Study unit 1
Introduction to industrial design law

Overview

In this study unit you will be introduced to the law relating to designs. You will see how these legal rules apply in a factual setting. In short, we will explore the relevance of industrial design protection.

Learning outcomes	After completion of this study unit, you should be able to: - understand the role of designers in society - explain what an Industrial design is in about 50 words - explain why industrial designs are legally protected

Setting the scene

The main story line as set out below briefly points to the issues that will be discussed in the different study units. We will narrate an on-going story in this guide, and provide you with more details as they become necessary, in each study unit and sometimes before a set of activities. The function of the ongoing story is to involve you in the practical application of design protection in a concrete manner. The facts are imaginary, but the answers are based on South African law and court decisions.

The three important role-players in our story are three friends named Toni, Kepi and Shalimar. Tony studied mechanical engineering and earns his living by working as a product designer for Mac Engines CC. Shalimar is an artist and she sells her metal artworks, called "METALLINKS" at informal craft markets. Kepi is a jewellery designer.

Toni, Kepi and Shalimar have decided that their future lies in the design industry. They are of the opinion that the design industry offers vast business opportunities. Kepi has had some computer training and enjoys designing some of his jewellery by using commercial design programs, such as CAD. Shalimar does not have any computer-related experience and she prefers to create her metal artworks in her mother's garage. Toni's design activities takes place in the workshop owned by Mac Engines.

In our ongoing story you will follow the threesome's design activities that follow. They will also approach you for legal advice

when difficulties arise.

Discussion

What is an industrial design?

3D features
2D features

An industrial design is that aspect of a useful article which is ornamental or aesthetic. It may consist of three-dimensional features such as the shape or surface of the article, or two-dimensional features such as patterns, lines or colour.

applied to products

Industrial designs are applied to a wide variety of products of industry or handicraft: from watches, jewellery, fashion and other luxury items, to industrial and medical implements; from house ware, furniture and electrical appliances to vehicles and architectural structures; from practical goods and textile designs to leisure items, such as toys and pet accessories. The appearance and function of these articles are influenced by industrial design principles.

industrial models

Industrial models include a wide range of everyday articles, from lampshades, coffee pots, toys, furniture to spare parts for motor vehicles. The terms “industrial design”; “industrial article”; “industrial model”; “works of applied art” and “utilitarian articles” are used interchangeably in this module.

The design process

design process

Intrinsic to our understanding of the term design is the ability to repeat the production of an object with reasonable accuracy. The design process is, above all else, one of rational, logical analysis.

elements of design

A designer designs articles for everyday use. They are created with imagination and the application of logic design and engineering. The final product is designed to be congruent with function, cost, the facilities of the manufacturer and the seller, and to meet the expectations, needs and wishes of the public.

Activity 1.1

Look around in your kitchen. List at least ten items to which industrial designs have been applied. In each instance, name the elements of design which you think played a role in the design process.

1
2
3
4
5
6
7

8
9
10

Feedback

Read tutorial letter 201 for feedback on this activity.

Discussion

The role of designers in society

objects for people

Designers are instrumental in the development and creation of new products. Furthermore, in order to identify and solve existing problems, designers conduct research into social and economic trends, competitor=s products and novel materials and manufacturing processes. New designs are often the result of innovative approaches to existing problems. Visual form can be analyzed by the elements such as shape, line, texture and space and principles of design such as balance, repetition, rhythm, focal

point and contrast.

influences

The role of industrial designers can be distinguished from engineers and other professional people, such as system designers or analysts. Industrial designers focus on designing objects for people as opposed to the role of engineers and other professionals in designing objects for other objects, or components of objects or for systems that are more complex.

