TECHNICAL FUNCTIONALITY
Ilanah Fhima*

1. Introduction

Functionality¹ plays a vital role in maintaining competition within the trade mark system by preventing the registration as trade marks of characteristics of goods that other traders need access to in order to compete. This is particularly important given that any feature of a product,² including its shape or that of its packaging, its colour, scent, flavour or even the way in which it moves could, in principle,³ be registered as a trade mark in Europe. Without a functionality exclusion, the risk is that a trade mark registration would deliver exclusive rights in how a product works, or in other product features which consumers value, into the hands of a single undertaking and for an unlimited duration. Functionality is also the point at which trade mark law meets with patent, copyright and design law with their finite terms of protection and their different conceptions of what should be within the public domain.

The EU functionality provisions prevent the registration of signs which result from the nature of the goods for which registration is sought,⁴ which are necessary to achieve a technical result,⁵ or which otherwise give substantial value to those goods.⁶ The importance of the interests underlying these provisions is recognised by the fact that, unlike many of the absolute grounds for the refusal of registration, an objection under Art.7(1)(e) of the European Trade Mark Regulation (EUTMR) cannot be overcome by proof that the mark has acquired distinctiveness i.e. that consumers as a matter of fact recognise it as a trade mark that indicates the origin of goods. Yet, despite its key role in the European

---

¹ "Functionality" is technically a US term and does not appear in the EU legislation, but as the authors note in Lionel Bently, Brad Sherman et al., *Intellectual Property Law*, 5th Edition (Oxford, Oxford University Press, 2018) at p.959, the provision “plays a similar role to that played in US trade mark law by the doctrines of ‘mechanical functionality’ and ‘aesthetic functionality’.”

² See Art.4 EUTMR.

³ Though in practice there are difficulties in reducing certain types of marks to a clear and precise representation as required by Art.4(b) EUTMR.


⁵ Art.7(1)(e)(ii) EUTMR; Art.4(1)(e)(ii) EUTMD.

⁶ Art.7(1)(e)(iii) EUTMR; Art.4(1)(e)(iii) EUTMD.
trade mark system, the provision has been subject to little analysis. There are a handful of cases delimiting the doctrine and there is very little academic commentary in Europe on the policies that underlie functionality. In this article, I identify the policies behind technical functionality in particular, and consider how these have influenced its scope. I also examine how other interests have shaped the provision, such as those of trade mark owners in protecting their investment and of consumers in not being confused by functional but distinctive marks, and identify how these other interests are threatening to swamp the core interests underlying the technical functionality exclusion.

Part 2 considers the mainly US literature on conflicting policies behind functionality of channelling all functional product characteristics into patent law versus only preventing signs from being protected if there are no equally good alternatives available for competitors to use. Parts 3 and 4 consider whether the same conflicting policies are present in Europe as a key to determining the scope of the EU technical functionality exclusion. I find that they are not, and that the CJEU has consistently justified functionality as a measure to ensure that technical features are channelled into patent law rather than into the trade mark system. However, in Part 5, I examine how a mark will only be excluded from registration (or subject to an invalidity action) if it consists exclusively of a shape, or another characteristic, which is necessary to achieve a technical result. I argue that the term “exclusively” has been interpreted to allow too many “hybrid” signs (those which combine functional and non-functional features) to escape the exclusion and proceed to registration. This undermines the “channelling” policy behind the “necessary to achieve a technical result” element of the exclusion. Further, I explain in Part 6 that this undermining is compounded because, courts are willing to find likelihood of confusion in infringement or invalidity actions in instances in which similarity is based upon reproduction of the functional feature/s alone, without the non-functional characteristic that secured its protection. Part 7 concludes with suggestions for how the channelling policy and its inherent protection of public domain can be restored to its central position.

2. Conflicting Functionality Policies in the Academic Literature

There is relatively little written about technical functionality in the EU. However, the sometimes conflicting policies underlying technical functionality in the US (or utilitarian functionality as it is known there) have been examined most recently in two significant pieces by Mark McKenna and

---


8 Although the tensions they describe have been present for many years – see, e.g., Graeme Dinwoodie, “The Death of Ontology: A Teleological Approach to Trademark Law” (1999) 84 Iowa Law Review 611.
Robert Bone. The key question addressed by those scholars is whether a sign is only barred from protection on functionality grounds if there are no alternative ways of achieving the same technical result.

