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THE OVERLAP BETWEEN PATENT AND DESIGN PROTECTION

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A. Hypothetical—the Circular Beach Towel¹

You create a new beach towel. Preceding towels were rectangular, but yours is circular. It features a central slit through which you can poke your head, to wear it as a poncho. It costs a little more to cut and edge, and wastes a little more material, but it quickly becomes very popular. **2.01**

Prudently, you apply simultaneously for a patent and also a registered design (in the US, a utility patent and a design patent). Both are granted. Here is the patent: **2.02**

2500000 CIRCULAR BEACH TOWEL

Beach towels are rectangles of cotton. Cotton is hard-wearing, but exposure to sand can make it less fluffy. Since Leonardo da Vinci, the sides of the towel have been in the ‘golden ratio’

¹ Based on *Franek v Franco* 615 F 3d 855 (7th Cir 2010).

(although most are six feet in length and three feet in width), allowing a regular American male to lie untouched by sand. A dedicated sunbather aligns the towel with the sun for an even tan. However, as the sun moves through the day, it is occasionally necessary to stand up and re-orient the towel, which activity is unwelcome to the dedicated sunbather, and increases the wear on the towel.

It is an object of this invention to provide a circular section of woven fabric that when used as a towel for sunbathing requires no repositioning toward the changing angle of the sun. It is a further object of this invention to provide a material suitable for such a towel.

A preferred embodiment of the invention, needing no illustration, provides a circular towel of woven material of six foot diameter, to correspond to the reclining heel-to-crown length of an average American male.

The circular shape allows for the repositioning of the human body toward the changing angle of the sun while the towel remains stationary, thereby eliminating the need for continual repositioning of the towel as with the conventional rectangular sunbathing towel.

Also, the circular shape of the towel utilized as an absorbent, heat-retaining garment permits greater conformity to the human body.

A suitable material for making the towel is di-hexatowelium. This polymer, formerly used only as a rat poison pellet binder, can be made into a towelling material visually identical to terry cotton, with additional resistance to wear and to thermal cycling.

CLAIMS:

1. A towel construction comprising a non-rectangular towel made of di-hexatowelium.
2. A towel construction as set forth in claim 1 wherein said towel is circular in shape, whereby a user while sunbathing may reposition his or her body towards the changing angle of the sun while the towel remains stationary.

2.03 And here is the design (see Figures 2.1 and 2.2):

0005555-0001 Beach Towels

2.04 You are pirated. You reach for your rights. You consider copyright and passing off or trade dress rights but, for reasons which will be explained elsewhere in this book, decide against them. You sue on your patent and your design.

2.05 By way of defence, however, the infringer says that the existence of your patent invalidates your design, and vice versa. Her grounds are that.

- The patent constitutes proof that the circular shape is dictated by function, and hence unregistrable as a design.
- Claim 1 lacks novelty (true, unfortunately, over a newly-cited prior patent to a triangular towel made of di-hexatowelium).
- The design constitutes proof that the circular shape is aesthetically appealing. Thus, claim 2 of the patent is obvious and does not involve an inventive step as differing merely in aesthetic details from the prior art.
- You have, as a general principle, no right to dual protection—you have a duty to elect the protection you seek and by selecting each you have abandoned your right to the other.



Figure 2.1 Circular Beach Towel—Front

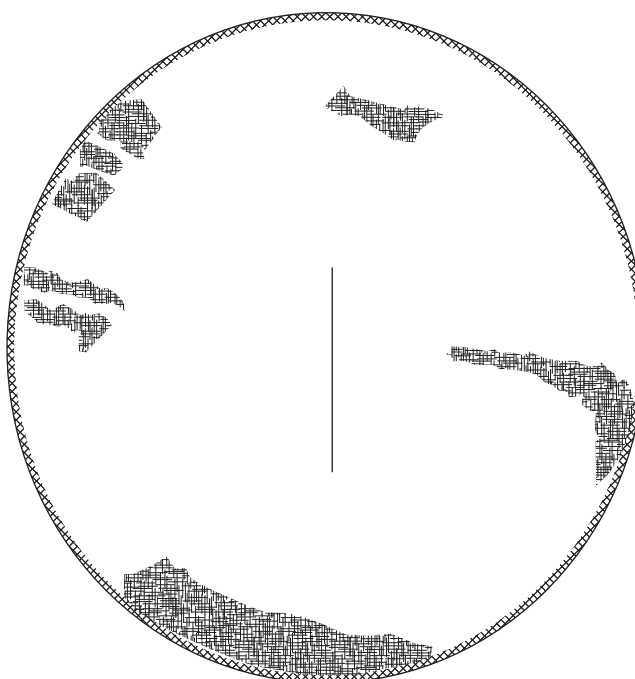


Figure 2.2 Circular Beach Towel—Side

Can double protection place you in double jeopardy? It is likely that at least one of these defences will fail. Which, however, very much depends on your jurisdiction. The law is in flux, but the approaches, and some of the answers, will emerge below. **2.06**

B. Do Overlaps Matter?

Intellectual property practitioners are accustomed to multiple coexisting patents or copyrights in the same work, but the view from outside the system is different.² Vaver lists objections to overlap: **2.07**

1. (*Stretch*) If material is adequately protected by trade mark law, why stretch copyright law to protect it more?
2. (*Election*) If the same creative process is protected by both patent and copyright, why should the copyright not be forfeited if a patent is voluntarily acquired?
3. (*Post expiry right to use*) If a design right or product patent expires, why should the possibility even exist, as it does now, of having additional potentially perpetual trade mark protection on the product shape, a right even more potent than protection by patent or design right?

² See generally, eg, V. Moffat, 'Mutant Copyrights and Backdoor Patents: the problem of overlapping Intellectual Property protection', (2004) 19 BERKELEY TECHNOLOGY LAW JOURNAL 1473; D. Vaver, 'Reforming Intellectual Property Law: An Obvious and Not-so-Obvious Agenda: The Stephen Stewart Lecture for 2008', (2009) IPQ 158.

4. (*Mismatched defences*) If overlap of rights is permitted for owners, why should it not be permitted equally for users? If a user has a right of fair dealing with a copyright logo under copyright law, why can he not claim this right if sued for trade mark infringement of the logo?

2.08 One more objection which sometimes arises is:

5. (*Undermining* or *circumventing*) Other rights can circumvent stringent patent examination, undermine the patent system, and threaten trade with trivial monopolies.

2.09 As between patents and designs, however, these concerns have much-reduced force.

(1) 'Stretch'

2.10 What is the 'proper' scope of patent or design law? Rather than defining protectable subject-matter too closely, legislators appear to show a universal preference for allowing patent law to develop with industry and technology. It is therefore no simple matter to prohibit wrongful 'stretching' without stifling necessary evolution—one man's flexibility is another man's stretch.

2.11 In practice, avoiding overlap means creating gaps, later plugged with *sui generis* measures—each of which increases the number of interfaces between rights and hence increases, rather than reducing, the potential for overlapping protection. This is particularly true of design rights, themselves often seen as a gap-fill between patents and copyright. 'Utility models' were originally a gap-fill between patents and designs.³ Other examples in the design area are the UK's Unregistered Design Right,⁴ the US Vessel Hull Protection Act,⁵ and the various Semiconductor Chip Topography protection measures.⁶

(2) 'Forced election'/pre-emption

2.12 Limitation to only one form of protection, and enforced renunciation of others, cannot operate without clear selection rules, which neither Europe nor the US have enacted. Which right is renounced—the patent or the design? And if timing is determinative, how should simultaneously filed rights be treated?

2.13 In the US, the election theory of *Korzybski v Underwood*⁷ was not followed in relation to other rights or other factual situations. Likewise in the UK, the enforced election (between patent and copyright) in *Catnic v Hill & Smith*⁸ was decided on other grounds on appeal;⁹ and does not hold as between other rights.¹⁰ Nor was it widely followed elsewhere.

2.14 The case law was reviewed in the Australian case *Roland Corp v Lorenzo and Sons*,¹¹

The underlying notion appears to be that a piece of intellectual property may be deprived of protection in one category on the ground that it is more appropriately dealt with under

³ According to the EU Commission, there was an 'area not covered by industrial design law or patent law, so that . . . the new right was intended to close a gap'. Green Paper—The protection of utility models in the Single Market Brussels 19 July 1995 COM (95) 370 final p 63.

⁴ Copyright, Designs and Patents Act 1988, Part 3.

⁵ Vessel Hull Design Protection Act, Chapter 13 of Title 17.

⁶ Washington Treaty; EU Directive 87/54 on the Legal Protection of Topographies of Semiconductor Products [1987] OJ L24/27.

⁷ *Korzybski v Underwood and Underwood, Inc.*, 36 F 2d 727 (1929) 3 USPQ 242.

⁸ [1978] FSR 405, [1982] RPC 183.

⁹ Having heard argument on *Werner Motors v Gamage*.

¹⁰ *Sobrejina SA's Trade Mark Application*, [1974] RPC 672, at 680, Whitford J himself.

¹¹ [1991] FCA 617; (1992) AIPC 90-852 (1991) 22 IPR 245; 105 ALR 623 (1991) 33 FCR 111.

another . . . I prefer to follow what appears to be the orthodox assumption, that the two may co-exist . . .

The same appears true under EU law. According to the Office for Harmonization in the Internal Market (OHIM) in *Lego v Mega Brands*,¹² 'If an entity possesses the required conditions, it may be protected simultaneously by a number of intellectual property rights' **2.15**

(a) *Double protection*—*Werner Motors v Gamage*

European design law expressly permits parallel protection by design and patent.¹³ The point was decided long ago in the UK in *Werner Motors v Gamage*,¹⁴ in which, ten days before filing the design, the proprietor applied for a patent. **2.16**

The patent and the design had substantially identical drawings. The design had a statement of novelty directed to 'the pattern as shown of a motor cycle frame'. In the patent, claim 1 recited a series of integers which 'read onto' (ie covered) the drawings, and claim 2 was in the 'omnibus' form: 'A frame for motor cycles constructed substantially as described with reference to the accompanying drawings'. It might therefore have been thought comparable in scope and effect to the design. **2.17**

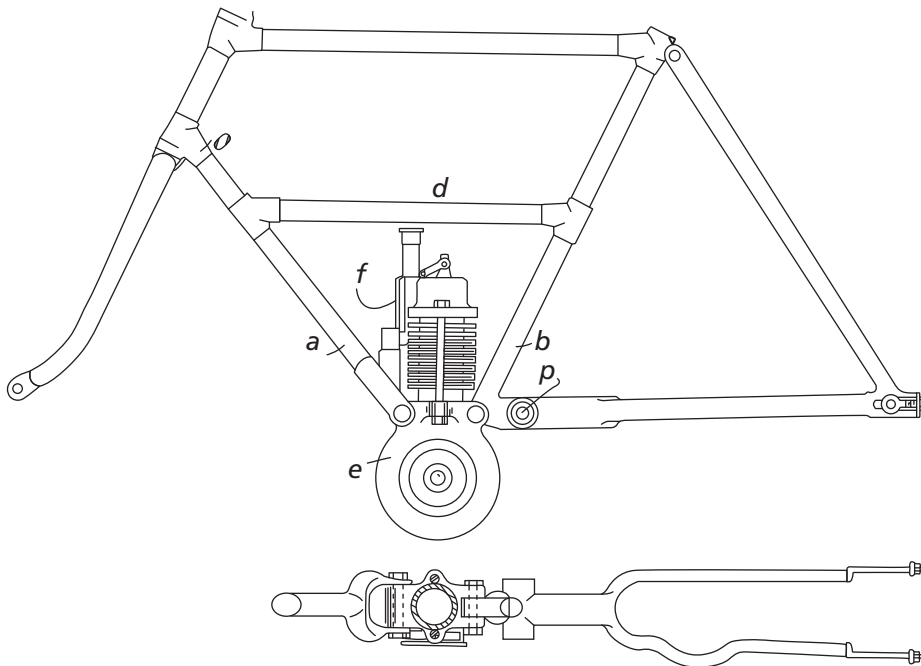


Figure 2.3 *Werner Motors v Gamage* (annotated by the Court)

¹² *Lego Juris A/S v Mega Brands Inc* (R 856/2004-G) [2007] ETMR 11 OHIM (Grand Board of Appeal) at para 39 followed in R 497/2005-1—*LOUDSPEAKER III/Bang & Olufsen* at para 26.

¹³ Council Regulation 6/2002 on Community Designs [2001] OJ L3/1 ('CDR') Recital 31. 'This Regulation does not preclude the application to designs protected by Community designs of the industrial property laws . . . such as those relating to . . . patents . . .' applied in OHIM Appeal Board Decision R 497/2005-1—*LOUDSPEAKER III/Bang & Olufsen* at para 26—see also Council Reg 6/2002 Art 96(1) and equivalent Directive 98/71 on the Legal Protection of Designs [1998] OJ L289/28 Recital (7) and Art 16.