The roots of design skills are embedded within the evolution of society (James Holland "The Historian, the Critic and the Designer" in Design History: Fad or Function? (ed Design Council) (1978). In studying design theory from a historical perspective, one should always keep in mind that social, cultural, and economic factors, politics, the law, as well as the environment, all play an important role in the designing process (Victor Margolin and Richard Buchanan "Introduction" in The Idea of Design (eds Victor Margolin and Richard Buchanan) (1995). All these influences affect the design of useful things in a thousand and one different ways (John Blake "The Context for Design History" in Design History: Fad or Function? (ed Design Council) (1978).

human engineering

Even today, the design of infra-structures for roads, bridges and sewage-treatment plants are sometimes viewed as creations of the public spirit and are designed, beyond their obvious utility, to meet a community=s cultural, aesthetic and educational needs (John Pierson "Form + Function" 21-03-1994 The Wall Street Journal B1). Furthermore, designers also work with specialists in human engineering; psychology and physiology to assure that the resulting designs are appropriate for human use (Vivian Faulkner-King "The Designer's Role" in Compton's Interactive Encyclopaedia (1994).

innovation

Illustration of design disciplines

The following is a short synopsis of some of the different design disciplines (source: Design Institute SABS *Guide to design education in South Africa* (2002) at 7-9).

Industrial Design

The design of products for consumer or industry use. To hit the mark, a balance must be struck between an elegant and appealing design and the qualities of functionality, comfort, safety and affordability. Fashion, style, competition, technology trends, materials, production processes and social concerns also influence the final product.

Interior Design

Artistic flair and creativity characterise the interior designer, who must design spaces that suit the users, whilst taking into account lighting levels, temperature control, acoustics and environment. Interior designers must be practical in their use of building materials and construction methods, and artistic in use of colour, line, form and texture.

Architecture

The architect's role starts at the drawing board or, increasingly, the computer, and ends when her brainchild opens its carefully styled doors. She must combine the creativity needed to design a building that appeals to its occupants and fits into its environment with the discipline to do so within often right budget restrictions.

Graphic Design

The graphic designer conveys a message through an appropriate visual medium, whether on a printed documents (packaging, advertisements, books, magazines and posters) or on film, video or computer (illustrations, animation and typography). He or she should be able to conceptualise and generate ideas, and understand and apply specialised software.

Ceramic Design

Ceramics are not restricted to articles for household use, but are used widely in architecture and interior design, in the form of ceramic murals, tiles and ornaments.

Jewellery Design

Jewellery design involves the application of drawing skills, designing, manufacturing, workshop materials and gemmology. It serves a dynamic and versatile market.

Clothing Design

Fashion design is dynamic and competitive, as it serves varied, constantly changing markets. The clothing designer must create, adapt and interpret clothing styles and accessories for each season. The checklist of attributes includes knowing how to relate fabrics and designs to market needs, the ability to cost and carry out the design to final garment, a sound knowledge of pattern and garment construction, creativity and an innovative approach, with a good sense of colour, line, form and texture, drawing and communication skills.

Textile Design and Technology

The textile designer's role goes beyond knitted, woven and printed textiles, although these products are widely used for fashion wear and in interior design. Her role extends from cultural and historical conservation projects that may require the reproduction of wallpaper and cloth to the fine arts and performing arts requiring special effects using fabrics. Textile designers are also involved in botanical, educational and fashion illustrations.

Mechanical Design

Mechanical engineering deals with power and movement, and it is the broadest of all engineering disciplines in its range of activities and functions. Mechanical engineers design various types of machines (including gas turbines, pumps), vehicles, pressure valves, materials handling equipment, heating and cooling systems. Mechanical engineers also analyze equipment failure and equipment to improve performance and reliability. They are involved in manufacturing and sales, and the testing of quality performance, safety and reliability of products and procedures.

Why legal protection for designs?

By protecting an industrial design, the owner of the design is protected against the unauthorized copying or imitation of her design by third parties.