To understand the US literature on functionality, one needs to consider the recent landmark jurisprudence and the underlying functionality provisions. Section 2(e)(5) of the US Trademark Act (“the Lanham Act”) bars from registration any mark which “comprises any matter that, as a whole, is functional.” A mark which is functional is also liable to be cancelled under s.14(3). The functionality of the protected mark is also a defence to infringement. The functionality exclusion has its roots in unfair competition law, and was employed by courts in the US for many years before it was codified in the Lanham Act in 1988. US functionality is seen as having two subsets: utilitarian functionality and aesthetic functionality. Utilitarian functionality occurs when a product feature “is essential to the use or purpose of the device or when it affects the cost or quality of the device.”

Aesthetic functionality remains more controversial, and addresses the concern that there may be a competitive need to access aesthetic features that may otherwise be protected as a trade mark. This article focusses on utilitarian functionality, which broadly corresponds with technical functionality in the EU. Historically, aesthetic functionality has played a role in shaping US technical functionality, and indeed, some argue that aesthetic and technical functionality are part of the same continuum. Until recently though, the same interplay has not been seen in Europe, and so I will focus on technical functionality. However, since the CJEU has now ruled in Hauck that the ‘substantial value’ exclusion also applies to value from functional features, there is scope for future research which examines potential EU lessons to be learnt from how US aesthetic and technical functionality have influenced each other.

TrafFix, concerned a road sign including a two-spring mounting which helped it to stay upright in the wind. A US utility patent for the mechanism had already expired. There were numerous ways to construct wind-resistant signs, but the Supreme Court found that competitive need is not the key consideration in utilitarian functionality cases, and labelled the availability of alternatives as irrelevant.

---

9 Mark McKenna, “(Dys)Functionality” (2011) 48(4) Houston Law Review 823 and Robert Bone, “Trademark Functionality Reexamined” (2015) 7(1) Journal of Legal Analysis 183. Although it should be remembered that the US has somewhat different functionality provisions and a different legal and constitution background.


15 Number 3,646,696.
(Indeed, in many cases involving “patent-type” subject-matter, an alternative will be available in prior-art devices or subsequent improvements.) Instead, functionality according to this Supreme Court ruling is intended to “police the boundary between trademark and patent law by channelling protection of useful product features exclusively to the patent system.” This is because patents provide broad monopoly protection, but only for an invention that is novel and non-obvious and, unlike trade mark protection, only for 20 years. Patent law’s goal is to incentivise the development and disclosure of inventions in return for a fixed term of protection. Its ultimate aim is to keep pre-existing and/or obvious technical developments in the public domain.

The TrafFix decision seemed to mark a departure from the previously prevailing competition-based approach, where courts considered whether third parties needed access to the product feature in question in order to compete effectively with the trade mark holder. This required consideration not only the utility of the sign, but also whether alternative design options were available.

Morton-Norwich is the most prominent and influential adumbration in the US. The case concerned the somewhat ordinary shape of a spray container. There the Court of Customs and Patent Appeals (“CCPA”) found that the container could have “an infinite variety of forms or designs and still function to hold liquid.” The court observed that: “Since the effect upon competition ‘is really the crux of the matter’, it is, of course, significant that there are other alternatives available.”

TrafFix cast significant doubt as to the relevance of alternatives in functionality evaluations. Yet some Circuits continued to apply the Morton-Norwich test. Thus, some courts are considering alternatives when considering functionality while others were not. In order to understand this inconsistency, both Mark McKenna and Robert Bone have sought to identify the policies behind the functionality doctrine.

