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An Empire Built of Bricks: A Brief Appraisal of 'Lego'

Introduction

The *Lego* trade mark is one of the best-known trade marks in the world; indeed, as Falconer J. accepted in *Lego System A/S v Lego M. Lemelstrich Ltd*,¹ it is a 'household word'. The product to which the mark is applied is one of the most successful and enduring toys in marketing history, with sales rising from £203 million in 1981² to an estimated £600 million in 1987.³ Lego 'stud and tube' building brick systems have indeed assumed something like cult status among enthusiasts — there are Lego Builders' Clubs around the world (the UK chapter claims 44,000 members and has its own newsletter). In Denmark there is even a model village in Legoland Park, a tourist attraction which receives nearly 1 million visitors each summer. Interest in Lego bricks seems to know no bounds, global estimates ranging from 200 million to 300 million for the number of children who have played with them.⁴

This article could not hope to give a complete history

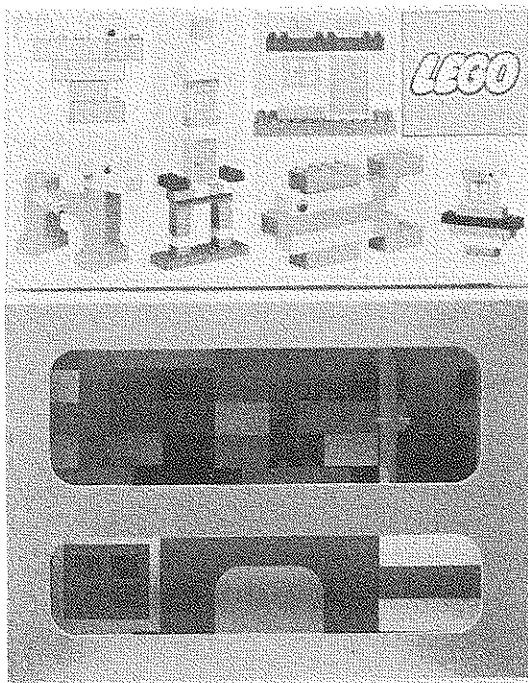


Figure 1: Lego bricks in shapes and forms

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1 [1983] FSR 155 at 163.

2 *Ibid.*, at 159.

3 Adrian Lithgow, 'The Ghost that is Haunting Legoland', *The Mail on Sunday*, 26 July 1987.

4 [1987] FSR 409 at 430 (per Fuad J.).

of Lego's development and history. It will, however, cast a few perspectives on the rise and sustained popularity of a carefully nurtured and cleverly exploited intellectual property portfolio, taking a look at some of the litigation which has enabled the various companies of the Lego Group to keep so tenacious a hold on their valuable assets and market dominance.

Origin of the Company

The proper name of the manufacturer of *Lego* bricks is Lego System Aktieselskab, a private company incorporated in the Kingdom of Denmark. The company can trace its origins back to the foundation by Ole Kirk Christiansen, in 1932, of a small carpentry firm in the small town of Billund, on the Jutland peninsula (Billund lies about 240 km west of Copenhagen). The business started making wooden toys but, in 1947, started to experiment with the then relatively unfamiliar technology of plastic moulding. By 1949 the firm had developed a product range of about 100 toys, some plastic, some wooden. The plastic toys were assembled by means of small hollow plastic bricks which have sometimes been claimed as the intellectual origin of the Lego brick.

The introduction of plastics technology at Billund coincided with a period of rapid growth for the family firm. While at the end of the Second World War it had only 50 employees, this figure had risen by 1981 to 3,643 employees worldwide;⁵ by 1987 the total had reached some 3,700.⁶ The principal factor in this growth was the development of the 'stud and tube' plastic brick back in 1958. Two years after this product was first marketed, the company phased out its original woodworking operations entirely, and concentrated its attentions on the extension of their range of interlocking plastic construction components.

The company now has an international manufacturing facility which includes two factories in Switzerland and one in the United States, and has also entered into licensing arrangements with overseas manufacturers. World production is, however, centred on Billund and the Kirk Christiansen family has not lost its control. The firm's current chairman is Godtfred Kirk Christiansen, the son of the firm's founder Ole — to whom the invention of Lego bricks has traditionally been attributed. Godtfred, together with his children Kjeld Kirk Kristiansen⁷ and Gunhild Kirk Johansen, control the company's shares. Since the company is not obliged under Danish law to publish its accounts, the scale of the family's fortune can only be guessed.