¹⁴ (1904) 21 RPC 621.

- 2.18** Vaughan Williams LJ commented that the two rights were ‘different in their legal nature and scope’ and that the design ‘leaves it open to every member of the public to attain the same end by using an article which differs from it in shape and configuration . . .’
- 2.19** He begrudgingly concluded that ‘I cannot find any estoppel or any ground for putting the plaintiff to an election between the Letters Patent and the Copyright of the Design’.¹⁵
- 2.20** Romer LJ thought it reasonable for a patentee to file a design, in case his patent was ultimately invalid. Thus, ‘the two rights being not necessarily the same may exist together, though, no doubt, to a certain extent they may overlap and interfere . . .’¹⁶ Cozens-Hardy LJ referred to the difference in scope between the different rights: ‘The Patent may be used or infringed in many ways not involving the use of the registered Design’.¹⁷
- 2.21** Two rationales thus emerged:
1. **Different natures** ‘Unless there is a specific provision preventing rights from co-existing, then they just do.’¹⁸
 2. **Different scopes** Mere overlap was no problem, as with two overlapping patents or copyrights. Likewise, in the US, duplication rather than overlap is required to trigger ‘double patenting’ objections between a design patent and a utility patent, which are thus both rare and difficult to prove.¹⁹

(3) Post-expiry right of use

- 2.22** The concern in ‘election’ cases was usually not the existence of double protection per se, but the unwarranted extension of monopoly after expiry of patent rights when the public should be free to use an invention. Where the other right is a perpetual trademark or an inalienable copyright this may have great commercial significance, but considerably less so for designs which have a similar lifetime (give or take five years) to patents,²⁰ and must be filed in the same time frame (rather than, say, after expiry of the patent) in order to avoid self-anticipation by prior publication.²¹
- 2.23** In the UK, the post-expiry right to use doctrine now ‘has no place in the modern statutory scheme of things’ (*Philips v Remington*²²). However, although it no longer justifies the ‘election’ theory discussed above, it may provide an underlying rationale for applying other provisions to the same effect. According to the European Court of Justice (CJ) in *Lego v OHIM*,²³

... protection of that shape as a trade mark once the patent has expired would considerably and permanently reduce the opportunity for other undertakings . . . In the system of intellectual

¹⁵ *Ibid.*, at 629.

¹⁶ *Ibid.*, at 630.

¹⁷ *Ibid.*, at 631.

¹⁸ *Philips v Remington* [1998] ETMR 124, [1998] RPC 283 PC.

¹⁹ *Transmatic v Gulton Industries*, 601 F 2d 904, 912 (6th Cir, 1979), also discussion in G. Dinwoodie, and M. Janis, *Trade Dress and Design Law* (New York: Wolters Kluwer, 2010) 311.

²⁰ 14 to 25 years is normal.

²¹ French designs—closely assimilated to copyright—could under the old law be extended up to 50 years and did not require absolute novelty, which may underlie historical French resistance to double protection (for which, see D. Cohen, ‘Le nouveau droit des dessins et modèles’, (2002) *Economica* at para 64).

²² [1998] ETMR 124 PC, [1998] RPC 283 PC, following *American Cyanamid (Dann’s) Patent* [1970] 1 WLR 1507; [1970] 3 All ER 785; [1970] FSR 443; [1971] RPC 425.

²³ Case C-48/09 P *Lego Juris A/S v OHIM, Mega Brands, Inc* [2010] ETMR 63 CJ.

property rights developed in the European Union, technical solutions are capable of protection only for a limited period, so that subsequently they may be freely used by all economic operators. . .

Although ‘that consideration underlies not only . . . trade mark law, but also . . . designs’, the decision is opaque (and *obiter*) in application to the latter.²⁴ **2.24**

The post-expiry doctrine for patents is strong in the US, but not between design and utility patents. In *Kellogg v National Biscuit*,²⁵ protection under unfair competition law was refused to Shredded Wheat™ biscuits, previously protected by expired utility and design patents. No adverse comment was passed on dual protection by utility and design patents. However, double patenting, even between a design patent and a utility patent, is generally not permitted.²⁶ In practice, the objection can be overcome by a ‘terminal disclaimer’ renouncing any term extension of the longer-lasting right over the shorter one.²⁷ **2.25**

(4) Mismatched defences

The acts of infringement and defences for designs in Europe are closely modelled on those for patents,²⁸ and the same in the US, so this objection has little practical force where the overlap is between designs and patents. **2.26**

(5) Undermining or circumventing patents

The patent system has existed for long enough to acquire defenders²⁹ for whom it is the only legitimate exception to untrammelled competition. Other forms of protection are therefore seen as unwarranted intrusions into the market which, if popular, threaten the survival of the patent system by robbing it of business.³⁰ In the US, the picture is complicated by the tussle for jurisdiction between Federal institutions (competent in patents) and States (competent in unfair competition).³¹ **2.27**

There is however no reason to cede primacy to the patent system. Although it is often painted in rosy hues,³² in its modern form it is generally neither much older nor much more rigorous than the design system. Both systems similarly require novelty over the prior art, and restrict protected subject-matter by statute. Exhaustive examination is neither an inherent nor an **2.28**

²⁴ As pointed out by the Advocate-General of the CJ in *Philips v Remington* Case C-299/99 *Philips v Remington* Opinion of Advocate-General Colomer, [2001] RPC 38, [2001] ETMR 48, [2002] ECR I-5475 at para 34.

²⁵ *Kellogg Co v National Biscuit Co*, 305 US 111, 120–122 (1938).

²⁶ See, for example, the US Manual of Patent Examining Practice MPEP 1504.06 Double Patenting.

²⁷ As, in Commonwealth countries, ‘association’ and ‘patents of addition’ allowed double protection in return for a curtailed term.

²⁸ See D. Musker, *Community Design Law Principles and Practice*, (London: Sweet & Maxwell, 2002) 66.

²⁹ See L. Bently, and B. Sherman, ‘The United Kingdom’s Forgotten Utility Model: The Utility Designs Act 1843’, (1997) 3 IPQ 265–278.

³⁰ ‘. . . could essentially redirect inventive efforts away from the careful criteria of patentability developed by Congress’. *Bonito Boats Inc v Thunder Craft Boats Inc* 489 US 141 (1989).

³¹ *Dinwoodie and Janis*, see n 19 at 24.

³² ‘prerequisites to obtaining a patent are strictly observed, and . . . the limitations on its exercise are equally strictly enforced.’ ‘carefully used to promote invention while at the same time preserving free competition.’ *Sears, Roebuck & Co v Stiffel Co* 376 US 225 (1964). ‘restrictive conditions imposed by patent law’, OHIM Board of Appeal Case R 690/2007-3 *Chaff Cutters Lindner Recyclingtech GmbH v Franssons Verkstader AB* [2010] ECDR 1.

exclusive feature of the patent system—some offices³³ examine, many³⁴ never did and others³⁵ have given it up. And to the extent that the same product can be protected either by design or by patent, the narrower scope of the former hardly poses a serious threat to the latter.

- 2.29** Nonetheless, legislators and judges have created exclusions that have either the intention or the effect of creating areas where overlap is problematic.

C. Patent/Design Anti-overlap Provisions

(1) Patent law—exclusion of registrable designs

- 2.30** Since the Statute of Monopolies, patents in the common law world have been restricted to ‘inventions’—which are, however, not defined in either US or European law. The word denotes both a kind of subject-matter, and a level of thought.³⁶ The absence of a definition in the European Patent Convention (EPC)³⁷ was intentional, and the scope of protectable subject-matter is constrained by the ‘industrial application’ requirement,³⁸ and the ‘non-exhaustive list of non-inventions’ of EPC Article 52(2).

- 2.31** During the protracted EPC negotiations, the UK proposed³⁹ an exclusion of ‘Designs or arrangements in which the novelty resides in appeal to the eye’, explicitly to eliminate overlap, but this was rejected.⁴⁰ Instead, ‘aesthetic creations’ ‘as such’ were excluded. This is taken in the UK to exclude overlap with copyright⁴¹ rather than designs, as is clear from the wording of the Patents Act 1977.⁴²

(2) Design law—exclusion of patentable inventions

- 2.32** The now-superseded French design law⁴³ did specifically exclude protection for patentable inventions,

... if the same object may be considered both as a new design or model and as a patentable invention and if the elements constituting the novelty of the design are inseparable from those of the invention, such an object may be protected only under the [patents] provisions.

³³ The ‘IP5’ offices (those of the US, Europe, Japan, China, and Korea), and a few others.

³⁴ For example, until recently, France.

³⁵ The Netherlands, for example.

³⁶ ‘Inventive step’, ‘inventive height’, ‘inventive activity’.

³⁷ Convention on the Grant of European Patents (Cmnd 7090).

³⁸ EPC Art 57.

³⁹ White Paper: The effects of the Strasbourg Convention of 1963 (Cmnd 2835) 1965, Patents Liaison Group.

⁴⁰ J. Pila, ‘Art. 52(2) of the Convention on the Grant of European Patents: What did the Framers Intend?’ (1995) 36 IIC 755 at 778.

⁴¹ See *CFPH* [2005] EWHC 1589 PC, *Halliburton v Smith* [2005] EWHC 1623 PC, although this may not be correct: Justine Pila, ‘The Future of the European Requirement for an Invention: Inherent Patentability as a Pre- and Post-Patent Determinant’ in *Biotechnology and Software Patent Law: A Comparative Review on New Developments*, G. Ghidini and E. Arezzo (eds) (Cheltenham: Edward Elgar, 2011), Ch 1 available at <http://works.bepress.com/justine_pila/21> last visited 28 March 2012.

⁴² Patents Act 1977, s 1(2) (implementing the EPC in the UK): ‘a literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever’.

⁴³ Law of 14 July 1909, Art L. 511-3, §2.



D. Systemic Cross-Links

Portugal, Spain, and Belgium did likewise,⁴⁴ as the OAPI law⁴⁵ of Francophone Africa still does. **2.33**

In practice, this exclusion was applied with varying effects over the years. Sometimes, it was only applied where a design met all the substantive criteria for patentability. In earlier cases, it was held to bite only where a technical function could be achieved by a single form—in other words, for designs where the form fused with the function—so that a design was valid where it could be shown that other forms would fulfil the same function. Later, however, this ‘multiplicity of forms’ approach was abandoned in France, and there are several recent cases where it appears that the mere coexistence of a patent with similar drawings was enough to invalidate a parallel design.⁴⁶ **2.34**

There is thus no ‘bright line’ separating patents from designs in Europe or the US. The positive requirements for ornamentality⁴⁷ or ‘eye appeal’⁴⁸ (for designs), and utility or technical character (for patents), and the specific statutory exclusions of functional designs and aesthetic inventions discussed in this chapter, do not produce a ‘lack of overlap’,⁴⁹ or a ‘clear and unmistakable separation’.⁵⁰ Where a given design includes both functional and ornamental elements, it may qualify for either or both rights. **2.35**

D. Systemic Cross-Links

(1) Cross-priority

The Paris Convention⁵¹ provides for cross-priority claims between a patent and a utility model⁵² (within 12 months) and between a utility model and a design⁵³ (within six months) and does not preclude ‘domestic’ or ‘internal’ priority within one country under national law. **2.36**

(a) The US position

The US patent system provides a domestic priority system of continuation and continuation-in-part applications, unconstrained by the Paris Convention periods,⁵⁴ within which a US **2.37**

⁴⁴ U. Suthersanen, *Design Law in Europe* (London: Sweet & Maxwell, 2000).

⁴⁵ OAPI uniform law, Art 2(2).

⁴⁶ See, for example, *Plastiques Progrès v Établissements Roybier et Fils*, Cour d’appel de Paris, 31 mai 2000, PIBD 2000, 705-III-448 concerning coat hangers, and *Mephisto et M. Martin Michaeli v Sanders Distribution Sandis et Calzaturificio Grisport*, Cour de Cassation, 26 mars 2002, PIBD 2002, 749-III-419, the *Jean-Pierre cycle shoe* case. See also the discussion in OHIM Board of Appeal case: Case R 690/2007-3 Chaff Cutters *Lindner Recyclingtech GmbH v Franssons Verkstader AB* [2010] ECDR 1 and the authorities cited therein.

⁴⁷ In the US, 35 USC 171 ‘any new, original and ornamental design for an article of manufacture.’

⁴⁸ Former Commonwealth laws.

⁴⁹ As suggested in G. Zimmerman, ‘Extending the Monopoly? Risks and benefits of multiple forms of Intellectual Property protection’ (2000) 17 CANADIAN INTELLECTUAL PROPERTY REVIEW 345.

⁵⁰ As suggested by the quote attributed to Vaver by Zimmerman see (2000) 17 CANADIAN INTELLECTUAL PROPERTY REVIEW 363, para 4.5.

⁵¹ Paris Convention for the Protection of Industrial Property of 20 March 1883 as amended (‘Paris Convention’).

