practice of the invention, for the only way the inventor can make a profit from it (or even recover the fees for his patent) is by putting it into practice: either by using it himself, and deriving an advantage over his competitors by its use, or by allowing others to use it in return for royalties"

Statutory recognition of letters patent for inventions was first given in 1624 in the Statute of Monopolies which provided that all monopolies were to be void except "letters patents . . . for the term of fourteen years . . . . for the sole working or making of any manner of new manufactures . . . to the true and first inventor . . . . "11 Although there is an embellishment of the definition of invention, that is the subject matter of a patent, in the present Act12 it still remains substantially that defined in the Statute of Monopolies. However, the meaning of "manner of new manufacture" has been extended, particularly over the last thirty years, and to a large extent due to the decisions of the Australian and New Zealand Courts. 13 An invention now includes a process the product of which need not be an article or substance, but any "artifically created state of affairs". 13a As to the term of a patent, this has been increased slightly to sixteen years.<sup>14</sup> No doubt the original term of fourteen years for patents determined the term of copyright granted under the first copyright Act.

Although the Statute of Monopolies referred to "manner of new manufactures" the test of novelty did not take place until the patentee sued an infringer for damages at which time a jury would compare the plaintiff's invention with its predecessors before comparing the defendent's invention with the plaintiff's. Patent specifications describing the invention were required to be filed under the Act of 1852, and claims defining the invention were required under the Act of 1883.

14. Patents, Designs and Trade Marks Act 1921-22.

<sup>11.</sup> Section 6 — reproduced in Fox, Monopolies and Patents (1947), 118.

Patents Act 1953, s. 2(1).
 National Research Development Corporation v. Commissioner of Patents [1960] A.L.R. 114 and Swift and Company v. Commissioner of Patents [1960] N.Z.L.R. 775.

<sup>13</sup>a. National Research Development Corporation v. Commissioner of Patents, note 13.

and from then novelty and infringement became a matter of construing a document rather than looking at a model. This feature of the patent system, that is, the notion of the scope of the monopoly granted being determined by a description of the subject matter, represents a notable distinction between patents and copyright, and to a large extent designs as well, even though it is the representations of the designs which are registered and not the article itself.

#### III THE NATURE OF PROPERTY

By tracing the historical development of the norms of a legal institution useful information on the nature of that institution can be obtained. However, this information only reveals part of what can be learnt. An additional perspective is provided by an investigation of the developments in the social function served by the institution. In order to make such an investigation of the copyright, designs, and patents systems, it is first necessary to examine the concept of pro-

It is the goal of all modern societies to increase the standard of living of their members. Standard of living is dependent on the volume of production: "the greater the volume of production, the more there is available for consumption by the community as a whole, and the higher can be the general standard of living."15 Different societies have adopted different ways of achieving an increased volume of production. The primary devices of capitalism are the institutions of private property and the free market.

Granting on individual<sup>16</sup> property in any net increase in economic output for which he is responsible is an incentive which will lead to his achieving an output greater than that which he would achieve if he was allocated a predetermined fraction of the total output of society. By property it is meant that "bundle of rights" comprising (a) the power of enjoyment (e.g., the determination of the use to which the property is to be put), (b) possession which includes the right to exclude others, and (c) power to alienate inter vivos or to charge as security.17 Since in modern society the division of labour will mean that any one individual will need to acquire goods other than those produced by himself, and pre-supposing a free market, then the individual will exchange part of the increase in output with other members of society. It is in this process of exchange that the element of incentive resides. The individual is given the power to determine with whom he will exchange his output and what he will accept in exchange for it. Provided that the individual cannot act as a perfect

<sup>15.</sup> Benham's Economics, (8th ed., 1967) 77; it is also dependent on there being an equitable sharing of the economic cake.
16. Taken here to mean any entity having legal personality.
17. The three most important for the purposes of this discussion from the list of four in Paton, A Text-book of Jurisprudence (4th ed., 1972), 517.