17 See e.g. Article 1, Section 8, Clause 8 of the US Constitution which empowers Congress to “promote the Progress of Science and useful Arts by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”
19 In re Morton-Norwich Products, Inc., 671 F 2d 1332 (CCPA 1982).
20 The CCPA used to hear appeals from the decisions of the US Patent & Trademark Office, a role now undertaken by the Court of Appeals for the Federal Circuit.
21 In re Morton-Norwich Products, Inc., 671 F 2d 1332 (CCPA 1982), 1341.
22 E.g. Bodum v A Top Casting 927 F.3d 486, 493 (7th Cir. 2019). See further the cases in Bone, “Functionality Reexamined” at n.106. Another stance is that consideration of alternatives, while not negating functionality per se, is necessary to evaluate whether that product feature is ‘essential’ to the use or purpose of the article, as per the Inwood test, see e.g. Valu Engineering, Inc v Rexnord Corp. 278 F.3d 1268 (Fed. Cir. 2002).
2.1 McKenna

McKenna has identified two policies underlying US decisions on technical functionality: (1) As a mechanism for insuring access for competitors to competitively necessary product features; and (2) as a means of channelling protection of certain features exclusively to patent law.\(^{23}\) The former, he says, amounts to the “need” to copy while the latter reflects a “right” to copy.\(^{24}\) Their coexistence demonstrates a lack of consensus amongst the courts as to the relative importance of the two policies. The *TrafFix* approach “de-centered” functionality as a tool for assessing competitive need and instead positioned it as a device for channelling useful product features away from trade mark law and exclusively into the patent system with its high threshold for protection and limited duration. McKenna traces the lack of consensus back to a fundamental disagreement as to historic US cases as to whether functional features should be free for all to copy as long as there is no confusion (which could be avoided by labelling). This in turn reflects a wider tension in trade mark law as to whether there is a general principle of free copying, subject to certain exceptions, or if instead, copying is generally problematic. This culminated in *TrafFix*’s channelling approach in 2001. He also highlights the relevance of the pre-emption cases, where courts considered whether, as a Constitution matter, federal patent law trumped (pre-empted) state unfair competition laws, which were the original laws protecting trade marks, including product configuration.

2.2 Bone

Bone\(^{25}\) identifies the same tensions, which he attributes to its historical development of the US functionality doctrine. Bone argues that competitive necessity (McKenna’s “need to copy”) only surfaced in the 1970s. In the late 19\(^{th}\) Century, unfair competition cases had begun to protect product features even though this conflicted with the well-established principle that anyone could copy publicly-available products, unless prevented by copyright or patent law. This right to copy was perceived as a Lockean natural right, rather than one created to serve a policy goal of protecting competition. Thus courts had to balance this natural right with preventing deception through the law of passing off. This pitted the right to copy against unfair competition principles: the defendant had a right to copy “necessary” product features, but no right to copy any “unnecessary” features that would confuse consumers.

By the *First Restatement of Torts* in 1938,\(^{26}\) the approach had shifted from natural to positivist rights, rooted in policy which balanced the “privilege to copy” and its associated public interest in competition.

---

\(^{23}\) McKenna, “*(Dys=functionality)*”, 824. Similarly, Dinwoodie, “*Conceptual Lessons*”, p.29.

\(^{24}\) McKenna, “*(Dys=functionality)*”, 825.

\(^{25}\) Bone, “*Functionality Reexamined*”.

\(^{26}\) The Restatements, produced by the American Law Institute, seek to codify the common law, see: https://www.ali.org/publications/#publication-type-restatements.
against the interests of creators. Creators’ interests in receiving reward for their ingenuity were outweighed by the public interest in competition, but preventing unfairness by imitation was not. Bone argues, however, that the comments accompanying the Restatement suggest that its drafters favoured a competitive necessity test, entailing an examination of alternatives. This was seemingly overlooked by the courts, which, following the literal wording on the Restatement, tended to find product features functional, irrespective of whether alternatives were available. This resulted in instability in the jurisprudence because the rules were being applied without reference to their competition-based rationale.

According to Bone, the doctrine finally caught up with the underlying competition-based rationale in *Morton-Norwich*. A test based on competitive necessity and the availability of alternatives was adopted (even for once-patented features) and then followed by most federal circuits. However, this approach ended with *TrafFix*. Competitive necessity and consideration of alternatives were rejected in favour of what Bone calls the “old rules” barring protection for utilitarian trade dress. If a product feature was previously protected by an expired patent, this amounted to “strong evidence” that that feature was functional. Even if a feature had not been patented, it would not be protected where it was “essential to the use or purpose of the article or affects its cost or quality.” However, the availability of an alternative way of achieving the same result did not prevent a production feature from being “essential” to its use. The Supreme Court offered little explanation for its shift away from competitive necessity. Consequently, some lower courts have continued to apply the alternatives test.