The 'Lego' Mark

Several explanations, both curious and spurious, have been advanced for the selection of the *Lego* mark. One is that the word is an adoption of the Latin word *lego* ('I read').⁸ Another is that the word is a mis-spelling of the

5 [1983] FSR 155 at 158.

6 Lithgow, Note 3.

7 *Lego Australia Pty Ltd v Paul's (Merchants) Pty Ltd*, [1982] 42 ALR 344 at 349. The spelling 'Kristiansen' is the result of a baptismal error.

8 See also *Lego Australia v Paul's*, Note 7, at 350 (per Deane and Fitzgerald JJ.).

exclamation 'leggo!', a contracted form of the words 'let go'.⁹ More fanciful accounts can stretch the credulity even further, linking *Lego* with the Classical Greek verb λεγω ('I say') and with *l'ego*, a feature of one's psychological make-up which is doubtless enhanced by hours of solitary and solipsistic indulgence in the art of building with small plastic bricks.

The official truth of the matter is rather more mundane. Lego is an invented word of two syllables, deriving from the contraction of the two Danish words *leg godt* (play well).¹⁰ This sounds plausible, but there is another, more likely, explanation. If one puts together the forename of the founder of the firm (Ole) and his son (Godtfred), the result is o-LEGO-tdfred. The contraction of names is a well-known means of labelling companies; another example which also pertains to a very large private company is that of Heron in the United Kingdom, a contraction of the names Henry and Ronson.

One might have thought that, in a Danish language jurisdiction, a word which sounded like 'play well' and which was used for children's toys would be unregistrable on the ground that it was referable to the character or quality of the goods to which it was applied. This does not in fact seem to have caused major problems and today the mark is exploited in 120 countries,¹¹ being legally protected in more than 100 of them.¹²

The mark, as registered and used over the last 50 years or so, has not consisted solely of the word *Lego*; there has generally been either extra text or design work to complement it. Writing on the evolution of the '*Lego plus device*' mark, Visser and Heijning comment: 'No radical changes have been made but there have been gradual and logical adjustments until we reach the trade mark which — for the time being — we all know so well.'

With respect, it is difficult to accept this statement. The evidence, as indicated by the sequence of marks depicted below, betrays some major changes of geometrical and logotypical perspective as well as typographical reference, and several marks are so different from each other that it is difficult to deny that they would evoke quite different consumer responses.

The 'Stud and Tube' Brick

How did the stud and brick, which formed the basis of the best-selling interlocking construction system, come to be evolved? Until recently the conventionally accepted story was that contained in the Lego Group's own booklet, 'Facts and Figures', on which Falconer J. placed substantial reliance in *Lego System A/S v Lego M. emelstrich Ltd.*¹³ According to this story, the basic brick was invented by company chairman Godtfred Kirk Christiansen in 1958.

A very different account of the development of the brick has been revealed in the evidence reviewed in Lego's long Kong litigation against American rival Tyco.¹⁴ It



Figure 2: The sequence of 'Lego' marks

now seems that the basic 'stud and tube' brick was created by a British child psychologist by the name of Hilary Page, a fact which has apparently been corroborated by Godtfred himself, when he admitted that as long ago as 1947 he received sample 'Kiddicraft' bricks from Page. These bricks differed only in small and conceptually insignificant features from the 'stud and tube' brick prototype manufactured by Lego in 1949. Lego's designers had, it seems, copied and re-drawn the Page 'Kiddicraft' bricks themselves.¹⁵

Hilary Page, of Earl's Court, West London, started up the Kiddicraft toy company in the 1930s, using £100 of his own savings to do so. As a trained and skilled child psychologist he profited from the many hours he spent in careful observation of children at play, seeking to provide them with the sort of toys which they — and not their parents — would prefer. Kiddicraft (now Hestair-Kiddicraft Ltd) became a successful toymaker in the United Kingdom after the Second World War but did not itself develop the 'stud and tube' bricks. Although Page's invention was devised shortly after the outbreak of the war and was sent to Christiansen in 1947, Page never lived to see its success or to take any credit for it. In 1957 he took his own life.