monopolist, society will be better off as a result of such exchange since it will share some of the increased output. Property then, serves the function of increasing economic output. It is therefore to the benefit of society to grant property rights to an individual because society will enjoy an increase in wealth as a result.<sup>18</sup>

The above theory suggests that property can be explained as a social construct rather than as a natural right. Because of this it is a theory of greater utility than the traditional Lockean theory. In addition there are of course established arguments which caution against an adoption of Locke's theory of property. The proposition that wealth accruing from land rightly belongs to the man who mixed his labour with it can only be justified by recourse to natural law or moral theories, the contents and truth of which cannot be ascertained by reason alone. Does such a proposition reflect reality? Even in Locke's time many acknowledged owners of property had never mixed their labour with the property itself whether it took the form of land or chattel. A theory such as Locke's is moreover readily accommodated in a sociological view of property — in fact it is to be expected. Most social institutions are traditionally held to have non-human origins. This process of reification — the denying of the human origin of social institutions — seems necessary to satisfy the human need for security.

It is not suggested that property rights have been granted only in cases where there is a benefit for society as a whole. Indeed, a number of writers have maintained that while property is a social construct, its function is to serve the interests of a particular class in society. In terms of the theory outlined here this may be seen as a distorting factor, like monopolies, which society will attempt to combat. 20

In sympathy with the economic growth of industrial societies there has been a growth in the subject matter entitled to property rights. The subject matter of property today comprises not only "things" but also debts, shares, insurance policies, patents, copyrights, etc. This development surely supports the view that property is a functional concept. It is interesting to note the way in which the law has recognised the "new" property of the social and economic world. The civil law with its systematic but somewhat rigid codes confined ownership to "things," movable and immovable. The fact that there could not be, strictly speaking, ownership of mortgages or copyright led to a great deal of difficulty and the special legislation required to accommodate these new heads of property came late. "Thus, slowly, modern continental law is arriving at a more

<sup>18.</sup> For clarifying the writer's own ideas on property acknowledgement must be made to Bjork, *Private Enterprise and Public Interest* (1969), especially chap. 5.

Renner, The Institutions of Private Law and their Social Functions (1949);
 Edelman, Le Droit Saisi par la Photographie (1973).
 No doubt some individuals in society have benefited more than others

<sup>20.</sup> No doubt some individuals in society have benefited more than others because of the institution of property, but society must have benefited sufficiently in many countries to continue to affirm it.

elastic and functional concept of property, similar to that of the common law."<sup>21</sup> On the other hand, the common law has been free from theoretical distinctions based on classifications appropriate to an earlier age. "In this field at least, the empirical development of the common law, its aversion to theoretical definitions of legal concepts, its preference for thinking in terms of legal relationships, of powers and liabilities, rights and obligations, types of action rather than of abstract concepts, has proved an advantage."<sup>22</sup> The common law conceived of property in terms of function rather than of definition and accordingly was able to accept the new property more easily.

## IV THE ROLES OF THE COPYRIGHT, DESIGNS AND PATENTS ACTS

#### 1 — The Common Role

An increase in the volume of production can be obtained by increasing the variety of products manufactured as well as by increasing the output of known products. A society desiring economic growth will therefore encourage activity which gives rise to new products. In a society where output is encouraged by giving individuals property in products for which they are responsible because of their contribution of labour or capital, it is not surprising that the same device should be adopted to encourage innovative output for which individuals are responsible because of their intellectual contribution. However, property has not traditionally been inherent in products of the intellect. The creation of property in certain products of the intellect is the prime function of the Copyright, Designs and Patents Acts. It is by this legislation that the so-called "intellectual and industrial property" is added to the things which the law recognises as capable of being the subject of property rights.

To view intellectual and industrial property legislation as simply providing for the protection of products of the intellect is to obscure the fundamental purpose. This view is misleading either because it suggests that the relevant subject matter already has the status of property and that the purpose of the legislation is simply to sanction this pre-existing right, or because it suggests that a legal right less than a property right is being granted. It is interesting to note that the full import of at least the Patents Act has not always been overlooked. One of the older standard works on patent law opens with the statement that "Neither at common law nor by statute is there any property in an invention." The author continues "Hence an

<sup>21.</sup> Friedmann, Law in a Changing Society (2nd ed., 1972), 98.