Based on lessons from its historical development, Bone seeks to reconstruct a functionality doctrine based on a public domain policy supporting free copying, rather than as a (natural) right to copy. This would promote competition, facilitate downstream innovation by allowing modification of existing designs and (in certain cases) channel inventions to the patent system. He suggests a twin-track rule: competitive necessity would apply where there are obviously many equally effective alternatives whereas a *per se* bar would apply where it is difficult to evaluate the availability of alternatives. He also raises abolition of protection for product configuration as a possibility, albeit one that would most likely not be accepted in the current legislative climate, arguing that consumers would not be confused as they would learn to rely on non-trade dress prompts to identify the origin of goods.

### 2.3 Dinwoodie

Dinwoodie has written more generally about the protection of non-traditional marks in the EU, but in doing so, he has identified a number of conceptual lessons concerning the scope of the functionality exclusion which draw upon US law. Of particular relevance to this research is his discussion of how, in

---

27 Dinwoodie, “Conceptual Lessons”. 
relation to non-traditional marks, doctrines which are overtly normative (i.e. that in the interests of competition, there is a need to keep the sign available to competitors) may in practice include an empirical element (as a matter of fact, this sign is functioning as a trade mark to consumers) leading to the ultimate grant of an exclusive right.28 When this happens, and protection is granted to a mark that, on first sight should be excluded from protection, the normative concerns should inform the scope of protection granted to such marks.29 He also draws attention to how, in situations where signs are composed of multiple components, courts have sought to separate minimally protected meanings from those which are important in a trade mark sense, in a bid to only offer protection to the latter. He views the CJEU as having done this effectively in the case for Art.7(1)(e) but notes the risk of consumer confusion where protection is not granted to distinctive but functional elements.30

3. What are the Policies Underlying EU Technical Functionality?

The way in which trade mark law has evolved in the US is very different from how it has evolved in the EU. Bone’s article considers the last 150 years while EU level trade mark law is relatively recent, with almost all of its functionality cases post-dating TrafFix. The shift from natural rights to legal realism and possibly back again described by Bone likewise reflects a particular timeframe in US jurisprudence and a particular philosophical approach that is absent from the short history of EU trade mark law. There are also significant structural differences in the respective legal and court systems. McKenna speaks of how different circuits have taken different approaches to alternatives pre- and post-TrafFix, whereas in recent years have been relatively few courts involved in EU functionality cases.31

There is also not the same issue of pre-emption and balancing state versus federal law in the EU. Nevertheless, I have devoted significant discussion to the US debate because of the important policy issues raised therein. Both McKenna and Bone identify two broad approaches to functionality. First, as an absolute way of excluding certain product features from trade mark protection, either as the recognition of a “right to copy” (natural or otherwise) or in order to channel the protection (or not) of technically functional aspects of goods to the patent system. Secondly, as a tool to protect competition. This requires a functionality test that considers which product features competitors need to access in order to compete. This does not require an absolute bar on the protection of features that may have a technical purpose and instead adopts a balancing approach that contemplates whether there are sufficient alternative product shapes available to competitors that can achieve the same technical result.

31 Although EU law is inevitably influenced by the approaches taken in Member State courts in how they ask questions that they refer to the CJEU.
3.1 This research

Given the fundamental role that these contrasting approaches have played in shaping US functionality, this article asks whether and to what extent those two approaches have been influential in the development of functionality in EU trade mark law, and what their impact has been on the scope of the technical functionality exclusion. This is a two-stage process because the test under Art.7(1)(e)(ii) EUTMR is made up of two components. The most prominent component of the test is that the sign must be “necessary to achieve a technical result” in order to be excluded from protection. However, this is really the second stage of the test because Art.7(1)(e)(ii) reads that registration must be withheld from:

“signs which consist exclusively of… (ii) the shape, or another characteristic, of goods which is necessary to obtain a technical result…[emphasis added].”

Thus, the test includes a preliminary stage of determining whether or not the signs “exclusively” of functional characteristics. To understand fully how the articulated policies have influenced the scope of the functionality exclusion, it is necessary to consider how they have applied to the preliminary stage as well.