⁵² Paris Convention, Art 4E(2).

⁵³ Paris Convention, Art 4E(1).

⁵⁴ Paris Convention, Art 4C(1).



design patent application may claim priority from a US utility patent application⁵⁵ and vice versa.⁵⁶

(b) *Europe—patent claiming priority from a design*

2.38 It is clear from the statute⁵⁷ that a UK patent application cannot claim domestic priority from a UK design application. Against that background, the UK Court in *Agfa-Gevaert AG's Application*⁵⁸ considered whether priority could be claimed from a German design application. The court concluded that no priority was possible, for various reasons:

- The design application would 'afford no protection to the invention'.⁵⁹ It was not an application which 'seeks to protect the invention as such'. Since the court accepted that the design application disclosed (and therefore protected) an embodiment of the invention, the rationale must be that the design application could not protect the claimed invention across its scope, or the particular features that were sufficiently novel and technical to support grant of the patent.
- The Paris Convention did not mean that 'an application for any one of the specified kinds of intellectual property protection can give rise to a claim of priority in respect of an application for any of the other kinds . . .'.⁶⁰
- The different terms permitted for claiming from patents and designs would have made it necessary to provide a rule as to which applied, and there was no such rule.⁶¹

2.39 In *Agfa-Gevaert*, the German design filing could not have been used to claim priority in a German patent. In the US, however, priority from a design patent application can be claimed in a utility patent application. The effect was considered in *Anchor Wall Systems v Keystone*,⁶² in which an Australian 'petty patent' claimed ultimate priority from a US utility patent application, which itself claimed priority from design patent applications. Since, under the Paris Convention, priority may only be claimed from a 'first' application, the issue was whether the US design patents generated a priority right to the claimed invention. It was held that they did not. It was,

well established that manufactures, for example processes and devices, involving only functional features and not aesthetic features, are available for protection under Australian patent law. Such manufactures form 'the proper subject of letters patent . . .' Thus the meaning of the term 'invention' as used and defined in the act must be understood in this context. It follows that when used in the definition of basic application, invention must be understood in this same context, i.e. something available for protection by a patent as against other possible protections such as a design or trademark . . . Thus an application to protect the invention or creation of a new or ornamental design involving features of external and aesthetic appearance, in my view, is not encompassed. . .

⁵⁵ *In re Scott J. Daniels*, 144 F 3d 1452, 46 USPQ 2d 1788 (Fed Cir 1998), following *Racing Strollers, Inc v TRI Industries, Inc*, 878 F 2d 1418, 1419, 11 USPQ 2d 1300, 1301 (Fed Cir 1989 *en banc*). See also MPEP, 1504.20 Benefit Under 35 USC 120, and 201.11 Claiming the Benefit of an Earlier Filing Date Under 35 USC 120 and 119(e); and the cases cited therein.

⁵⁶ *In re Scott J. Daniels*, 144 F 3d 1452, 46 USPQ 2d 1788 (Fed Cir 1998), following *KangaROOS, U.S.A., Inc. v Caldor, Inc*, 778 F 2d 1571, 1574, 228 USPQ 32, 33 (Fed Cir 1985). See also MPEP, n 55.

⁵⁷ Patents Act 1977, s 5(5) and (6)—UK is not a 'convention country'.

⁵⁸ (1982) RPC 441.

⁵⁹ *Ibid.*, at 451, 454.

⁶⁰ *Ibid.*, at 456.

⁶¹ *Ibid.*, at 457.

⁶² *Anchor Wall Systems Inc v Keystone Retaining Wall Systems Inc* [1996] APO 33.

The European Patent Office considered a priority claim from a German design application.⁶³ **2.40**
The Legal Board of Appeal held that,

The deposit of an industrial design in essence protects aesthetic appearance. Although the deposited design may incorporate an invention, according to national design laws the deposit will not protect the invention as such.

The rationale of the cases is that whilst a design application may disclose an embodiment **2.41**
of a patentable invention, it is not an application to protect that invention, and hence not available for a Paris Convention-type priority claim.

(c) Europe—design claiming priority from a patent

National design priority law is not harmonized in Europe. For the UK, it is likely that the **2.42**
broad (though *obiter*) remarks in *Agfa-Gevaert* would exclude priority from a patent application. Whilst priority claims from utility models are permitted in the Community Design system,⁶⁴ no explicit provision is made for patent applications and they are not accepted by OHIM as the basis of a priority claim.⁶⁵ The question was left undecided in *Crocs, Inc v Holey Soles Inc*.⁶⁶

(2) Cross-citation

(a) Designs as prior art against patents in Europe

Designs form part of the state of the art against a patent. Although light on text, they are **2.43**
capable of invalidating a patent claim on the basis that the species anticipates the genus,⁶⁷ and can be combined with other documents in an obviousness attack.⁶⁸

(b) Patents as prior art against designs in Europe

Patents likewise form part of the state of the art against designs.⁶⁹ In the event that the patent **2.44**
discloses all features of a design in a drawing, the comparison between the two is straightforward. A patent which describes the design textually in sufficient detail could, in principle, invalidate a design,⁷⁰ but general statements such as ‘the head could be made in any shape’⁷¹ do not suffice—the genus does not anticipate the species.

(c) Cross-citation in the US

For the US, it is clear from numerous decisions that citation of designs against patents and **2.45**
vice versa is possible: ‘Although there are different statutory bases and standards for utility

⁶³ *ARENHOLD/Deposit of an Industrial Design* J 15/80 (1981) OJ EPO 213, [1979-85] EPORA56, [1982] ECC 74.

⁶⁴ Council Reg 6/2002 Art 41 (4).

⁶⁵ OHIM Examination Guidelines—Community Designs para 10.1.

⁶⁶ Case R 9/2008-3 *Crocs v Holey Soles with PHI*, [2010] ECDR 11 OHIM (3rd Bd App).

⁶⁷ Examples are EPO Appeal Board decisions T 83/98 and T 1077/99 (unpublished, both unsuccessful citations).

⁶⁸ EPO Appeal Board decision T 1179/08 (unpublished), Reasons 5.2—albeit an unsuccessful attack in that case.

⁶⁹ Although the Cologne Appeal Court recently expressed doubt on the citability of a utility model against a German design under the old German law due to the different orientations of the rights: email from Henning Hartwig to the author, 22 June 2011.

⁷⁰ See, for example, *Rosedale Associated Manufacturers Ltd v Airfix Products Ltd* [1957] RPC 239.

⁷¹ *José Mallent Castello v 3M Innovative Properties Company* OHIM Invalidity Division Case No. ICD 000000057.

patents and design patents, no similar distinction exists when determining what constitutes relevant prior art for these two types of patents'.⁷²

(d) *Prior rights in Europe*

- 2.46** In Europe, prior filed but unpublished designs are not a citable 'prior right' against a patent⁷³ and prior unpublished patent applications are not a 'prior right' citable against a design.⁷⁴ This is consistent with the priority position; it would be strange to deny a priority claim from something that would be citable as a prior right, and *vice versa*.

(e) *Prior rights in the US*

- 2.47** In the US, earlier-filed US patents of others (whether design or utility patents) are treated as if prior-published.

E. Patents and Designs—Twins or Antonyms?

- 2.48** Within the intellectual property family, patents and registered designs are the closest of siblings. They are both 'monopoly' rights (in the legal, rather than the economic sense), which can be infringed irrespective of the infringer's *mens rea*. They both, as a consequence, need to show novelty over the state of the art, irrespective of the creator's *mens rea*—subjective originality won't do. They are usually filed and granted according to similar regulations. Many of the actors involved are the same—usually, the same registration office,⁷⁵ the same agents, and the same judges.

- 2.49** However, some of these similarities are illusory. The patent system is only one of those affecting the orbit of design registration—copyright and trademarks also exert an influence. And whilst the similarities in legal bases between patents and designs might be expected to result in the two being drawn together, the effect is often one of repulsion rather than attraction, as actors in the longer-established and more economically important patent system defend it against encroachment by other, less reassuringly familiar, forms of protection.⁷⁶

- 2.50** As a result, the relationship between patents and designs is often represented as one of opposites. Commonly-stated comparisons are listed in Table 2.1.

Table 2.1 Commonly stated contrasts

Issue	Patents are . . .	Designs are . . .
Subject-matter	Technological	Aesthetic
Aspect protected	Function	Form
Level of abstraction	Ideas	Embodiments or expressions
Scope	Broad	Narrow
Medium	Words	Pictures

⁷² *Re Aslanian* 590 F 2d 911, 200 USPQ 500 (CCPA 1979), 2125.

⁷³ Under Articles 139 and 140 EPC (or their UK equivalent).

⁷⁴ Under Dir 98/71 Art 11 or Council Reg 6/2002 Art 25.

⁷⁵ Europe provides a rare exception.

⁷⁶ See Bently and Sherman, n 29.

However, when these commonly-held comparisons are unpicked, they are either over-simplifications, or not antonyms, or both. **2.51**

(1) *Technology v Aesthetics*

(a) *Patents, inventions, and technology*

Patents are for ‘inventions’, but although machines and technologies have always been central to the patent system, the common law tradition historically took a broader view of ‘inventions’ and did not exclude patents for failing to be ‘technological’. Patent law requires utility or ‘industrial applicability’ for some practical purpose,⁷⁷ but this has not always been confined to the ‘technological arts’ or ‘fields of technology’.⁷⁸ **2.52**

US patent law extends generally to ‘anything new under the Sun made by man’⁷⁹ (though this is qualified by the requirement to fall within one of the statutory categories of ‘processes, machines, manufactures and compositions of matter’⁸⁰), and the US Patent Office practice has therefore been, to take an example, to grant patents to board games.⁸¹ **2.53**

It was until 2006⁸² also the practice of the UK Patent Office to grant patents for board games characterized by novel printed matter, in accordance with a 1926 Official Ruling.⁸³ Under the influence of the EPC that changed, and the current, more restrictive, practice is discussed here. **2.54**

(b) *Designs and ‘aesthetics’*

Designs have always protected ornamental mass-produced articles, but have not historically been available for many ‘aesthetic creations’ in the UK. Instead, works of a ‘primarily literary or artistic character’ were for many years specifically excluded,⁸⁴ with the intention that copyright alone should apply to these. There was a requirement for ‘eye appeal’ under the old UK law, but this involved only some visual impact not rising to the level of art or beauty.⁸⁵ Under the current European laws, designs are not *excluded* as being primarily aesthetic, but no aesthetic quality is *required*.⁸⁶ **2.55**

The current US statute requires a patentable design to be ‘ornamental’, and it is conventional for the claims of a design patent to be thus limited, but⁸⁷ this requirement is usually thought not to rise to the level of art or beauty—“‘ornamental’ does not always mean artistic or pleasing to the eye . . . ornamentation is in the eye of the beholder . . .”,⁸⁸ ‘ . . . design patents are **2.56**

⁷⁷ In Europe, if it can be ‘made or used in any kind of industry’, EPC Art 57. Industry is ‘an activity which belongs to the useful or practical arts as distinct from the aesthetic arts’ EPO Guidelines C-IV, 5.1. Some practical utility is required: *Chiron v Murex* [1996] RPC 535 CA.

⁷⁸ TRIPS Art 27(1).

⁷⁹ *Diamond v Chakrabarty*, 447 US 303, 308–09, 206 USPQ 193, 197 (1980).

⁸⁰ 35 USC 101.

⁸¹ See, for example, US 3961795 ‘Antitrust prosecuting board game’, or US 3850433 ‘Board Game involving patent transactions’ (see Figure 2.4), according to your prejudices.

⁸² Until *Shopalotto.com Ltd’s Patent Application* [2006] RPC 7.

⁸³ (1926) 43 RPC No 4 Appendix, i.

⁸⁴ Registered Designs Act 1949, s 4(2) and Rule 26 of the various Registered Designs Rules.

⁸⁵ ‘ . . . it has always been considered that a design need not possess any artistic merit.’ *Russell-Clarke and Howe on Industrial Designs*, 7th edn (London: Sweet & Maxwell, 2005) 3-51, 89.

⁸⁶ Dir 98/71 Recital 14 and Council Reg 6/2002 Recital 10 ‘whereas it is understood that this does not entail that a design must have an aesthetic quality.’

⁸⁷ Though the jurisprudence is divided.

⁸⁸ *Best Lock Corp v Ilco Unican Corp* 94 F 3d 1563 (Fed Cir 1996) Judge Pauline Newman’s dissent.