As for Hestair-Kiddicraft's relations with the Lego Group, it is clear that the British company has no outstanding claims against the Danes. In 1981 Hestair-Kiddicraft accepted a payment of £45,000 in a full out-of-court settlement of its claims against Lego, which took in return the residual intellectual property rights in such of Hilary Page's inventions and designs as Hestair-Kiddicraft may have owned.¹⁶

For the record, Hilary Page and Godtfred Kirk Christiansen have both been named as inventors in respect of United Kingdom patents. Page's first toy building block

⁹ Adrian Room, *Dictionary of Trade Name Origins*, 1982.

¹⁰ *Ibid.*

¹¹ Lithgow, Note 3.

¹² Theo Visser and Robert-Jan Heijning, *Famous Brands*, 1986, at 104.

¹³ [1983] FSR 155.

¹⁴ *Interlego AG v Tyco Industries Inc.*, [1987] FSR 409.

¹⁵ *Ibid.*, at 420 (per Sir Alan Huggins V-P).

¹⁶ Lithgow, Note 3.

patent¹⁷ is recorded in the Name Index to Complete Specifications for April 1940 to October 1941, and another patent for toy building blocks followed after the war.¹⁸ Both before and in between these inventions Page devised baby rattles as well as a toy for British Plastic Toys Ltd. Christiansen's own British patent portfolio did not commence until 1961, with his application to protect what were termed as 'Improvements in Toy Building Elements' with regard to 'hollow cuboidal bricks'.¹⁹ All of the patents relating to the basic elements of 'stud and tube' bricks have now lapsed.

Some Recent Litigation

Lego is currently one of the most actively litigious companies in the world of intellectual property. Cases are believed to be pending at present in the United Kingdom, the United States, Sweden, Australia, South Korea, New Zealand and Turkey.²⁰ The cases referred to below give only a small indication of Lego's involvement in the establishment and protection of its intellectual property rights. So far there is only one area in which Lego seems unassailable, and that is trade mark law. Patents and designs expire, and copyright can lose its utility; even unfair competition law can be complied with — but none of Lego's detractors and emulators can call themselves 'Lego', and the *Lego* name — associated for so many years with the manufacture of a quality product — can draw on an immense reservoir of goodwill. The only threat to this goodwill is likely to come from genericity: children (and adults) who are shown a single plastic brick do have a tendency to refer to it as a 'lego' brick and this is a danger against which all manufacturers whose trade marks have been applied to effectively monopolistic products must guard.

Recent and continuing litigation includes the following:

*Lego Australia Pty Ltd v Paul's (Merchants) Pty Ltd*²¹ Lego sought unsuccessfully to prevent the defendants from marketing plastic irrigation equipment, manufactured under the *Lego* mark by Lego M. Lemelstrich Ltd, an Israeli company which had been trading in irrigation equipment for longer than Lego has been in existence; the *Lego* of the irrigation equipment was simply the fusion of the first two letters of the surnames of Lemelstrich and Goldberg, the manufacturer's original founders. There was no infraction of the Australian Trade Practices Act 1974, sections 52 or 53, since the sale of Lego irrigation equipment was not regarded by the General Division of the Australian Federal Court as being deceptive or confusing *vis-à-vis* prospective purchasers of irrigation equipment.

*Lego System A/S v Lego M. Lemelstrich Ltd*²² In this case, before Falconer J. of the English High Court, Lego successfully prevented the defendant irrigation equipment manufacturer trading by reference to the word *Lego* even in the absence of a common field of activity between the two parties' products. The court was greatly influenced

by the fact that the word *Lego* had become a 'household word', being so well known that anyone, on hearing it, would be almost bound to assume that it indicated a connection in the course of trade with the Danish toymaker.

*Lego Systems A/S v Tyco Industries Inc.*²³ A Federal Court in Trenton, New Jersey, held that Tyco was engaging in unfair competition when its advertising literature unduly emphasised the similarity of its own Super Blocks bricks with Lego's and gave the impression, through the use of phrases like 'Works with Lego', to suggest that there was some sort of connection between the two companies. A finding of trade mark infringement was also made, but the court refused to stop Tyco making the bricks *per se*.