Since industrial design protection relates to those aspects of an

commercial value

article which make it aesthetically appealing and attractive, they add to the commercial value of the product and facilitate its marketing and commercialization.

protects investment

Industrial design protection helps to ensure a fair return on investment for the designer. However, the consumer and the public at large benefit as well, as industrial design protection is conducive to fair competition and honest trade practices, encourages creativity and thus leads to more aesthetically attractive and diversified products.

export

Also industrial design protection injects creativity into the industrial and manufacturing sector, contributes to the expansion of commercial activities, and enhances the export potential of national products.

easy to protect

So industrial design protection benefits the owner, the consumer and the economy in general. Another interesting feature of industrial designs is that they can be relatively simple and inexpensive to develop and protect. Therefore they are reasonably accessible to small and medium-sized enterprises, even to individual artists and craftsmen, in both industrialized and developing countries.

The development of legal protection for designs

textile designs

The historical development of design protection is closely tied to the recognition of rights to designs in the United Kingdom. In England series of statutes developed during the nineteenth century to protect industrial designs. The first act that regulated ornamental designs was the Designing and Printing of Linens, Cottons, Calicoes and Muslins Act of 1787. It gave the textile designers of any new and original pattern, the sole right to the printing, working, or copying of original two-dimensional patterns applied to textiles such as linen, cotton, calico and muslin. This protection initially only lasted for two months from the first date of publication of the pattern, provided the name of the proprietor was marked on each piece.

expansion of protection

In 1839 an important development in design law took place. Two design acts were promulgated. The Copyright of Designs for Calico Printing Act of 1839 granted protection to new and original patterns for printing on tissue or textile fabric, such as wool, silk or hair, and mixed fabrics consisting of two or more of linen, cotton, wool, silk, or hair. The Copyright of Designs Act of 1839 granted

protection to the following new and original designs: two-dimensional patterns or prints to be printed or painted on any article of manufacture; the modeling, casting or embossment, or the chasing or the engraving, or for any other kind of impression or ornament on any article of manufacture, and the shape or configuration of any three-dimensional shape applied to articles of manufacture. Protection is dependent upon registration prior to publication.

requirement of registration

The 1842 Copyright of Designs Act applied to a wide range of products, including articles of manufacture, designs printed on fabric, statues, designs placed on a product, or the shape and configuration of a product. The protection of designs was made dependent upon registration, as opposed to the previous requirement of publication. The Adesign copyright@ protection was extended for different terms, depending on the class or classes the design was registered in, namely for nine months, twelve months, and three years respectively.

functional designs

The protection was extended to functional designs by the Copyright Designs Act of 1843. The 1843 Act was enacted due to the fact that inventors registered their inventions as ornamental designs: they were deterred from obtaining a patent by the high costs involved. The notion prevailed that a design registration, albeit not appropriate and possibly unenforceable, would deter would-be infringers and competitors and ensures a head start in the market. Protection was extended to any new or original design for any article of manufacture, having reference to some utility or purpose, in so far as such design is for the shape or configuration of the whole, or part of the article.

The distinction between functional and aesthetic designs was removed in the Patents and Designs Act of 1907. The 1916 South African act, namely the Patents, Designs, Trade Marks and Copyright Act of 1916 was based on the British Designs Act of 1907. In 1968 this act was repealed and replaced by the Designs Act 57 of 1967. This 1967 Act introduced the principle of eye appeal and provided for protection of features that appeal to and are judged solely by the eye. Finally, the current design law was enacted in 1995. The Designs Act 195 of 1993 repealed the 1967 Act. All designs registered before the new act came into operation will still be dealt with in accordance with that law. The 1993 Act makes provision for the protection of aesthetic designs and functional designs. The implications of this will be discussed in the following study units.

Conclusion	We have now seen that we can characterize an industrial design as those aspects of a useful article, which is ornamental or aesthetic. It may consist of three-dimensional features such as the shape or surface of the article, or two-dimensional features such as patterns, lines or colour. As with other forms of intellectual property it may be protected. The protection of designs evolved from essentially the protection of patterns and prints of materials to the protection of a wide range of products, including product designs, communication design and engineering design.