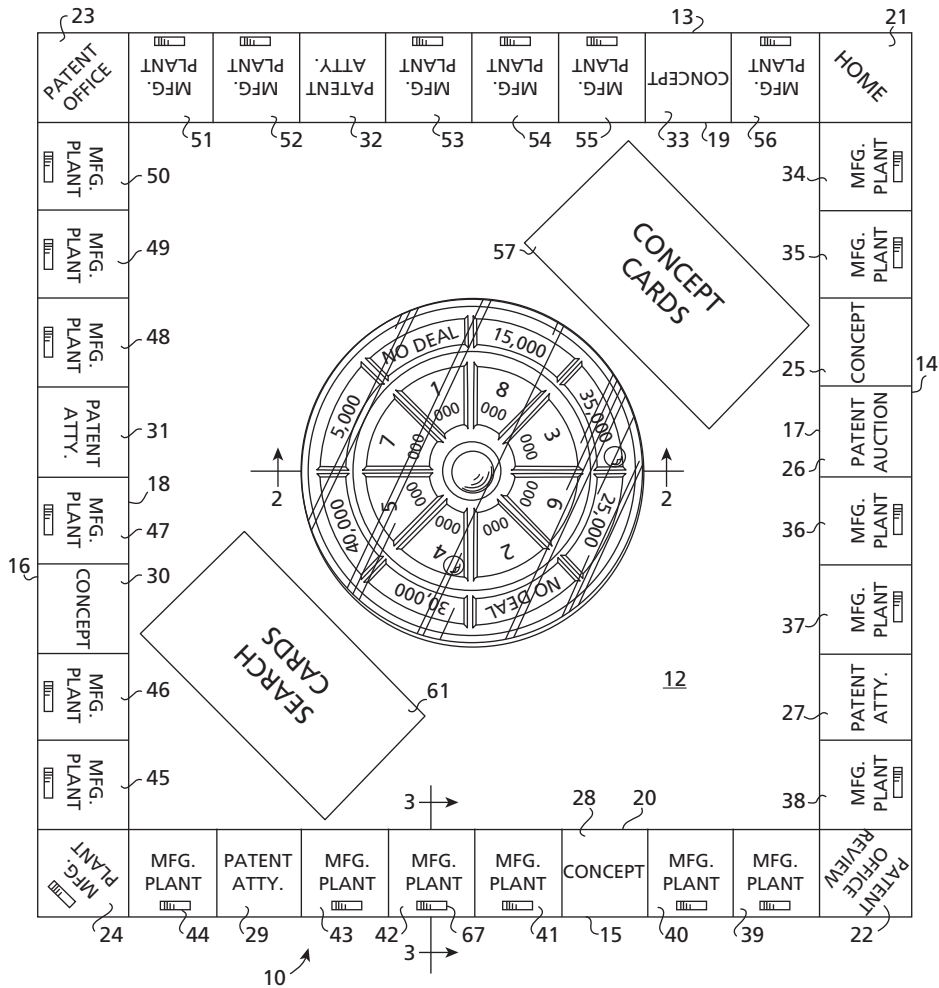


Figure 2.4 US 3850433 ‘Board Game involving patent transactions’

concerned with the industrial arts, not the fine arts. . . It is enough for present purposes that it is not ugly’.⁸⁹

(c) Patent law—statutory exclusion of ‘aesthetic creations’

2.57 European case law on the ‘aesthetic creations’ exclusion has taken a somewhat uneven course. Whilst a pure work of art is excluded as such, the European Patent Office (EPO) view is that a mixture of ‘technical’ and ‘non-technical’ (ie, aesthetic) features may be patentable.⁹⁰ The EPO Guidelines cite a tyre tread as an example having both aesthetic and technical features

⁸⁹ *Contico International Inc. v Rubbermaid Commercial Products, Inc*, 665 F 2d 820, 825 (8th Cir 1981), discussed in Dinwoodie and Janis, see n 19 at 317. See also U. Suthersanen, *Design Law: European Union and United States of America*, (London: Sweet & Maxwell, 2010) 10-012 onwards.

⁹⁰ T 769/92 *SOHEI/General purpose management system*, [1995] OJ EPO 525, [1996] EPOR 253.

which might be patentable.⁹¹ The US situation is broadly similar—a work of art per se could in principle be rejected as non-statutory subject-matter.⁹²

(d) *Utility as a qualification for design protection*

For much of the nineteenth century, designs could be registered, rather than rejected, on the basis of new utility. In the UK, the 1839 Act⁹³ was not restricted to ornamental designs, and it was succeeded by the 1843 Utility Designs Act, which provided protection for designs ‘having reference to some purpose of Utility.’ **2.58**

The US 1842 Act⁹⁴ was, like the UK 1839 Act, silent as to any requirement for ornament. Case law led⁹⁵ to ‘an overlap between the scope of protection for design and utility patents.’⁹⁶ In 1870, the statute provided for the protection of ‘. . . any new, useful and original shape or configuration of any article of manufacture . . .’ as well as various types of ornamental designs.⁹⁷ Explicit statutory exclusions of functional or non-ornamental matter date back only to 1902 (in the US) and 1919⁹⁸ (in the UK).⁹⁹ **2.59**

The Nicholson Report¹⁰⁰ proposed the reintroduction of registered protection for purely functional designs, but a parallel unregistered design right scheme, explicitly intended to protect purely functional designs, was introduced instead.¹⁰¹ **2.60**

Thus, although design registration appears to have evolved away from protecting products on the basis of a purely utilitarian advantage in the common law world,¹⁰² design protection and utility or function are not *inherently* incompatible. **2.61**

(e) *Design law—exclusion of technology/functionality and relation to utility*

Even when new utility ceased to be a sufficient criterion for registration of a design, it did not immediately become a disqualification—many (and perhaps most) designs protect objects which have some utility. However, in the late nineteenth and early twentieth centuries, a functionality exclusion evolved in the UK case law (though invalidation on this ground was very rare¹⁰³). In the US, there is no statutory objection to a design of a useful article, but a judicially-created functionality doctrine has evolved as a sub-test of the statutory requirement **2.62**

⁹¹ EPO Guidelines for Examination, C-IV, 2.3.4, ‘If, however, the article happens also to have technical features, it might be patentable, a tyre tread being an example of this. The aesthetic effect itself is not patentable, neither in a product nor in a process claim.’

⁹² MPEP 2106 Patent Subject Matter Eligibility, 2106.01 Computer-Related Nonstatutory Subject Matter.

⁹³ Copyright of Designs Act, 1839.

⁹⁴ Patent Act of 1842, Ch 263.

⁹⁵ J. Du Mont, ‘A Non-Obvious Design: Re-examining the Origins of the Design Patent Standard’, (2010) 45(3) GONZAGA LAW REVIEW 531.

⁹⁶ *Ibid.*, at 555.

⁹⁷ Section 71, quoted in Du Mont see n 95, 563 at fn 194.

⁹⁸ Patents and Designs Act, 1919.

⁹⁹ See Bently and Sherman, n 29.

¹⁰⁰ Green Paper on Intellectual Property and Innovation, Cmnd 9117, HMSO 1983.

¹⁰¹ White Paper on Intellectual Property and Innovation, Cmnd 9712, HMSO April 1986 at paras 3.21 and 3.33 and 3.39(a), *Farmers Build v Carrier Bulk Materials* [1998] EWCA Civ 1899, [1998] EWCA Civ 1900, [1999] RPC 461; [2000] ECDR 42; *Lucasfilm v Ainsworth* [2011] UKSC 39 at para 49.

¹⁰² Not however in South Africa where parallel ornamental and functional design registration systems coexist.

¹⁰³ As explained by the Federal Court of Australia in *Hosokawa Micron International Inc v Fortune* (1990) 26 FCR 393; 97 ALR 615; 19 IPR 531; [1991] AIPC 37, 226.

for ornamental character. There is now a statutory exclusion of functional designs in Europe, discussed in this Chapter, but it is important to bear in mind that the respective functionality doctrines in the US and Europe spring from different roots.

- 2.63** A design is not excluded from protection merely because one part is functional.¹⁰⁴ The exclusion applies only where the design is predominantly functional (in the US) or entirely functional (under the old UK law)¹⁰⁵—except where novelty also comes into play.

(f) *Subject-matter at the point of novelty*

- 2.64** Patents and designs both require not only novelty but also some statutory character ('technicality' for patents and 'non-functionality' for designs). Either can therefore suffer the defect identified by Dr Johnson¹⁰⁶ that the statutory part is not novel and the novel part is not statutory; a lack of protectable subject-matter at the 'point of novelty'.

- 2.65** Many judgments comment that, in general, designs and claimed inventions should be taken 'as a whole' and not dissected and rejected element-by-element.¹⁰⁷ However, currently, the usual approach is to invalidate where there is only non-statutory matter at the point of novelty.

(g) *Patents—aesthetics at the point of novelty*

- 2.66** According to the current EPO approach, the presence of 'any technical means' is sufficient to save a product as a whole from exclusion as an 'aesthetic creation'.¹⁰⁸ However, where the only difference between a claim and the prior art has a purely aesthetic advantage or effect, no matter how non-obvious, it cannot confer an inventive step.¹⁰⁹

- 2.67** The manner in which an aesthetic effect is provided might, however, be inventive if non-obvious, allowing the grant of a patent. Extrapolating from cases in other excluded areas (financial methods, for example), the issue is often whether the skills of a technical person (an engineer) are involved in providing the aesthetic effect. If so, then there may well be a patentable invention.¹¹⁰ If not, then there is none.¹¹¹

¹⁰⁴ *Interlego A.G. v Tyco International Inc*, [1988] RPC 343 (HL), at 354, criticized by some.

¹⁰⁵ *Ibid.*

¹⁰⁶ 'Your manuscript is both good and original, but the part that is good is not original and the part that is original is not good.'—attributed to Samuel Johnson.

¹⁰⁷ Some, however, hold that a design does not include functional features at all, which must be filtered out for all purposes: '... the scope of the claim must be construed in order to identify the non-functional aspects of the design...' *Richardson v Stanley Works, Inc*, 597 F 3d 1288, 1294 (Fed Cir 2010); if not filtered out altogether, they are almost ignored (eg, *Sommer Allibert v Flair Plastics*, [1987] RPC 599 (CA)).

¹⁰⁸ G 1/08 Essentially biological processes (to be published in OJ EPO 2011), Reasons 6.3 affirming cases such as *PROCTER & GAMBLE/Colour-changing absorbent article* (T1689/07), [2010] EPOR 19, and implicitly overruling earlier cases such as *FUJII/Coloured disk jacket* (T119/88), [1990] EPOR, 615, (1990) 4 OJ EPO 395.

¹⁰⁹ See, for example, EPO Appeal case T 335/90 (unpublished).

¹¹⁰ See, for example, EPO Appeal cases T 442/90, *HETTLING-DENKER/Translucent Building Materials* (T686/90), [2004] EPOR 5; T 252/91 (unpublished); T 1032/93 (unpublished); *PROCTER & GAMBLE/Colour-changing absorbent article* (T1689/07), [2010] EPOR 19.

¹¹¹ See, for example, EPO Appeal cases *ETA/Watch* (T456/90), [1993] EPOR 252, T 840/91 (unpublished), *KUNOMI/Video game* (T928/03), [2006] EPOR 53, *APPLE/Method of transition between window states* (T50/07), [2010] EPOR 20.

An oft-quoted EPO example is a lampshade carrying a new picture by Da Vinci¹¹²—although the object as a whole is more than an aesthetic creation, and the painting is certainly not ‘obvious’, the skills engaged in providing the aesthetic effect achieved are solely those of an artist and not an engineer. **2.68**

In the US, the same is currently true in assessing obviousness of utility patents, following *In re Seid*,¹¹³ ‘matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art’.¹¹⁴ **2.69**

(h) Example—the *ETA/Watch* patent

The *ETA/Watch* case¹¹⁵ illustrates how the EPO handles design-overlap patents. The case concerned a granted European patent to a watch strap fastening, opposed on the basis of prior art disclosing all but one feature of the claim. **2.70**

5.5. a widely distributed commercial product, such as the inexpensive watch of the present invention, must satisfy requirements of both a technical and an aesthetic nature. It is accepted that requirements of an aesthetic nature may be satisfied by technical means and, in principle, an aesthetic aim does not affect the patentability of such technical means, provided that the latter are new and inventive.

5.8 . . . this shape . . . is therefore clearly a design measure aimed solely at an aesthetic effect which does not help to solve a technical problem. Such a characteristic does not contribute to the inventive step of the claimed subject-matter.

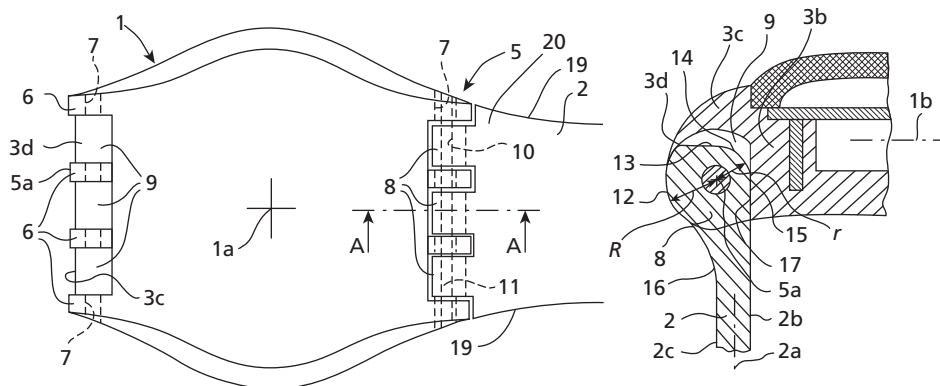


Figure 2.5 *ETA/Watch*

¹¹² See D. Rees, ‘Software Patents—EPO Practice: History and State of Play, prepared for the EPIDOS Annual Conference, European Patent Office (EPO)’, 16 October 2001, <<http://www.ps.uni-saarland.de/~tmueller/reestrans.pdf>> at 5, last visited 27 February 2012.