My research has shown that while the second stage is being interpreted in a way akin to a strict “right to copy” approach similar to TrafFix, this is being undercut by the preliminary stage. Unlike Dinwoodie, who argues that the CJEU has adopted a “strict approach” to the meaning of “exclusively”, based on an examination of General Court (“GC”), Board of Appeal and Cancellation Division decisions, it appears that the term is interpreted in a way that allows signs with functional characteristics to escape Art.7(1)(e)(ii) entirely because of relative minor non-functional characteristics. This exemplifies the type of a situation identified by Dinwoodie, where empirical concerns outweigh normative concerns. Thus, I evaluate whether those normative concerns are taken into account when the scope of protection for such marks is considered. I find they are not. The functional characteristics of these “hybrid” marks are given the same weight as the non-functional characteristics in drawing the scope of protection. Given this, I suggest ways in which the policy underlying the second stage of the functionality test could be re-integrated into the process when marks containing functional and non-functional elements are considered for registration and infringement.

3.2 Methodology

To address these issues, I have looked primarily to the case law of the Court of Justice of the European Union (“CJEU”), the GC and the Boards of Appeal of the European Union Intellectual Property Office (“EUIPO”). While the CJEU is the ultimate arbiter of matters of EU law, it has only decided a handful
of cases on Art.7(1)(e),32 and not all of these pertain to the “technical” subject-matter of Art.7(1)(e)(ii). Moreover, its decisions are often Art.267 TFEU references where the CJEU gives an abstract ruling on a point of law, meaning that it is necessary to look elsewhere for how the technical functionality provision is applied in practice. Although the GC does decide on the functionality of specific trade marks via appeal from the EUIPO Boards of Appeal, it too has decided a relatively small number of Art.7(1)(e) cases, and many of them have been further adjudicated on by the CJEU.33 Consequently, I have also analysed the decisions on the Board of Appeal of the EUIPO, the appellate jurisdiction of the body that awards EU trade marks, to gain a better understanding of how Art.7(1)(e)(ii) works in practice.

It is not possible to conduct a search for all of the cases where that provision is cited.34 Instead, I based my research on all Board of Appeal decisions containing the term “technical result” on the EUIPO eSearch Case Law interface. This returns approximately 124 decisions,35 although not all are reported in English, some have been appealed to the GC and/or CJEU and some have mentioned the wording of Art.7(1)(e)(ii) without analysing it in any detail. Additionally, to ensure that my research reflected the CJEU’s current practice on technical functionality, I only considered decisions which post-dated Lego, the case in which the CJEU set down detailed instructions for how Art.7(1)(e)(ii) should be applied.36 This limited the pool of relevant case law to 28 relevant decision. I also considered the decisions of the UK Trade Mark Registry as another example of a body which applies the functionality provisions, although it appears that only a very small number of functionality cases have resulted in published decisions. Finally, I have included a small number notable EUIPO Cancellation Decisions that became apparent during the research for this project.

3.3 Why technical functionality

This article focuses on technical functionality, i.e. Art.7(1)(e)(ii). As mentioned in the introduction, there are in fact three forms of exclusion under Art.7(1)(e).37 It is certainly true that a single mark may


33 As of 05/11/2019, there are sixteen GC cases where some aspect of Art.7(1)(e) has been the subject of substantive discussion, though some of those have been further appealed to the CJEU.

34 Although the eSearch Case Law interface (https://euipo.europa.eu/eSearchCLW/) includes a search box for limiting the search to specific norms, this returns a zero result.

35 The number varies somewhat as new decisions are added to the database.


37 The provision states that the following shall not be registered: “signs which consist exclusively of: (i) the shape, or another characteristic, which results from the nature of the goods themselves; (ii) the shape, or another characteristic, of goods which is necessary to obtain a technical result; (iii) the shape, or another characteristic,
be the subject of objections under any or all of the Art.7(1)(e) indents concurrently,\textsuperscript{38} and so they are interrelated. Likewise, all are stated to have as their object the protection of competition. However, there is relatively little academic writing\textsuperscript{39} on any of the Art.7(1)(e) grounds and case law is often unclear and/or lacking in detail. This is particularly troubling in relation to technical functionality because it goes to the core of how goods work.\textsuperscript{40} Consequently, if the exclusion is construed too narrowly, trade mark protection can deliver a monopoly in the sale of a technical “solution” into the hands of a single trader, blocking competitors from offering competing functional products. Additionally, while there have been significant developments in relation to the first and third exclusions following Hauck, the case law on these grounds is still in its early development, whereas there has been the opportunity for a greater number of cases to have been decided in relation to the second indent. Therefore, this article aims to clarify the meaning, scope and underlying objective of technical functionality as this is a necessary step before we can understand how the provision interrelates with the other forms of functionality.