<sup>22.</sup> Ibid., at 95.
23. Wallace and Williamson, The Law of Letters Patent for Inventions (1900), p. 1, para. 1.

inventor who desires to secure to himself the full benefit of his ingenuity must not only invent but also acquire by a further step that right to the exclusive use of his invention which is not a legal incident of the successful exercise of the inventive faculty."<sup>24</sup>

There are of course differences between intellectual and industrial property and what may for convenience be termed the older property, but these are probably not as great as might appear at first sight especially when it is remembered that the law has not always treated realty in the same way as personalty. Two characteristics peculiar to intellectual and industrial property are (i) the subject matter must be new or original before attaining, or perhaps retaining, the status of property, and (ii) the property is of a temporary nature. These features are however only devices to protect society as a whole against the abuse of this form of property, and as such may be likened to the modern public restraints on the use and enjoyment of land. The requirement for novelty or originality is essential if society is to derive any benefit from the granting of property rights in ideas since it would receive no net gain otherwise — the entire gain would be retained by the individual. A limitation on the term or duration of the property ensures that the owner receives sufficient incentive from the property rights to create his property while at the same time the economic surplus accruing to the owner is restricted.

The chief function performed by the institution of intellectual and industrial property is an economic one — the provision of incentives for intellectual activity which contribute to the attainment of an economic goal. In this respect the endeavours of the author of an artistic work are just as significant as the work of a technologist. Both may create a marketable product.

Whereas traditional theory emphasises the potential creator of intellectual products as being the recipient of the incentives provided by intellectual and industrial property legislation, it is submitted that this concept is as inappropriate in modern society as the concept that a contract is a bargain in an era of standard form contracts. It has long been impossible for an author to print and publish his books, or for a playwright or composer to popularize his works. The days when great inventions are devised by individuals working alone are gone. The lone inventor has simply not got the resources to conduct the research and development required for any significant invention in today's advanced state of technology. The incentives provided by granting property rights in products of the intellect are directed to commercial interests. It is these interests that require the incentives to ensure that they can receive a return on their investments in new works and products.

Even prior to the development of modern industrial society it is unlikely that individuals needed the incentives of property to encourage them to write or to invent. The best writers and inventors, that is, those individuals whose works have benefited society most, did these things irrespective of the rewards. The inventor of today is a salaried employee of industry and as such receives no additional remuneration for his inventions, and nor does he expect it — yet technological growth proceeds at an increasing rate.

The economic role of intellectual and industrial property is illustrated by the way in which the subject matter of this property has varied. As the economic importance of a product of the intellect increases it gains recognition by the law as being the subject of property rights. Copyright, while originally subsisting in literary works, has been progressively extended to engraving, sculpture, dramatic works, paintings and drawings, photographs, and this century to motion pictures, sound recordings and broadcasts, and television broadcasts. Similarly, the subject matter of registered designs, initially restricted to textile patterns, has been extended to include the shape and/or pattern of most industrial articles. With patents, the subject matter has always been restricted to the definition given in the Statute of Monopolies, that is, patents are granted for "new manners of manufacture." However, this definition has received a more liberal interpretation this century, particularly in the last two decades where, for example, methods for the "cosmetic" treatment of human beings,25 and for the treatment of a tract of land carrying growing crops have been held to be patentable.<sup>26</sup> The pharmaceutical industry has been seeking to have the Statute of Monopolies definition construed to include methods of treating human beings and in particular methods of contraception.27 There is also an as yet unsatisfied demand on the part of industry for the granting of property rights in trade secrets. It is likely that the delay in legislative action in this area is due solely to the practical difficulties in formulating appropriate legislation. Plant breeders have been more successful and there is now legislation<sup>28</sup> conferring property rights in respect of new plant varieties although at present only roses are covered. Pressure for property rights in computer programs is growing. At present certain types of computer programs are patentable29 although in Britain the new Patents Bill expressly excludes protection for computer programs. This is in accordance with the recommendation of the Banks Committee which based its recommendation on three grounds:30 (i) a computer program was basically a method of performing a mathematical calculation and this has long been held to be unpatentable as not sufficiently relating

<sup>25.</sup> Joos v. Commissioner of Patents [1973] R.P.C. 59.