¹¹³ 161 F 2d 229, 73 USPQ 431 (CCPA 1947)—advertising display device comprising a bottle and a hollow member in the shape of a human figure from the waist up.

¹¹⁴ MPEP 2144.04 Legal Precedent as Source of Supporting Rationale 1 AESTHETIC DESIGN CHANGES.

¹¹⁵ *ETA/Watch* (T456/90), [1993] EPOR 252.

(i) Designs—functionality at the point of novelty

2.71 In the US, ‘When a claim is rejected . . . as being unpatentable over prior art, features of the design which are functional and/or hidden during end use may not be relied upon to support patentability.’¹¹⁶ The appeal judgment in *Richardson v Stanley Works, Inc*¹¹⁷ held that ‘. . . the scope of the claim must be construed in order to identify the non-functional aspects of the design . . .’ and factor them out before performing an overall impression comparison for infringement or validity.¹¹⁸ Protection ‘does not extend to any functional elements of the claimed article.’

2.72 The position is probably similar under the new European design law. The issue was raised in *Crocs, Inc v Holey Soles Inc*¹¹⁹ where it was said that the named designer had only added a functional heelstrap (described, together with other features, in several parallel patent applications) to the existing design of a plastic clog. The design was invalidated as not creating a different overall impression to the prior art. Within the ‘overall’ impression, the part played by the strap was much reduced, in large part because of its functional nature.¹²⁰

(j) Conclusion

2.73 The presence of aesthetic elements does not preclude patentability of an otherwise allowable invention, nor does the presence of technical elements prevent registration of an otherwise allowable design. Nor do the exclusions from one right match precisely the requirements of the other. If it marks any border, the technology/aesthetics divide is more apt to distinguish patents from copyright than from designs.

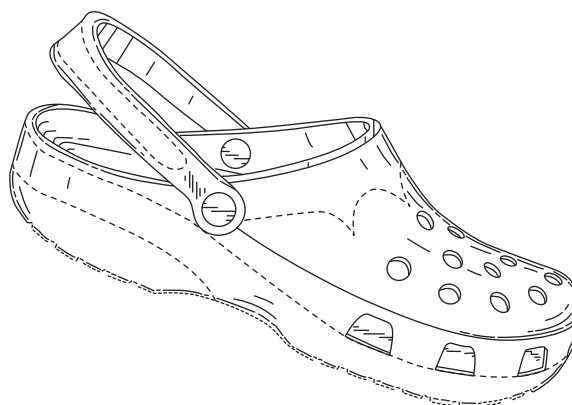


Figure 2.6 *Crocs v Holey Soles*

¹¹⁶ MPEP 1504.02 Novelty, 1504.03 Nonobviousness.

¹¹⁷ *Richardson v Stanley Works, Inc.*, 597 F 3d 1288, 1294 (Fed Cir 2010), following *OddzOn Prods, Inc v Just Toys, Inc*, 122 F 3d 1396, 1456 (Fed Cir 1998 en banc).

¹¹⁸ *Door-Master Corp v Yorktowne Inc* 256 F 3d (Fed Cir 2001).

¹¹⁹ Case R 9/2008-3 *Crocs v Holey Soles with PHI*, [2010] ECDR 11 OHIM (3rd Bd App).

¹²⁰ *Ibid.*, at paras 104–108.

(2) Form and function

(a) *Function v Form—designs*

‘Primarily the purpose . . . is to protect shape not function . . .’¹²¹ It is certainly true that what is protected is the design of a product, and this means its appearance,¹²² in other words its form¹²³ as perceived by the senses (and usually, by the eye). This has for many years been the US position, following *Gorham v White*.¹²⁴ **2.74**

The protected subject-matter of a design is in fact the *overall impression*¹²⁵ on an observer, created by the *appearance* resulting from the *shape* (or other elements) of a product itself (or its ornamentation). **2.75**

It is initially necessary to dissociate the *design* of the product from the *product itself*. The European law divorces the two for many purposes,¹²⁶ following in this respect the former UK law.¹²⁷ For example, a design lacks novelty if the same shape has been applied to another product¹²⁸ and any use of a design is an infringement of a design including applying it to any product. **2.76**

An important sub-test, however, is based on ‘design freedom’ as a regulator both of design scope and of validity—the less the design freedom, the smaller the scope, and the greater the likelihood of validity. Constraints on design freedom include:¹²⁹ **2.77**

- Features imposed by the technical function of the product;
- Statutory requirements applicable to the product;
- Cost;
- Safety;
- Fitness to work with other products.

These, and other factors, with an indication of what the product is, combine to constitute the brief to which the designer must work. The designer’s output, the design, is therefore separate from the set of constraints to which he is subject. **2.78**

¹²¹ *Stenor v Whitesides (Clitheroe) Ltd* (1948) 65 RPC 1 (HL), [1947] All ER 241, see also *Firmagroup Australia v Byrne & Davidson Doors* (1987) 73 ALR 321, 9 IPR 353, ‘The Act is concerned with shape and configuration, not function.’

¹²² See, for example, Dir 98/71 Art 1(a) or Council Reg 6/2002 Art 3(a).

¹²³ For example, shape (one of the elements of appearance in Dir 98/71 Art 1(a) or Council Reg 6/2002 Art 3(a)).

¹²⁴ 81 US (14 Wall.) 511, 524–525 (1871).

¹²⁵ For Europe, Dir 98/71 Arts 5(1) and 9(1), and corresponding Council Reg 6/2002 Arts 6(1) and 10(1), and, for the US, ‘the overall impression of the claimed ornamental features’ *Crocs, Inc v ITC*, 598 F 3d 1294 (Fed Cir 2010)—same test for validity as infringement, *Richardson v Stanley Works, Inc*, 597 F 3d 1288, 1294 (Fed Cir 2010).

¹²⁶ *Green Lanes v PMS* [2008] EWCA Civ 358.

¹²⁷ See the quote below from *Dover v Nurnberger Celluloid*. In the US, the usual view is that ‘Design is inseparable from the article to which it is applied . . .’ MPEP 15.44 Design Inseparable From Article to Which Applied, approved in *Best Lock v Ilco*, Newman dissented, but something closer to the UK position emerges from *Re Schnell*, 46 F 2d 203 (CCPA 1931), acknowledging that some designs can be applied to multiple products.

¹²⁸ See, for example, *Stenor v Whitesides (Clitheroe)* (1948) 65 RPC 1 (HL) (design of fuse anticipated by same design of bicycle crank).

¹²⁹ *Grupo Promer Mon Graphic SA v OHIM, Pepsico* (T-9/07 Metal Rappers), [2010] ECDR 7, at paras 67–70.

2.79 The number of different appearances that could be created in order to meet the brief is the ‘design freedom’. Where the brief can be met in only one way, there is no design freedom—the end result is in a one-to-one relationship with the brief, so that¹³⁰ every designer would produce the same result. In the absence of any design that can be separated from the brief, there is nothing protectable.

(b) *Function v Form—patents*

2.80 Patents also protect product forms. Patented products include electronic circuits, programmed computers, chemical, and biological species, but the historical core of the patent system is in the protection of mechanical products such as machines, devices, tools, and civil engineering structures. A claim to such products is in terms of the elements making up its form. At the beginning of the patent system, no doubt such products were employed mainly in business, but with the rise of mass consumer consumption in the nineteenth and twentieth centuries, consumers came into possession of complex mechanisms,¹³¹ and patented consumer products have invaded the home which had previously been the domain of design and trademark protection.

2.81 It is impossible to analyse patents without considering how inventions function, but it is not generally the case that patents protect ‘function’ per se. A patent usually protects a ‘solution’ that solves a ‘technical problem’ in a particular way. Patent claims are either for products or processes.¹³² A product claim does not necessarily cover all structures that functions in the same way to solve the problem, still less all ways of solving the problem.

(c) *Conclusion*

2.82 The form/function contrast therefore provides an imperfect dividing line between patents and designs. The issue is summarized in the US Manual of Patent Examining Practice (MPEP)

In general terms, a ‘utility patent’ protects the way an article is used and works . . . , while a ‘design patent’ protects the way an article looks . . . Both design and utility patents may be obtained on an article if invention resides both in its utility and ornamental appearance. . . While utility and design patents afford legally separate protection, the utility and ornamentality of an article may not be easily separable. Articles of manufacture may possess both functional and ornamental characteristics.¹³³

(3) *Idea/expression*

2.83 ‘Design right does not therefore protect ideas. Ideas are protected by patent law.’¹³⁴ But is it as simple as that? And does this rather trite proposition of copyright law have any practical value for designs? The UK Courts have repeatedly doubted it.¹³⁵ No doubt patents offer

¹³⁰ Perhaps after the expenditure of considerable skill, labour, and investment.

¹³¹ First watches, then cars, then electrical domestic machines, then consumer electronics.

¹³² G 2/88 MOBIL OIL III/Friction Reducing Additive (Change of Claim Category) [1990] OJ EPO 93.

¹³³ MPEP 1502.01 Distinction Between Design and Utility Patents.

¹³⁴ *Virgin Atlantic Airways Ltd v Premium Aircraft Interiors Group*, [2009] ECDR 11, [2009] EWHC 26 (Pat) at para 25, see also *Red Spider Technology v Omega Completions Technology* [2010] EWHC 59 (Pat) at para 124: ‘The relevant distinction is between real, particular designs on the one hand (which are capable of protection under the section) and ideas on the other’. All UK Unregistered Design Right cases.

¹³⁵ ‘For myself, I find it difficult to determine what that phrase means in the present context’. *Browne-Wilkinson VC, Mirage Studios v Counter-Feat Clothing* [1991] FSR 145; ‘it all depends on what you mean by “ideas”’. *Lord Hailsham of St Marylebone, L.B. (Plastics) Ltd v Swish Products Ltd* [1979] RPC 551 (HL);



E. Patents and Designs—Twins or Antonyms?

protection at a higher level of generality than designs, but it is inaccurate to characterize this as an idea/expression split.

Patents in Europe do not protect all new ideas¹³⁶ indeed, ‘mental acts’ as such are specifically excluded from patentability. Only ideas which are statutory ‘inventions’ and are ‘industrially applied’ are patentable, and these restrictions anchor ideas firmly in the physical realm—the more concrete and the less abstract, the likelier a patent is to be valid. **2.84**

On the other hand, although designs (like anything else) must be reduced to some physical form to be protected, and must be for application to a product, they are based on a new idea that can be separated from the product: *Dover v Nurnberger Celluloid*,¹³⁷ **2.85**

Design means, therefore, a conception or suggestion or idea of a shape or of a picture or of a device or of some arrangement which can be applied to an article . . . It is a conception, suggestion, or idea which is the thing capable of being registered . . . It is a suggestion of form or ornament to be applied to a physical body.

This is generally at a higher level than the precise reproductions filed in a design application—up to a point. Thus, where the originator of a design has someone else prepare detailed drawings, the latter is not the designer. In a case where the originator of a design idea had made sketches and a Chinese collaborator had drawn them up, devised a CAD model and made moulds, the Australian High Court held that, **2.86**

Authorship of a design is in the ‘person whose mind conceives the relevant shape, configuration, pattern or ornamentation applicable to the article in question and reduces it to visible form’.¹³⁸

In similar vein, in *Hoop v Hoop*¹³⁹ two brothers who conceived the concept of eagle-shaped fairing guards for motorcycle handlebars and registered it as a design succeeded against their cousin and his wife, who ‘refined and perfected’ the idea to produce sketches and moulds, and also registered the same—their conception made them the designers.¹⁴⁰ **2.87**

In practice, then, the difference is in kind rather than in degree—both patents and designs involve some kind of idea and some level of expression (or application). The difference is not in the nature of the right but in the person of the reader. Whereas a patent is directed to a reader of skill in the relevant art, who may be able to extract a principle of operation from an exemplary drawing, a design is directed to a lay observer (the ‘informed user’ in Europe,¹⁴¹ the ‘ordinary observer’ in the US¹⁴²) who will generally be much less able, or inclined, to do so.¹⁴³ **2.88**

‘Nevertheless, it needs to be handled with care. What does it mean?’ *Designers Guild Limited v Russell Williams (Textiles) Limited* [2000] 1 WLR 2416, [2001] FSR 11, (HL). All UK design copyright cases.