*Interlego AG v Tyco Industries Inc.*²⁴ In proceedings before the Hong Kong High Court, Lego attempted to stop the manufacture of bricks virtually identical to its own. Since the defendants' bricks bore neither the *Lego* nor the *Duplo* trade marks (Duplo being applied to bricks which interlock on a basis comparable with that of Lego bricks, but which are much bigger and cannot therefore be swallowed by small infants), and since Lego had no patent protection, Lego could only proceed on the basis that there was an infringement of copyright in the drawings from which its bricks were made. The issues at stake in this case were in fact much greater than those of pure copyright and design registration law, since the defendant was intending to manufacture in Hong Kong for export to the US and Canada and, secondly, the defendant's marketing ploy was to persuade the public that its own bricks were compatible with Lego systems while also being much cheaper. In the High Court Jones J. held for Lego on almost all of the many issues raised; the Court of Appeal, however, held for the defendant with regard to some of the complex issues raised. Both parties are eager for the determination of a further appeal (to the Privy Council), which should be heard in early 1988.

*Interlego AG v Alex Folley (Vic.) Pty Ltd*²⁵ In a case in which the copyright and design registrability issues were very close to those of the Hong Kong litigation in *Lego v Tyco*, Whitford J. took the opposite view to Jones J., holding that no enforceable artistic copyright remained in drawings of Lego bricks which were non-functional and which, having been capable of design registration but remaining unregistered, lost their enforceability 15 years after they were first industrially exploited.

Future Prospects

Lego's success over the last twenty-five years has depended on three factors:

- (a) the manufacture of a quality product;
- (b) the existence of a large, growing and apparently insatiable demand for that product;
- (c) the absence of serious competition.

The first factor, that of the quality product, has been the

17 Patent 529 580.

18 Patent 587 206.

19 Patent 935 308 (in the name of Interlego AG, Zurich).

20 *Wall Street Journal* (European Edition), 16 September 1987.

21 [1982] 42 ALR 344.

22 [1983] FSR 155.

23 *Trademark World*, December 1987, at 8.

24 [1987] FSR 409.

25 [1987] FSR 283.

sine qua non of Lego's market credibility. The product is durable almost to the point of infantile destructiveness, provides a renewable source of interest, and offers a practically infinite variety of constructional applications. In addition it does not rust or corrode, is washable and non-toxic, and is pleasing to the eye. Though Lego has to take its products to the consuming public just as every other toy manufacturer does, the nature of the product is itself an eloquent testimony to its saleability. The second factor, that of the large and growing demand, has enabled Lego to step up its operations without undue fear of saturating national markets through over-production, and without, apparently, the spectre of investment in surplus, unnecessary manufacturing capacity. The third factor, the absence of serious competition, has enabled Lego to maintain its market domination while pricing its product on a well-nigh monopolistic basis.

Lego's rivals have three avenues by which they can approach Lego's market and take a major share of it:

- (a) emulation of the quality product;
- (b) compatibility with Lego's interlocking system;
- (c) exploitation of Lego's marketing style and image.

Now that Lego's original patents have expired and, in a number of jurisdictions, design or copyright protection is lacking or cannot be utilised, Lego will find it increas-

ingly difficult, and in the end impossible, to prevent rival manufacturers making look-alike bricks with similar interlocking systems. Further, since it is a widely accepted axiom of trade mark law that an object or item cannot be a trade mark of itself, it is difficult to see how trade mark law could prevent the manufacture of rival bricks. Compatibility of a rival's brick system with that of Lego could conceivably be stopped in jurisdictions which take a generous view as to what constitutes unfair competition, but there is now, in most industrialised countries, a tendency to allow the unauthorised manufacture of 'spare parts', sometimes even where those parts enjoy theoretical copyright protection.²⁶ Only the exploitation of Lego's marketing style and image can reliably be prevented — but that will militate against damage to goodwill and reputation through trade mark infringement, passing off and comparative advertising actions; it will not prevent the manufacture and sale of a rival's clearly-marked and non-confusingly marketed construction systems. The conclusion which can be drawn from this analysis is that Lego can rely, ultimately, only on the intellectual property rights in its name and reputation, and in its rights as a manufacturer of a quality product; rights in the bricks themselves are all too ephemeral.

²⁶ See for example, *British Leyland Motor Corporation v Armstrong Patents Company Ltd*, [1986] FSR 221.