National Research Development Corporation v. Commissioner of Patents, note 13.

<sup>27.</sup> An example is Schering's Application [1971] R.P.C. 337.

<sup>28.</sup> Plant Varieties Act 1973.

See Slee & Harris' Application [1966] R.P.C. 194; Badger's Application [1970] R.P.C. 36.

<sup>30.</sup> The British Patent System, note 9, chap. 17.

to a manufacture, (ii) there was little international precedent, (iii) the validity of the patents granted, on the questions of novelty and obviousness, would be highly doubtful due to the difficulty of the Patent Office to properly assess these questions in such an art. The issue still remains open insofar as other modes of protection are concerned.

## 2 — Remedying a Deficiency in the Competitive Market

The function performed by the institution of intellectual and industrial property can perhaps be considered from a slightly different point of view. This will be discussed with reference to the patent system to which it is more appropriate, but the copyright and designs systems can be viewed in the same way. Patents provide the incentive for technological innovation which firstly leads to the production of more assets in that the number of products is multiplied, and secondly leads to their production with a lower expenditure of capital and/or labour. However, this process does not occur in a neutral context but in a context of opposing economic forces.

For society to receive the maximum benefit from the granting of property rights to individuals, it must prevent the individual from exchanging his output for more than the minimum value which would induce him to produce it. That is, the surplus — the difference between what a vendor would be willing to accept and what a purchaser would be willing to give in exchange— must be minimised. One mechanism, and one that most capitalist societies have at least in theory adopted, for achieving this object is the market of perfect competition. However, "the competition of the competitive model . . . almost completely precludes technical development."31 In the competitive model no manufacturer has a large enough slice of the market to control or exercise an appreciable influence on the common price. In such a system there is no incentive for a manufacturer to undertake a large expenditure on development. Upon marketing a new invention competitors will quickly imitate and the fruits of his innovation will be spread over the entire market of which he has by definition only an infinitesimal share. The imitators without paying any cost for development, which in advanced technology could be enormous, profit along with the innovator. Once the mechanism of competition gains momentum the innovator soon finds himself having to sell at a price which prevents him from covering his development costs. Thus, the device of the competitive market discourages the creation of assets which are new in kind. Establishing property in invention has ameliorated this to a society seeking to advance.

<sup>31.</sup> Galbraith, American Capitalism (Pelican, 1968), p. 100, para. 1.

## 3 — Ideas and the Expression of Ideas

An invention is an idea whereas a literary work, for example, is the expression of an idea.32 Therefore, although the Copyright, Designs and Patents Acts have a common function, it is necessary for there to be a distinction between the property rights granted in ideas and the property rights granted in the expression of ideas. The treatment of these two products of the intellect must be different because the same idea can be put into effect or expressed in a number of different ways. The property rights given by a patent are more extensive than the property rights given by copyright. Whereas copyright may be infringed only by copying, an idea cannot be protected by limiting infringement of a patent to copying, because such copying could only be the reproduction of one of perhaps many possible embodiments of the idea covered by the patent. 33 Since copying cannot be the test of infringement, it is necessary to make independent (but later) derivations of the same idea infringements. Because of this it is said that the property rights granted by a patent amount to a monopoly. Because the property rights granted by a patent are so wide ranging in comparison with copyright, it is not surprising they are given less freely. The idea must survive an examination by the Patent Office.

The separate roles of the Patents and Copyright Acts are quite clear. However, the special role of the Designs Act is more difficult to discern. The rights given by registration of a design under the Designs Act are monopoly rights<sup>34</sup> even though a design is really the expression of an idea in the same way as, say, a sculpture. Because of the inherent nature of a design it may frequently enjoy 'dual protection'. That is, it may receive protection by virtue of both the Designs Act and the Copyright Act. The difficulties in eliminating dual protection have proved insurmountable, although attempts have been made ever since the 1913 Copyright Act (1911, U.K.). This would seem to suggest that the roles at present performed by the Copyright Act and the Designs Act could be performed by a single Act.