4. Polic(ies) Underlying Technical Functionality

4.1 The CJEU’S Approach

There are four cases\textsuperscript{41} where the CJEU has articulated the policy underlying the technical functionality exclusion: Philips, Lego, Hauck and KIT-KAT.\textsuperscript{42} The CJEU does, in each case, speak about technical functionality as a tool for protecting competition, which might appear to reflect the US competitive balancing test as per Morton-Norwich.\textsuperscript{43} However, I would argue that the CJEU’s repeated reference to preventing overlaps with patent law, together with its approach to the limited relevance of alternative methods of achieving the same result, indicates that the EU policy of protecting competition is different from the Morton-Norwich style balancing of the needs of the would-be trade mark owner and competitors and is closer to a “right to copy”. This is further demonstrated by the Boards of Appeal’s strong reliance on pre-existing patents as evidence of technical functionality, and repeated rejection of evidence of alternative methods of achieving the same result.

which gives substantial value to the goods.” Following Hauck GmbH & Co KG v Stokke A/S (C-205/13) [2014] E.T.M.R. 60, it seems that (i) is concerned with generic shapes of goods while (iii) applies to value derived from aesthetic or other valued aspects of goods, see further Kur, “Too Common”.

\textsuperscript{38} Hauck GmbH & Co KG v Stokke A/S (C-205/13) [2014] E.T.M.R. 60.

\textsuperscript{39} As discussed in n.7; Martin Senftleben, “A Clash of Culture and Commerce: Non-Traditional Marks and the Impediment of Cyclic Cultural Innovation” in Irene Calboli and Martin Senftleben (eds.) The Protection of Non-Traditional Trademarks: Critical Perspectives (Oxford, Oxford University Press, 2018).

\textsuperscript{40} Chronopoulos, “De jure functionality”.

\textsuperscript{41} There was no articulation of policy in Benetton Group SpA v G-Star International BV (C-371/06) EU:C:2007:542; [2008] E.T.M.R. 5.


\textsuperscript{43} In re Morton-Norwich Products, Inc., 671 F.2d 1332 (CCPA 1982).
4.1.1 *Philips v Remington*

In its first functionality case, *Philips*, concerning the validity of a trade mark for a three-headed triangular shaver, the CJEU identified the rationale behind the functionality exclusions as:

“to prevent trade mark protection from granting its proprietor a monopoly on technical solutions or functional characteristics of a product which a user is likely to seek in the products of competitors.”

This would appear to suggest that the motivating factor was to ensure that competitors could compete effectively. Later it identified the “legitimate aim” of the exclusions as:

“not allowing individuals to use registration of a mark in order to acquire or perpetuate exclusive rights relating to technical solutions.”

Here the CJEU demonstrates an unwillingness to allow trade marks to be granted in signs which have already been protected by other exclusive rights. The precise contours of this policy are not clear from the its brief articulation, but the unwillingness to “perpetuate exclusive rights” through the use of trade mark law could be seen as an attempt to channel protection of technical features into patent, rather than trade mark law, as was the case in *TrafFix*. This would be analogous to the policy identified particularly in McKenna’s “right to copy”.

It could also be an attempt to articulate an “election theory”, where the would-be IPR holder cannot have double protection because of conflicting terms and scopes of protection are at the public domain’s expense. Instead, the IPR-holder has to choose which IP right to apply for. But this seems unlikely because the exclusion for functional shapes is mandatory, and an applicant has no mechanism to opt for a trade mark, instead of a patent or design. Also, in the Board of Appeal decisions examined, there are no signs of evidence of an applicant arguing that they have forgone the opportunity to secure a patent and elected trade mark protection. To the contrary, in the UK High Court stage of *London Taxi*, Arnold J (as he then was) noted that the holders of a mark of the shape of a London black taxi which was invalidated could have sought registered design protection but did not. This suggests that because the IPR-holder could have opted for design protection it was not at liberty to choose trade mark protection instead.