¹³⁶ The animal chess set would probably not be patentable for example.

¹³⁷ (1910) 27 RPC 498 (CA).

¹³⁸ *Chris Ford Enterprises Pty Ltd v BH & JR Badenhop Pty Ltd* (1985) 7 FCR 75, 80, followed in *LED Technologies Pty Ltd v Elecspeess Pty Ltd* [2008] FCA 1941.

¹³⁹ 279 F 3d 1004 (Fed Cir 2002).

¹⁴⁰ Judge Lourie dissented: ‘Design patents do not claim concepts. They claim specific designs set forth in their claims, which invariably refer to the appearance of what is illustrated in the patent’s drawings. 37 CFR s1.153(a) (2001).’

¹⁴¹ Dir 98/71 Arts 5(1) and 9(1), and corresponding Council Reg 6/2002 Arts 6(1) and 10(1).

¹⁴² Following *Egyptian Goddess, Inc v Swisa, Inc*, 543 F 3d 665, 678–79 (Fed Cir 2008 en banc).

¹⁴³ For the nineteenth century controversy on the interpretation of designs, see Bently and Sherman, n 29.



(4) Words/pictures

- 2.89** Designs must contain pictures, and patents (at least in the mechanical and civil engineering fields) almost always do. Patents must contain a description and a claim,¹⁴⁴ but the amount of text required in a design¹⁴⁵ may be minimal—no more than an indication of the product to which the design is applied¹⁴⁶—although many countries permit¹⁴⁷ (and some require¹⁴⁸) a description, a disclaimer disclaiming part of what is shown,¹⁴⁹ a ‘statement of novelty’ directing attention to the particular features which are novel,¹⁵⁰ or a claim.¹⁵¹
- 2.90** It is therefore not the simple presence or absence of words and pictures which distinguishes patents and designs, but the relationship between the two.
- 2.91** Within a patent, the claims reign supreme.¹⁵² They ‘define the matter for which protection is sought’¹⁵³ and the ‘extent of protection conferred’ is ‘determined by the claims’,¹⁵⁴ the description and drawings being used to interpret them.¹⁵⁵
- 2.92** At one time in the nineteenth century, after claims became mandatory in the US and UK, it was customary for them to refer explicitly to the description and drawings with a ‘substantially as described’ clause, but such ‘omnibus’ claims are now no longer used in US utility patents, and are not generally permitted in EPO practice. Cross-references to the drawings ‘shall not be construed as limiting the claim.’¹⁵⁶ In Commonwealth practice, however, ‘omnibus’ claims¹⁵⁷ are commonplace, and the drawings thus have some role in determining scope.
- 2.93** Originally, in the nineteenth century, it was common for designs to have a statement of novelty much like an omnibus claim. Thus, in *Pugh v Riley*,¹⁵⁸ the statement of novelty read, ‘The novelty consists in the disposition of a tyre rim d in relation to a hub e and in the cross sectional arrangement of the spokes a, b, c.’¹⁵⁹
- 2.94** Currently, however, it is clear in Europe that the pictures are paramount.¹⁶⁰ Whilst an indication of the relevant product is required, and a description may be present, these ‘shall not

¹⁴⁴ Though claims are usually not required on initial filing.

¹⁴⁵ Other than bibliographic data.

¹⁴⁶ And even this is not required on filing in Europe: Council Reg 6/2002 Articles 36(1) and 38.

¹⁴⁷ Council Reg 6/2002 Art 36(3)(a), Hague Agreement Art 5(2)(b)(ii).

¹⁴⁸ China, Bulgaria, and Russia, for instance, and see Hague Agreement Art 5(2)(b)(iii).

¹⁴⁹ Council Reg 6/2002 Art 25(6), UK Registered Designs Act 1949, s 3B(6).

¹⁵⁰ And thus acting essentially as a disclaimer for the others.

¹⁵¹ As in the US.

¹⁵² This has not always been the case. As late as 1968, French patents were not required to include a claim at all.

¹⁵³ EPC Art 84.

¹⁵⁴ EPC Art 6.

¹⁵⁵ The exact extent to which such ‘interpretation’ is permissible was left open when the EPC was drafted, and when it was amended, and is therefore still in doubt.

¹⁵⁶ EPC Rule 43(7).

¹⁵⁷ In the form ‘An electric generator for a cycle, constructed and arranged substantially as herein described, with reference to and as illustrated in the accompanying drawings’—upheld in *Raleigh v Miller*, (1948) 65 RPC 141 (HL).

¹⁵⁸ (1912) 29 RPC 196.

¹⁵⁹ The drawing showed a cross-section, with elements other than a–c shown in dashed lines and the same drawing was used in Pugh’s patent, filed the day before. It was held not to show a particular unique design but an illustration of a method of construction from which an engineer could devise many variants, and the design registration was therefore either not infringed or invalid.

¹⁶⁰ Dir 98/71, Recital 11, see *Procter & Gamble v Reckitt Benckiser* [2007] EWCA Civ 936, [2008] FSR 8, [2008] ECDR 3 (CA).



F. Design Law Exclusions

affect the scope of protection of the design as such.¹⁶¹ The description is intended merely to explain the pictures.¹⁶²

In the US, a description of a design ‘would probably not be intelligible without the illustration’¹⁶³ and thus ‘a patented design is defined by the drawings in the patent’¹⁶⁴ which are of ‘decisive importance’.¹⁶⁵ Although design patents have claims, they are ‘... claimed according to their drawings, and claim construction must be adapted to a pictorial setting’.¹⁶⁶ **2.95**

Thus, from similar beginnings, patents and designs have evolved apart—for patents, the text governs and the pictures explain, and *vice versa* for designs. As designs in Europe include pictures of only one embodiment, they cannot have a broader scope than patents. **2.96**

(5) Broad/narrow

As a result of their different content and addressees, at least in Europe and the US, ‘Design patents have almost no scope.’¹⁶⁷ For functional designs, where common design constraints underlie similarities, ‘A claim to a design containing numerous functional elements ... necessarily mandates a narrow construction.’¹⁶⁸ **2.97**

F. Design Law Exclusions

(1) Functional designs

The principal regulator of the degree of overlap between designs and patents is the functionality exclusion. Unfortunately, however, ‘The concept of function in this area of discourse is not easy to describe in clear terms because it often becomes in the end a philosophical debate, as the reported cases demonstrate.’¹⁶⁹ **2.98**

TRIPS¹⁷⁰ permits (but does not require) that design protection may be denied to ‘designs dictated essentially by technical or functional considerations’. The current European Directive governing national European design laws provides that,¹⁷¹ **2.99**

A design right shall not subsist in features of appearance of a product which are solely dictated by its technical function.

‘Function’ here means what European design law refers to as the ‘technical function’ of a product,¹⁷² or what the Privy Council referred to¹⁷³ under the former UK law as ‘what the **2.100**

¹⁶¹ Council Reg 6/2002 Art 36(6).

¹⁶² Community Design Implementing Regulation (‘CDIR’) 2245/2002 [2002] OJ L341/28 Art 2.

¹⁶³ *Dobson v Dorman*, 118 US 10, 14 (1886).

¹⁶⁴ *Door-Master Corp v Yorktowne Inc* 256 F 3d (Fed Cir 2001).

¹⁶⁵ *Richardson v Stanley Works Inc* 597 F 3d 1288, 1294 (Fed Cir 2010).

¹⁶⁶ *Crocs Inc v ITC* 598 F 3d 1294 [2010] WL 638272 (Fed Cir 2010).

¹⁶⁷ *Re Mann*, 861 F 2d 1581, 1582 (Fed Cir 1988).

¹⁶⁸ *Richardson v Stanley Works Inc* 597 F 3d 1288, 1294 (Fed Cir 2010), following *OddzOn Prods., Inc. v Just Toys, Inc.*, 122 F 3d 1396, 1456 (Fed Cir 1998 en banc).

¹⁶⁹ Lockhart J in *Hosokawa Micron International Inc v Fortune* (1990) 26 FCR 393; 97 ALR 615; 19 IPR 531; [1991] AIPC 37, 226.

¹⁷⁰ Trade Related Intellectual Property Rights Agreement (TRIPS) 1994, Art 25(1).

¹⁷¹ Dir 98/71 Art 7(1) and equivalent Council Reg 6/2002 Art 8(1).

¹⁷² Dir 98/71 Art 7(1) and equivalent Council Reg 6/2002 Art 8(1).

¹⁷³ *Interlego A.G. v Tyco International Inc*, [1988] RPC 343 PC at 357.



article is intended mechanically to do.’ In the case where shape is inseparable from function, almost all design registration schemes withhold protection.¹⁷⁴

(2) Reasons for exclusion of functional designs

- 2.101** Some¹⁷⁵ suggest that the European exclusion merely re-enacts the former French patentability exclusion. The Recitals, however, indicate that its purpose is that ‘technological innovation should not be hampered’.¹⁷⁶
- 2.102** That would only occur where a design monopolized or pre-empted a technical innovation. The ‘technology’ involved in most designs is the simplest of mechanical engineering, which is often not patentable. High-technology products (computers, mobile phones) are often protected by design, but merely in their externals, not the innovative electronics or software which drive them.
- 2.103** The US functionality test developed from a different source—as a sub-test for absence of ornamental character.¹⁷⁷ However, influenced by trade dress law, it is nowadays often applied as a defence to infringement to ensure freedom to compete in the market.

(3) The ‘multiplicity of forms’ sub-test

- 2.104** Freedom to compete is absent in the rare case where the function of a product can only be performed by a single shape. According to the ‘multiplicity of forms’ test, in all other cases, ‘A design is not dictated solely by its function when alternative designs for the article of manufacture are available.’¹⁷⁸ This test is and has been used in many countries. The competition law rationale was well expressed by the Israeli Supreme Court,¹⁷⁹

... when there are also other designs that achieve the useful objective, it cannot be said that the design is dictated only by the function, and there is no overlap between the delineations of design registrations and utility patents, because another person can create his own object that performs the same function with the same effectiveness by changing the form without having the design registration stand in his way.

- 2.105** The enduring popularity of this test is due to the fact that it is:
- Focused on the situation where a design can become anticompetitive because there is no market alternative to fulfil the same function in the same way; and
 - Objective, not subjective.

¹⁷⁴ As the new European design law does by virtue of Dir 98/71 Art 7(1) and corresponding Council Reg 6/2002 Art 8(1), and as the UK has for registered designs, but not unregistered designs or copyright, since the end of ‘utility designs’, already discussed. The former Scandinavian law contained no functionality exclusion, and authority was divided on whether the older Australian law did so.

¹⁷⁵ For example Cohen, see n 21 at 23.

¹⁷⁶ Dir 98/71 Recital 14, Council Reg 6/2002 Recital 10.

¹⁷⁷ ‘... it has long been settled that when a configuration is the result of functional considerations only, the resulting design is not patentable as an ornamental design for the simple reason that it is not “ornamental”—was not created for the purpose of ornamenting.’ *Re Carletti* 328 F 2d 1020, 1022 (1964), followed in *Best Lock Corp v Ilco Unican Corp* 94 F 3d 1563 (Fed Cir 1996).

¹⁷⁸ *Best Lock Corp v Ilco Unican Corp* 94 F 3d 1563 (Fed Cir 1996), citing *LA Gear Inc v Thom McAn Shoe Co* 988 F 2d 1117, 1123 (Fed Cir 1993),

¹⁷⁹ *A.A. Sharnoa Ltd. v Seren Meubador Industries Ltd N. Tnuva*, Court decision 22(1)113, English summary by Reuben Berman, downloaded on 6 June 2011 from <www.epal.org.il/140010/IL-Design-Practice> last visited 27 February 2012.

It was extensively used in the UK in the late nineteenth and early twentieth centuries, until decisively terminated by *AMP v Utilux*¹⁸⁰ in 1971. The Australian courts followed the same approach until recent amendments to their design statute,¹⁸¹ and it was in the past employed elsewhere in Europe.¹⁸² **2.106**

Under the new European design law, the Advocate-General of the CJ¹⁸³ held multiplicity of forms to be the correct approach, and German,¹⁸⁴ Spanish, and UK Courts¹⁸⁵ followed—unlike those of the Netherlands¹⁸⁶ or, recently, France.¹⁸⁷ **2.107**

In the US, the multiplicity of forms test is always relevant, and some courts have treated it as dispositive,¹⁸⁸ but its precise status nowadays is unclear—it may now merely be one of several indicative sub-tests.¹⁸⁹ **2.108**

A criticism is that it would apply only in a few, if any, circumstances, so that the scope of the exclusion ‘would be reduced almost to vanishing point’.¹⁹⁰ But this is not a principled objection. Some are attracted to the notion that exclusions have to be ‘given teeth’ by broad interpretation, but exclusions are sometimes included for declaratory or normative purposes,¹⁹¹ or to deal with situations which, although rare, are important.¹⁹² **2.109**

The mating shapes of a lock and corresponding key are often given as an example where the multiplicity of forms test would bite—the key can only be the shape it is if it is to turn the lock. This was the fact-pattern considered in *Best Lock v Ilco Unican*¹⁹³ where the design patent concerned was held invalid—though the dissenting judgment suggests that even this was not an open-and-shut case.¹⁹⁴ **2.110**

¹⁸⁰ [1972] RPC 103 (HL).