The artificial distinction betwen the registered designs and copyright systems appears to have been recognised in the United Kingdom and has resulted in the Design Copyright Act 1968 (U.K.) which amended the Copyright Act 1956 (U.K.). By this Act owners of copyright works, which may be of an industrial nature, can use their copyright to control the industrial use of their works for a fifteen year period.

This distinction seems to be generally accepted. See for example Copinger and Skone James on Copyright (11th ed., 1971), para. 2 and 178. However to be patentable the idea must be "a new manner of manufacture".
 It is usual for a patent specification to describe and illustrate in detail only the embodiment of the idea preferred by the inventor at the time the patent application is filed.
 Designs Act 1953, s. 11.
 See Board of Trade, Report of the Departmental Committee on Industrial Designs (1962: Cmpd 1808) part V

Designs (1962; Cmnd. 1808), part V.

# V INTELLECTUAL AND INDUSTRIAL PROPERTY IN A CHANGING SOCIETY

In view of the explosion of change which has occurred since the Second World War it seems pertinent to enquire whether there have been any changes in the function of the institution of intellectual and industrial property which have not been reflected by changes in the institutional norms.

### Copyright

An analysis of the social usefulness of the copyright system in respect of books has been made by Breyer.36 He reviews both the moral and economic arguments traditionally advanced in favour of copyright. Breyer comes to the conclusion that the moral argument alone is insufficient in that an author could receive remuneration by way of payment of a "persuasion cost" the same as other workers receive salaries. Authors have no moral claim to more than this since the social value of the work of many people of other occupations is often far greater than their pay. On the economic argument, which he examines by investigating the question "what would happen if copyright protection were abolished?", he concludes that the social benefits only balance the social costs, and calls for more intensive empirical study. Against the traditional argument he points out that without copyright a publisher would still have a few weeks "lead time" to recoup some of his expenses before copiers can reproduce his book and distribute it, and that copiers could well find it does not pay to copy low volume books. Further, in high volume books there ought to be some competition to reduce prices — the initial publisher would not suffer too much as his non-duplicated costs would not be very significant when spread over a large volume.

Breyer at first condemns the "feeling that an author's book is his 'property' . . . An intellectual creation differs radically from land and chattels. Since ideas are infinitely divisible, property rights are not needed to prevent congestion, interference, or strife". That the concedes "that property rights are often created for reasons of efficiency . . . Providing him with this right may thereby allow the earth's resources to satisfy more human wants". The question really is whether the copyright system is the most efficient institution for the task in hand, and Breyer recognises this, although he confuses the argument by then saying, if it is, there is "a strong reason for adopting it without relying upon analogies to other property rights". 39

The theoretical foundations of copyright in books appears to have survived the only attack in recent time — "The validity of . . .

<sup>36.</sup> The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies and Computer Programs, 84 Harv. L. Rev. 281.

<sup>37.</sup> Ibid, 288-289.

<sup>38.</sup> Ibid., 289.

<sup>39.</sup> Idem.

copyright in books has been relatively uncontested up to the present day"40 — and it is suggested that such evidence as there is would indicate that for the system as a whole, the function of copyright outlined in the previous section is still being met. Any significant change or redundancy of function has not yet manifested itself.

## Designs

An Australian writer<sup>41</sup> has recently argued that design legislation no longer serves the purpose of encouraging the production of articles of commerce possessing new features of shape. He refutes the validity of the free competition versus protection argument in relation to modern industrial economy. He argues that the contemporary theory of product differentiation is a more accurate model of industrial activity. According to this theory a new producer will be deterred from copying another's product because this will start a price war which the established manufacturer will win. Optimal product differentiation is where a new product is sufficiently similar to an existing product to gain some of the old market, while at the same time being sufficiently different to avoid a price war. Thus, the nature of the present industrial system, without designs legislation, will encourage a greater frequency of new designs by an established manufacturer in order to recover the portion of his market which has been lost as a result of a new, similar, but differentiated product. Existing design legislation by providing a manufacturer with a monopoly in a particular design eliminates the stimulus for further new designs and should be repealed.