---

47 *The London Taxi Corporation Ltd v Frazer-Nash Research Ltd* [2016] EWHC 52 (Ch) 52; [2016] E.T.M.R. 18 at [215]. This decision concerned the “substantial value” exclusion, but the policy articulated by the CJEU for this provision is the same as for the “technical result” ground.
4.1.2 Lego
Likewise, in the Lego decision, concerning the validity of a trade mark for the shape of the famous toy building brick, the purpose of the provision was said to be to ensure that:

“undertakings may not use trade mark law in order to perpetuate, indefinitely, exclusive rights relating to technical solutions.”48

The registration of trade marks in relation to matter covered by an expired patent or design would:

“considerably and permanently reduce the opportunity for other undertakings to use that technical solution. In the system of intellectual 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.”49

This appears to be channelling functional trade marks into the patent system and away from the trade mark system. Once any patent protection has lapsed or expired, the invention disclosed therein should be free for other traders to use, and should not be further extended by trade mark law.

Nevertheless, the Lego Court also mentioned competitive interests, stating: “The interest underlying Article 7(1)(e)(ii) EUTMR is to prevent trade mark law granting an undertaking a monopoly on technical solutions or functional characteristics of a product.”50

4.1.3 Hauck and KIT-KAT
By the time of its Hauck decision, the CJEU blended the two policies into a single framework. First it gave the “rationale” of the provision as being:

“to prevent trade mark protection from granting its proprietor a monopoly on technical solutions or functional characteristics of a product which a user is likely to seek in the products of competitors.”51

It then gave the “aim” as to prevent:

“the exclusive and permanent right which a trade mark confers from serving to extend indefinitely the life of other rights which the EU legislature has sought to make subject to limited periods.”52

The same rationale and aim were offered in KIT-KAT.53 While the “rationale” explains the provision as being motivated by competition, the “aim” makes it clear that the provision is designed to channel signs that have been protected by other IPRs away from trade mark law.

4.2 Have the conflicting US functionality policies been replicated in Europe?

What is striking about the EU cases is that while the two broad policies that McKenna and Bone identify—a right to copy in the form of channelling and protecting the needs of competitors—are highlighted in all of the cases considering the “technical shape” exclusion, particularly in Hauck and KIT-KAT, they are treated as being harmonious and as part of a single framework. When viewed through the lens of US academic commentary this is difficult to understand.

The fundamental issue where there is ambiguity in the USA is whether the availability of alternatives is relevant to utilitarian functionality. The “need to copy” line of cases say that it should be—there is no “need” to copy if there are other ways of achieving the same technical result. The “right to copy” cases, most notably TrafFix, suggest that the availability of alternatives has no role to play. According to the latter, technically functional shapes are channelled into patent law because after the limited duration of any patent protection, the technical solution should be available for all to use. The former favours an examination of alternatives as part of an evaluation of the state of competition, while the latter says that it is unnecessary.

Thus, at this point, it is helpful to examine how the provision has been applied in practice. If the EU provision is primarily concerned with channelling, we might expect evidence of pre-existing patents for the subject-matter of the trade mark to be determinative of functionality. However, if the EU policy reflects that of “need to copy” in Morton-Norwich, i.e. of balancing the needs of trade mark owners with those of competitors, we might expect there to be an analysis of competitors’ needs, which examines technical equivalence of alternative product features available.

4.2.1 Pre-existing patent

If the policy behind EU functionality is channelling, and reflects the US notion of “right to copy”, we might expect the existence of a pre-existing patent to be conclusive evidence of technical functionality. The CJEU in Lego, and consequently the EUIPO and UKIPO Manuals, all state that the presence of a pre-existing patent is highly persuasive evidence of technical functionality, but is not determinative. However, in the one UK Registry decision, and five out of the six EUIPO Board of Appeal decisions