¹⁸¹ *Hosokawa Micron International Inc v Fortune* (1990) 26 FCR 393; 97 ALR 615; 19 IPR 531; [1991] AIPC 37, 226.

¹⁸² See Suthersanen, n 44 at 12-064, 12-018 for Belgium, 13-022-13-031, 13-110 for France.

¹⁸³ Case C-299/99 *Philips v Remington* Opinion of Advocate-General Colomer, [2001] RPC 38, [2001] ETMR 48 [2002] ECR I-5475 at [34].

¹⁸⁴ See, for instance, Stuttgart Appeal Court, decision of 30 April 2008; Dusseldorf District Court, 16 July 2008 email from Henning Hartwig to the author, 22 June 2011.

¹⁸⁵ *Landor & Hawa v Azure* [2006] EWCA Civ 1285 [2006] ECDR 31 (CA) followed the AGO’s Opinion but in *Dyson v Vax* [2010] FSR 39, [2010] EWHC 1923 (Pat), [2010] ECDR 18 this was said to be *obiter* and not followed.

¹⁸⁶ *Synergys v Geba*, s’Hertogenbosch Court of Appeal, 4 November 2003 (BIE 2004, 44).

¹⁸⁷ Cohen, see n 21 and the discussion in OHIM Board of Appeal Case R 690/2007-3 *Chaff Cutters Lindner Recyclingtech GmbH v Franssons Verkstader AB* [2010] ECDR 1.

¹⁸⁸ *Best Lock Corp v Ilco Unican Corp* 94 F 3d 1563 (Fed Cir 1996), citing *LA Gear Inc v Thom McAn Shoe Co.* 988 F 2d 1117, 1123 (Fed Cir 1993).

¹⁸⁹ For example, *Rosco v Mirror Lite* 304 F 3d 1373, 1378 (Fed Cir 2002), but it may be a ‘very persuasive rationale’, *Avia v LA Gear* 7 USPQ 2d 1548, 1533 (Fed Cir 1988).

¹⁹⁰ Because ‘... it is difficult to imagine any actual case where one shape and one shape alone will work’, Lord Reid in *Amp Incorporated v Utilux Proprietary Limited* [1972] RPC 103 at 109. See also R 690/2007-3 *Chaff Cutters Lindner Recyclingtech GmbH v Franssons Verkstader AB* [2010] ECDR 1, para 30 ‘highly exceptional circumstances’.

¹⁹¹ Especially those of European law, drafted by conciliatory compromise between competing committees.

¹⁹² The European functionality exclusion was indeed intended to apply only in ‘those extremely rare cases where form follows function’ (Memorandum accompanying amended Draft Directive).

¹⁹³ *Best Lock Corp v Ilco Unican Corp* 94 F 3d 1563 (Fed Cir 1996).

¹⁹⁴ On the basis that there were many different lock-and-key combinations. Lord Reid also doubted that it was truly a single shape situation—*Amp v Utilux*, see n 190 at 109.

- 2.111** Similar facts confronted the UK House of Lords in *Stenor v Whitesides*,¹⁹⁵ which concerned an interfitting fuse, where a corresponding patent indicated that ‘the correct fuse will therefore constitute a kind of key for operating the switch mechanism, which cannot be operated by an incorrect key.’ Unsurprisingly, it was held invalid.¹⁹⁶
- 2.112** Sensibly viewed, the multiplicity of forms test can come into play more widely.¹⁹⁷ The simpler the design, and the greater the technical constraints, the narrower the range of shapes which will do the job.

(4) *Kestos v Kempat*

- 2.113** The origin of the ‘dictated by function’ test in UK law was *Kestos v Kempat & Kemp*,¹⁹⁸ in which the judge adopted a phrase from Counsel’s submissions, ‘A mere mechanical device¹⁹⁹ is a shape in which all the features are dictated solely by the function or functions which the article has to perform’, and it was adopted into the Statute in 1949 (regrettably, according to *Amp v Utilux*). *Kestos* concerned a bra, covered both by the asserted design and by a parallel patent. Although it refers to an earlier case which had found the ‘multiplicity of forms’ test inadequate, the decision in *Kestos* (finding the design valid but not infringed) clearly used that test,

Figure 1 of the drawings attached to the Specification is substantially identical with the drawing which is the subject of the registered Design. It is true that the Specification [of the patent] is directed to the particular functions which it is claimed that a brassiere, made in accordance with the invention as therein described and as shown in Figure 1, performs. It is, I think, impossible to suggest that all brassieres must necessarily be made substantially in accordance with Figure 1 and in my judgment the registered Design cannot properly be said to cover a mere mechanical device or a mode or principle of construction within the meaning to be attributed to those phrases . . . [ie all features solely dictated by function].²⁰⁰

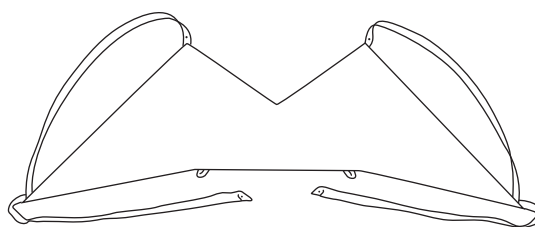


Figure 2.7 *Kestos v Kempat & Kemp*

¹⁹⁵ *Stenor Ltd v Whitesides (Clitheroe) Ltd*, (1948) 65 RPC 1 (HL).

¹⁹⁶ As being a ‘mere mechanical device’—the then-prevailing exclusion.

¹⁹⁷ *Hosokawa Micron International Inc v Fortune* (1990) 26 FCR 393; 97 ALR 615; 19 IPR 531; [1991] AIPC 37, 226 Gummow J. dissenting.

¹⁹⁸ (1936) 53 RPC 139.

¹⁹⁹ The relevant exclusion in the 1919 Act.

²⁰⁰ *Kestos* (1936) 53 RPC 139 at 152.

Claims:

1. A bust support consisting essentially of two breast pockets, a girdle running horizontally below the breasts and wholly or partially integral with the pockets, two shoulder straps, each of which is attached to the top of the corresponding pocket, passes substantially vertically over that shoulder directly above the pocket and is attached at its other end to the girdle, and two bands, preferably elastic, which are connected to the upper edges of each of the two breast pockets and cross over each other freely in the hollow of the chest, substantially as described.

6. A bust support constructed substantially as described with reference to the accompanying drawings.

(5) ‘Multiplicity of forms’—refinements

Some consider the multiplicity of forms test too generous, on the basis (unlikely in practice) that where a small number of discrete forms are available, registering them all would create a monopoly in the function.²⁰¹ **2.114**

Problems arise where the alternatives are impractical or less advantageous—if a design monopolizes the optimum shape for a given function, there is inevitably a cost to competitors in avoiding it. US courts have adapted the multiplicity of forms analysis to take account of these issues. For example, in *PHG v St John*²⁰² (design patents for medical patient identification label sheets, claiming priority from a utility patent application), the Court considered that not all alternatives were commercially realistic. A full multiplicity of forms investigation involved determining (*inter alia*) whether: **2.115**

- the ‘protected design represents the best design’, and
- ‘alternative designs would adversely affect the utility of the specified article’.

(6) Subjective tests—designer’s intention, user’s impression

By way of contrast, rather than adapting the multiplicity of forms test, the UK courts abandoned it altogether. **2.116**

(7) Designer’s intention

In *Amp v Utilux*,²⁰³ a set of concurring but disparate judgments on the design of an electrical connector,²⁰⁴ the House of Lords decided that ‘dictated’ meant, ‘driven by’—the question was whether no other motivation than function was present, rather than whether no other shape was possible. **2.117**

²⁰¹ See *Tecalemit Limited v Ewarts Limited (No 2)* (1927) 44 RPC 503 and *Infields v Rosen* (1939) 56 RPC 163—both wrong on the facts, in the view of the present writer.

²⁰² *PHG Technologies LLC v St John Companies Inc.* 469 F 3d 1361 (Fed Cir 2006), following *Berry Sterling v Pescor Plastics* 122 F 3d 1452, 1455 (Fed Cir 1997). Dinwoodie and Janis, see n 19, comments that these cases restate the trade dress formulation from *Re Morton-Norwich Products, Inc* 671 F 2d 1332 (CCPA 1982).

²⁰³ *Amp Incorporated v Utilux Proprietary Limited* [1972] RPC 103.

²⁰⁴ See *Interlego A.G. v Tyco International Inc.*, [1988] RPC 343 (HL), a few years later, in which the House of Lords in its guise as the Privy Council commented that ‘That is a decision which has given rise to a little difficulty because the views expressed by the Lords who composed the Committee in that case do not altogether coincide . . .’

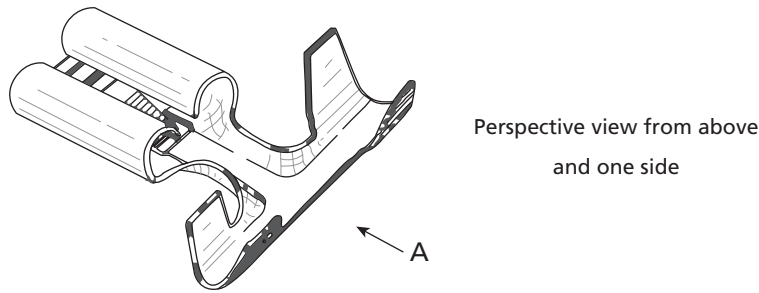


Figure 2.8 *Amp v Utilux*

2.118 The designer conveniently conceded that he had only considered function, and the design was duly invalidated. However, in general application, that approach does raise some obvious problems:

- It is not transparent—the designer’s motivation is private;
- Cross-examination of the designer is not always available;
- Designers may unintentionally create something attractive to a consumer, which should be protected;²⁰⁵
- Even the best or only possible shape could be protected where there was some intention to create a striking appearance (whereas it would be rejected by the multiplicity of forms test).

(8) User’s conception of designer’s intention

2.119 These drawbacks (together with the inconvenient fact that the designer swore he had aesthetic considerations in mind) led OHIM²⁰⁶ to view the question through the eyes of the user,

It goes without saying that these matters must be assessed objectively: it is not necessary to determine what actually went on in the designer’s mind when the design was being developed. The matter must be assessed from the standpoint of a reasonable observer who looks at the design and asks himself whether anything other than purely functional considerations could have been relevant when a specific feature was chosen.

2.120 But this question, whether the *tribunal* would think the *observer* would think the *designer* was functionally motivated, is a long way from the underlying question whether the design actually is functional—it struggles to bear the weight of a double load of legal fiction.

2.121 It is more likely to break down where an article is both functional and aesthetic—a user seeing an attractive design will not discern any associated technical function (unless his habits include reading parallel patents). For example, in *Cow v Cannon*,²⁰⁷ the design involved diagonal ridges on a plastic hot water bottle. It was held that although the ribs had a function in preventing the user’s feet from being burnt, the evidence did not show that this was the

²⁰⁵ As recognized by Lord Reid in *Amp v Utilux*, but see, *per contra*, rejecting the design under the multiplicity-of-forms test, *Best Lock Corp. v Ilico Unican Corp.*: ‘Any aesthetic appeal of the key blade design . . . is the inevitable result of having a shape that is dictated solely by functional concerns.’

²⁰⁶ OHIM Board of Appeal Case R 690/2007-3 Chaff Cutters *Lindner Recyclingtech GmbH v Franssons Verkstader AB* [2010] ECDR 1, approved in *Dyson v Vax* [2010] FSR 39, [2010] EWHC 1923 (Pat), [2010] ECDR 18.

²⁰⁷ *PB Cow & Co v Cannon Rubber Manufacturers (No 1)* [1959] RPC 947 (CA).

sole reason why the particular configuration concerned had been adopted, and others were possible. Thus, features with two purposes, functional and non-functional, could be protected by design. Presumably, the *designer* had given thought to the issue of heat dissipation, but it is likely that the *user* would (incorrectly) have seen the pattern of ribs on a cheap consumer product as purely ornamental.

It may be unrealistic nowadays to imagine that users separate ‘ornamental’ from ‘functional’ appearances. Many designers, since the Bauhaus, have made a virtue of merging rather than separating form and function.²⁰⁸ **2.122**

Part of the appeal of a useful product is the promise of good performance,²⁰⁹ and products which are fit for purpose are often also attractive—perhaps all attractiveness, whether in things, animals, or people, does no more than reflect fitness for some purpose. A user confronted with what appears to be a functional design may be attracted to it *because* it appears functional—whether or not it actually is so. Functional appearance itself may, for some users, be no more than a fashion statement.²¹⁰ The aesthetic of merged function and form, the aesthetic of form as promise of functional performance, the aesthetic of unnecessary function as ornament, are poorly dealt with by current judicial approaches. **2.123**



Figure 2.9 *Cow v Cannon*

²⁰⁸ See, for example, Dinwoodie and Janis, n 19 at 13, Suthersanen, n 44 at 12.