There does seem to be some evidence which supports the view that the function of designs legislation is being performed by other means. In New Zealand, for example, it was noted in 1950 by the Commission to Inquire Into and Report Upon the Law of Patents, Designs and Trade Marks that "for some unknown reasons designs and the protection thereof have played a relatively small part under the various Acts".42 The total number of applications for registered designs filed in the year ending 31st March 1974 remains very little greater than the number filed in the year in which the Commission reported.43 It is further suggested that many of those design applications are "last resort" attempts to obtain legal protection for an article lacking the novelty and ingenuity required for patent protection. Persons concerned with the quality of industrial design also seem to have doubts as to the usefulness of the Designs Act, since in 1966 the Industrial Design Act was passed to "provide for the establishment of an Industrial Design Council for the purpose of encouraging good

Tyerman, The Economic Rational for Copyright Protection for Published Books: A reply to Professor Breyer, 18 U.C.L.A. L. Rev. 1100, 1101.
 Weston, Legal Protection of Industrial Designs (1971-1972) 10 U. West Silbertson, The Economic Impact of the Patent System (1973).
 Commission to Inquire into and Report Upon the Law of Patents, Designs

and Trade Marks (Report of the Commission) (1950), para. 304.
43. There were 369, Report of the Department of Justice for Year Ended 31st March, 1974 (1974).

design in industry". Furthermore, the sort of products suitable for registration are in the main consumer products which are often available from a number of sources. Accordingly, commonsense would suggest that design skill would be employed, just as advertising is, simply in order to ensure that a product sells.

#### **Patents**

Galbraith has pointed out the historical trend of capitalist economies to develop from a competitive system to an oligopolistic system, or even a monopolistic system. 44 In a system of oligopolies the market power of an individual firm can be and is used to obtain prices that are higher than could be obtained in a price competitive system. This allows the "competition" between members of the oligopoly to be manifested in the form of technical innovations and advertising. Thus, in the system of oligopolies the incentive for technical innovation is an intrinsic constituent because this is where the competition is now manifested. In parallel to the possibility of obtaining development finance from oligopolistic prices, one notes the enormous increase in government funding of research and development since the Second World War. These trends suggest that the function of the patent system is undergoing some change. One would expect that the right to exclude others might be declining in importance.

Recent research in Great Britain<sup>45</sup> may support a change in priorities in the bundle of property rights. Answers given in a survey of British manufacturers indicated "almost invariably that major research based firms are seldom impeded in their production plans by the patents of others".46 This survey also revealed that British industry considered that the main value of patents lay in providing a vehicle for the transfer of know-how (unpatentable technical information necessary for the implementation of the patented matter) in exchanges of technology between firms. "A frequent response was that although patents in themselves rarely contain the bulk of the essential information required for the effective operation of a new technique or a new plant, they do facilitate the transfer of such information through licensing or in less formal ways".47 Thus, it seems that the right to alienate is now the more important of the property rights conferred by a patent.

## VI THE STATE OF NEW ZEALAND INTELLECTUAL AND INDUSTRIAL PROPERTY LAW TODAY

In a preceding section<sup>48</sup> it has been argued that although the three intellectual and industrial property Acts serve a common function,

<sup>44.</sup> Note 31. 45. Taylor. Taylor, "Do We Still Need a Patent System", paper presented to the Chartered Institute of Patent Agents, being excerpts from Taylor and Silbertson, The Economic Impact of the Patent System (1973).

<sup>46.</sup> Ibid. 47. Ibid.

<sup>48.</sup> At p. 306, supra.

that is, the creation of property in certain products of the intellect, an idea of manufacture and an expression of an idea must be treated separately. However, the present legislation in New Zealand does not reflect such a clear distinction and this has been demonstrated by the decision in Johnson v. Bucko. 49 The reasoning of the judgment was as follows. There is infringement of copyright if copyright can and does subsist in a work, and that in relation to that work the defendant performs a prohibited act. There was an engineering drawing of the plaintiff's pan connector which had been commissioned by the plaintiff. The drawing was the subject of copyright since the Act confers copyright on artistic works (s.7) and artistic works include drawings irrespective of artistic quality (s.2 (2)). The drawing was original as required under section 7 as the plaintiff and the draughtsman had expended labour and skill in the execution of the drawing. The defendant had reproduced a substantial part (s. 3 (1)) of the drawing in a material form (s. 7 (4)) by the sale of his pan connector. The qualification of section 20 (8) that reproduction of a two-dimensional work in three dimensions will only infringe if it appears to a nonexpert to be a reproduction was found to have been satisfied. Furthermore, a copying as required by common law, was the only proper inference which could be drawn from the evidence. Little was made of the point that what the defendant copied was the plaintiff's article and not his drawings. However, there is authority that a copy of a reproduction is an infringement of the copyright in the original work.<sup>49a</sup>

The Copyright Act 1962 may now clearly be seen to extend to functional articles of no artistic merit. How did this come about? The Copyright Act 1913 by s.30 (1) provided that the Act would not apply to designs capable of being registered under the Patents, Designs and Trade Marks Act 1908 except where such designs were not intended to be used by any industrial process. Because it was held in King Features Syndicate Inc. v. O. & M. Kleeman Ltd. 50 that the "intention" was the intention of the artist at the moment of creating the work the Copyright Act 1956 (U.K.) included new provisions to prevent overlap which were independent of intention.<sup>51</sup> The New Zealand Copyright Committee, 52 in reviewing the 1913 Act decided not to follow the U.K. Act and recommended that s.30 be repealed and that there should be no provisions to prevent overlap with other intellectual and industrial property legislation. This recommendation seems to have been made as a result of the submissions by the Justice Department,53 the English Pottery and Glassware Agents Association of New Zealand.<sup>54</sup> and the United Kingdom Manufacturers and New Zealand Representatives Association.<sup>55</sup> The Department argued that it was wrong in principle that

<sup>49. [1975] 1</sup> N.Z.L.R. 311.

<sup>49</sup>a. For example, Martin v. Polyplas Manufacturers Ltd. [1969] N.Z.L.R. 1046. 50. [1941] A.C. 417.

<sup>51.</sup> s. 10.

<sup>57.</sup> Report of the New Zealand Copyright Committee (1959).
53. Ibid, paras. 300 and 301.
54. Ibid., para. 302.

<sup>55.</sup> Ibid., para. 303.

articles registerable under the Designs Act, such as china and glassware, should be denied copyright protection irrespective of the degree of artistic quality which they suggested would normally be high in the design of such articles. They were of the view that a partial overlap of the two systems would present no difficulty in practice. The United Kingdom Manufacturers and New Zealand Representatives Association argued that s.30 was such as to deny the industrial artist and designer the fruits of their genius and labour unless they underwent an onerous procedure. The Committee agreed that there was "no reason to suppose that a complete repeal of section 30 would create any difficulties of definition . . . "58 and recommended accordingly.

It is respectfully submitted that in recognising that there is no fundamental difference between an "artistic work" and an industrial design, and by casting aside measures designed to preserve this distinction the Committee was moving in the right direction. The distinction is contrived and because of this, measures preventing overlap between copyright and registered design protection are doomed to failure — as was s. 10 of the U.K. Act which led to the Design Copy right Act 1968 (U.K.). Unfortunately, however, since the Designs Act is still in force a proprietor of an industrial design may receive protection under both the Copyright Act and the Designs Act for fifteen years and then protection under the Copyright Act for at least a further fifty years if he is still alive when the design registration expires. But it seems almost universally agreed that industrial property should have a term close to that of the present Designs and Patents Acts — fifteen and sixteen years respectfully. There are two alternatives: limit the copyright of designs used industrially to, say, fifteen years (as does the Design Copyright Act (U.K.) ), or reduce the period of copyright generally. It is suggested that the latter is not without merit since the incentives offered by "artistic" copyright are also directed to industrial or commercial interests.