²⁰⁹ ‘But a terminal will appeal to the eye of an electrician only if he thinks it best for his purpose. It is its suitability for its function that will determine his choice . . .’ *Amp v Utilux*, per Viscount Dilhorne.

²¹⁰ Denim jeans, combat-chic camouflage wear, motorbike jackets, and Doctor Martens boots; and leisure vehicles based on military models, for example.

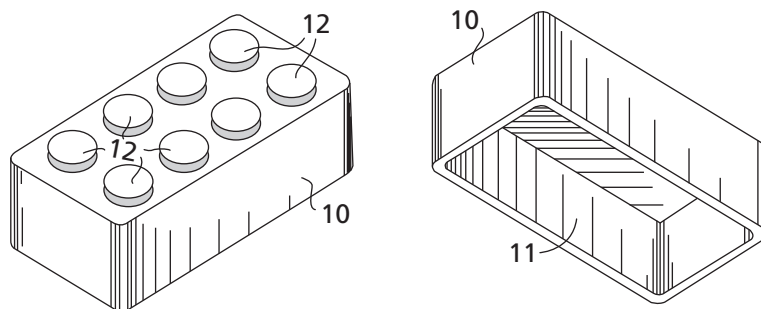


Figure 2.10 Lego patent GB 587206

- 2.124** The LegoTM litigation illustrates the difficulty. After the basic patents expired, the UK Privy Council²¹¹ held that the design of the LegoTM toy building brick had eye appeal and was registrable—virtually an inevitable conclusion for a child’s plaything, one might think, but when considering and rejecting a much later trademark application, OHIM came to the opposite conclusion, holding that the brick was entirely functional. Even though it had eye appeal, this was merely ‘ . . . the aesthetics of a sound structural and functional form.’²¹²

(9) Nature of the product

- 2.125** Most decisions on functionality can be rationalized on the nature of the product (and hence the user or buyer) rather than the design. It is surely arguable that the ‘function’ of the bra in *Kestos* was partly aesthetic—as for any article of clothing.²¹³ *Wingate’s Registered Design*²¹⁴ concerned a pair of spectacles protected by patent and design—it was held that the design was not excluded as functional and lacking in eye appeal, largely, it seems, because of the nature of the product itself. Per *Interlego AG v Tyco International*,²¹⁵

. . . it makes no sense to exclude from protection designs for articles which have—and indeed may be intended to have as their principal attraction—a distinctive and novel appearance merely because they also contain features . . . which are dictated by the functional requirements.

- 2.126** A design for a consumer product where ‘aesthetic considerations’ are ‘normally taken into account to a material extent’²¹⁶ by the buyer or user may have functional parts, but unless these are the only points of novelty, the design as a whole will almost always be protectable without the need for further enquiry.
- 2.127** The situation where the product is not of this nature—for example, the internal component part of *Amp v Utilux*—is more difficult. For the US,²¹⁷ ‘The design for the article cannot be

²¹¹ *Interlego A.G. v Tyco International Inc*, [1988] All ER 949; [1988] RPC 343 (HL).

²¹² *Lego Juris AIS v Mega Brands Inc* (R 856/2004-G) [2007] ETMR 11 OHIM (Grand Board of Appeal) at para 63.

²¹³ Strangely, in the US, clothing and footwear is seen as generally functional; see, eg, *Avia Group International Inc v L. A. Gear California Inc*, 853 F 2d 1557, 1563, 7 USPQ 2d 1548, 1553 (Fed Cir 1988).

²¹⁴ (1935) 52 RPC 126.

²¹⁵ [1988] RPC 343 at 354.

²¹⁶ To quote the exclusion adopted in the UK between 1989 and 2001 as the Registered Designs Act 1949, s 1(3).

²¹⁷ MPEP 1504.01(c) Lack of Ornamentality [R-5] - 1500 Design Patents, 1. FUNCTIONALITY VS. ORNAMENTALITY, citing *Avia Group International Inc. v L. A. Gear California Inc*, 853 F 2d 1557, 1563, 7 USPQ 2d 1548, 1553 (Fed Cir 1988), concerning footwear.

assumed to lack ornamentality merely because the article of manufacture would seem to be primarily functional.’ Nonetheless, the onus of proof is usually on the applicant to show the contrary.

(10) Visibility

An issue raised by, but not argued in, *Kestos v Kempat* is the fact that the bra is not visible in normal use (ie, wear). Although visibility is not per se relevant to patentable inventions, in practice many patented mechanisms (automobile engines for example) will in normal use be hidden from view for a range of reasons including aesthetics, safety, aerodynamics, or protection against dust. **2.128**

The components in *Amp v Utilux* were ‘unseen in the machines for which they were required (save by those who make or service the machines)’. Non-visibility was thus relevant to the findings that the design was functional and lacked ‘eye appeal’, as evidence that no one cared about the form or appearance of the product. **2.129**

Visibility alone is, however, an inadequate test. Articles may be bought, used, and appreciated in many different ways. As noted above, few would claim that the appearance of undergarments (as in *Kestos*) is irrelevant. For example, in *Ferrero’s Application*²¹⁸ in the UK, the interior of a chocolate egg was initially rejected as being not visible at point of purchase but upheld on appeal as being visible at point of end use, and in *Re Webb*²¹⁹ in the US, a hip prosthesis, initially rejected as being not visible at point of end use, was upheld on appeal as being visible on purchase. **2.130**

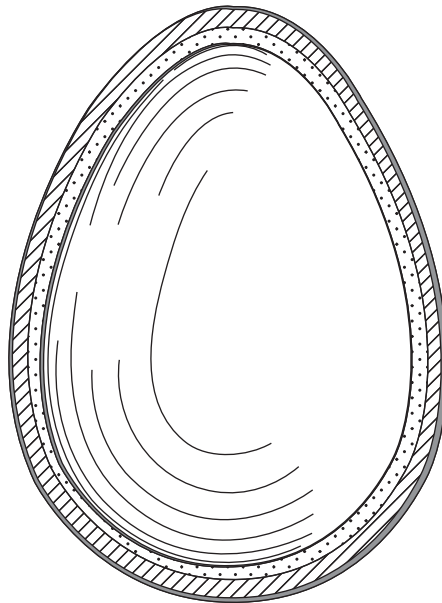


Figure 2.11 *Ferrero’s Application*

²¹⁸ [1978] RPC 473 RDAT.

²¹⁹ 916 F 2d 1553 (Fed Cir 1990).

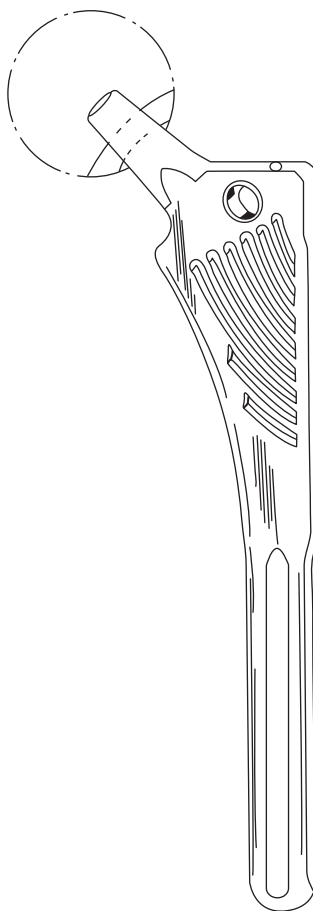


Figure 2.12 *Re Webb*

2.131 The current European design law has a narrow statutory exclusion for designs which are not visible in normal end use²²⁰ but only for designs of ‘component parts’²²¹ (despite the views of some French commentators²²²) such as the connector in *Amp v Utilux*. In the US, non-visibility is ‘a sound rule of thumb’ for refusal, but rebuttable.²²³

(11) ‘Must-fit’

2.132 Lock-and-key interfitting designs were statutorily excluded in the UK by 1989 provisions,²²⁴ carried over almost verbatim into the current European design law,²²⁵ known universally, though inaccurately, as the ‘must-fit’ exclusion. *Best Lock* and *Stenor v Whitesides* could

²²⁰ Council Reg 6/2002 Art 4(2) and (3) and corresponding Dir 98/71 Art 3(3) and (4).

²²¹ See D. Musker, ‘Hidden Meaning? UK Perspectives on Invisible in Use Designs’, [2003] 25 EIPR 450.

²²² P. Du Candé, ‘La Directive No 98/71 CE du 13 Octobre 1998 du Parlement et du Conseil sur la protection juridique des dessins et modèles’, D. Aff No 143, 7 January 1999 10–15, for example.

²²³ MPEP 1504.01(c) Lack of Ornamentality, III. REJECTIONS MADE UNDER 35 USC 171.

²²⁴ Copyright, Designs and Patents Act 1988, s 213(3)(b)(i).

²²⁵ Dir 98/71 Art 7(2) and corresponding Council Reg 6/2002 Art 8(2).

nowadays have been excluded on this basis, as could the designs featured in several other UK functionality cases.²²⁶

(12) Method or principle of construction

The exclusion of ‘methods or principles of construction’ from UK unregistered design right formerly applied also to registered designs.²²⁷ It bites on those designs which are inseparable from their method of manufacture, in two rather different ways. **2.133**

Firstly, it prevents the expansion of scope of a design registration to protect a principle that could be expressed in several different shapes. It therefore operates against applicants who file design applications which are generic to several different shapes,²²⁸ and against those who frame their assertions of infringement at too high a level of abstraction,²²⁹ duplicating, rather than merely overlapping, the scope of patents: *Bayer’s Design*.²³⁰ **2.134**

The exclusion also operates in a second way, related not to the level of abstraction with which the design is described or claimed but to the level of specificity of its method of manufacture. Occasionally, the appearance of a product is the unique result of a particular manufacturing process, in the sense that operating that process will always produce that appearance. Granting protection to the only possible product of the process therefore monopolizes the process. That was held to be the case in *Bailey v Haynes*,²³¹ where a particular mesh used for a fishing net was the inevitable result of the ‘three needle/two course Atlas warp knit pattern’ and hence invalid. Something similar appears to be one of the factors underlying the decision in *Moody v Tree*.²³² **2.135**

G. The Circular Beach Towel Revisited

It will hopefully now be apparent that there is no per se bar to coexistence of patents and designs, that Claim 2 of your patent is not invalid as purely aesthetic, and that the existence of the parallel design poses no threat to the patent. **2.136**

Is the reverse also true? The product concerned is used to dry, and to lie on. The circular design does not monopolize these primary functions—there is no separate market in circular beach towels. It is used openly, so appearance is not irrelevant. It is probably bought partly for aesthetic reasons, as a poncho, or perhaps simply to look striking amidst a beachful of rectangles. The granted patent is no guarantee that every feature of every claim meets all the requirements for patentability. The ‘technical’ advantage attributed to the shape in the patent may just be patent attorney’s puffery or pipedreams. **2.137**

²²⁶ *Vandervell v Lundberg* (1915) 33 RPC 60, and *Tecalemit Limited v Ewatts Limited (No 2)* (1927) 44 RPC 503 for example.

²²⁷ And still widely used in other countries.

²²⁸ Either because incompletely portrayed as in *Bayer*, or because of broadening text as in *Pugh v Riley*.

²²⁹ See *Landor v Hawa International* [2007] FSR 181, [2006] ECDR 31, and the various authorities cited therein.

²³⁰ (1908) 25 RPC 56 (HL) Lord MacNaghten at 59–60.

²³¹ [2006] EWPCC 5, [2007] FSR 1.

²³² (1892) 9 RPC 333, concerning the design of the pattern of a basket, but with a more generic written statement requiring the osiers to be worked in singly with all the butt ends being outwards.

- 2.138** The patent does highlight the fact that, whilst a circle is not the only shape that avoids having to stand up and move around with the sun, it is the most economical in terms of material (when compared with, say, a big square towel) and is hence, in this sense, technically the 'best' design. This advantage requires the circular shape, even if it is also aesthetically pleasing.
- 2.139** But isn't the material saved (from the cut-off corners) in a useless shape? And isn't the round towel more difficult to make than a square one? Cannot an economic disadvantage offset a functional advantage?
- 2.140** Although the court in *Franek v Franco*, on which this scenario is based, found the trade dress concerned to be functional and therefore invalid, it is not certain that the same economic analysis should underlie design law. Should the presence of some technical advantage (if facilitating indolence can really be said to be such a thing) trump the presence of eye appeal, merely because a competitor might want to offer something similar? Until some court gets around to deciding these circular arguments, there is no clear answer.