The main problem presented by the Copyright Act 1962 is that it provides protection for purely functional articles. This constitutes a confusion between the purpose of the Copyright Act and the purpose of the Patents Act.<sup>57</sup> This area of overlap was not envisaged by the Copyright Committee although it is a direct consequence of repealing s.30 of the Copyright Act 1913 while at the same time adopting the broad defifinition of "artistic work" which was introduced in the U.K. Act. There are two "overlaps" — an overlap in the purpose of the Copyright and Patents Acts, and an overlap in the protection provided by these Acts. The distinction arises because, although a purely functional article might not be entitled to derive protection from the Patents Act and thus obtain dual protection,58 it is the

<sup>56.</sup> Ibid., para. 308.

<sup>57.</sup> Because of the definition of "design" in the Designs Act, purely functional

articles cannot receive protection under that Act.

58. The toilet pan connector in Johnson v. Bucko, note 49, is possibly an example of such an article.

special purpose of the Patents Act to deal with purely functional articles.

The problem which results from dual protection is again due to the great disparity in the terms of protection provided by the two Acts. 59 That a patented article, for example, might still be private property after the patent has expired offends against the notion of social benefit, and constitutes a serious weakening of an important traditional justification, or legitimation, of the patent system — that the knowledge given by the patentee in exchange for his monopoly falls into the public domain after the patent expires. Furthermore, a long period of protection is not in the public interest since the owner of copyright is able to maintain his competition-free prices for much longer than he needs to recover his development costs. This problem could be solved in the same manner as with designs, that is, by reducing the period of copyright.

The real problem<sup>60</sup> arises from the Copyright Act being concerned with purely functional articles at all. Under s.2 (1) of the Copyright Act 1962 "artistic work" means, inter alia, "the following irrespective of artistic quality, namely, paintings, sculptures, drawings, . . . ". And " 'drawing' includes any diagram, map, chart, or plan". But where a drawing, which is normally taken as being only an expression of an idea, contains purely functional features, it effectively becomes a representation of the idea itself. Copyright law, in supposedly protecting only a mere drawing, protects as well the idea imparted by the configuration of the drawing since there can be an infringing reproduction of it in three dimensional form. Yet the Copyright Act does not contain the special provisions which are necessary in granting property rights in ideas. In particular, to ensure that these rights are given so as to benefit society as a whole, it is necessary to make the validity of these rights contingent on the idea, that is the invention, possessing both novelty and ingenuity over the knowledge already in the public domain.

It is submitted that there is urgent need for the Copyright Act to be amended so that it no longer can function to protect ideas. Such an amendment ought to be framed so that two-dimensional reproductions of functional drawings, and three-dimensional reproductions of cartoon characters (for example) remain infringements of the copyright in the two-dimensional work. It is suggested that this could be achieved by amending section 20 (8) of the Act so that a three-dimensional reproduction of a two-dimensional work is not an infringement of the copyright in that work if the work constitutes a design of a purely functional nature. The limiting part of the definition of "design" as given in section 2 of the Designs Act 1953 can be "borrowed" to implement this suggestion. Section 20 (8) would then read as follows (added matter shown in italics):

<sup>59.</sup> Also, since the "inventor" includes the first importer in New Zealand, how will the courts resolve the conflicting claims of the overseas copyright owner and the New Zealand patentee?

<sup>60.</sup> And one not dealt with in the U.K. by the Design Copyright Act 1968.

"The making of an object of any description which is in three dimensions shall not be taken to infringe the copyright in an artistic work in two dimensions, if

- (a) the object would not appear, to persons who are not experts in relation to objects of that description, to be a reproduction of the artistic work, or
- (b) the work is a representation of a method or principle of construction or a representation of features of shape or configuration which are dictated solely by the function which the article represented by that shape or function has to perform."

K. R. MOON.