54 See TrafFix Devices, Inc. v Marketing Displays, Inc., 532 U.S. 23 (2001) at 33-34: “There is no need, furthermore, to engage, as did the Court of Appeals, in speculation about other design possibilities… Other designs need not be attempted.” On the other hand, the addition of “arbitrary flourishes” may remove the entire sign from the functionality exclusion, and/or those flourishes may be protected as trade marks in their own right (p.34).
55 Lego Juris v OHIM (C-48/09 P) [2010] E.T.M.R. 63 at [85]. It is labelled “prima facie evidence” in the EUIPO Guidelines, at p.7 and the UKIPO Trade Marks Manual, at p.162. The latter notes that presence in a patent does not exclude the feature for trade mark protection “per se”.
56 Hambleside Danelaw Ltd’s Application, Trade Marks Registry (Examination), O/203/18.
where a pre-existing patent for the product feature in question was raised, the existence of the patent led to a finding that the mark was barred from registration under Art.7(1)(e)(ii). (In the sixth Board of Appeal decision, the patent identified was discounted because it related to an aspect of the product other than the shape for which trade mark protection was sought).58 The relevance of pre-existing patents has also been confirmed by both the GC59 and the CJEU, which in Lego, noted that all of the essential features of the mark in question had enjoyed patent protection.60 Indeed, so strong is this presumption of functionality that on two occasions, the “technical” teachings in the applicant’s patent application have been found more persuasive than subsequent arguments that the product feature applied-for had no technical function.61

The patents relied on by the Boards of Appeal as evidence of technical functionality include US and Canadian patents.62 This also suggests a policy based on channelling rather than election. Under election theory, one of the concerns is that the trade mark applicant should not be able to enjoy a “double benefit” from exploiting two IP rights. However, IP rights are jurisdictional, so a benefit enjoyed from, for example a US patent, does not amount to a benefit enjoyed in the EU.

4.2.2 Availability of alternatives

The approach of the CJEU and Boards of Appeal to alternative methods of achieving the same technical result also suggests that testing whether a product feature is “necessary to achieve a technical result” is focussed on the right to copy, rather than being about a “need-to-copy” competitive balance.

The CJEU in Philips is emphatic in its rejection of the relevance of alternatives in relation to the “necessary to achieve a technical result”, saying:

“As to the question whether the establishment that there are other shapes which could achieve the same technical result can overcome the ground for refusal or invalidity contained in Article 3(1)(e), second indent, there is nothing in the wording of that provision to allow such a conclusion.”63

And later:

“Where the essential functional characteristics of the shape of a product are attributable solely to the technical result, Article 3(1)(e), second indent, precludes

58 In a decision concerning the ‘Magic Tree’ air freshener, R1283/2013-4 L&D, SAU v Julius Sämann Ltd at [44]-[46], the existing patent concerned how a sachet within the air-freshener delivered fragrance, which was unrelated to the applied-for tree shape.
60 Lego Juris v OHIM (C-48/09 P) [2010] E.T.M.R. 63 at [85].
61 Hambleside Danelaw Ltd’s Application, Trade Marks Registry (Examination), O/203/18, [85]; R0042/2013-1 AGA Medical Corporation at [27].
62 R2696/2017-1 eXpresio, Creative Study v Etablissement AMRA and R0316/2014-2 Kun Yuan at [29].
registration of a sign consisting of that shape, even if that technical result can be achieved by other shapes.”

In Lego, the CJEU paraphrased what it had said in Philips:

“Those considerations [of the gradual monopolisation of all ways of achieving a technical result if any way of achieving that result can be registered] are moreover reflected in paragraphs 81 and 83 of Philips, which state that the existence of other shapes which could achieve the same technical result does not in itself preclude application of the ground for refusal set out in the second indent of Article 3(1)(e) of Directive 89/104, whose wording corresponds to that of Article 7(1)(e)(ii) of Regulation No 40/94.”

The Lego Court’s reversal of the wording of Philips (from the technical result precluding registration even if there are alternatives to the existence of alternatives not precluding the application of the functionality exclusion) might be read as indicating that the existence of alternatives may be taken into account in determining the applicability of Art.7(1)(e)(ii), but will not be determinative. This would be an odd outcome, given the clarity of the rejection of alternatives in Philips. Moreover, the Lego Court’s statement above concludes a discussion of how the existence of alternatives does not guarantee competition. The scope of trade mark protection also extends to use of confusingly similar-shaped goods, meaning that a significant number of alternative shapes would become unavailable for competitors. Additionally, this research found no examples of the acceptance of evidence of alternatives as indicating that a product feature was unnecessary to achieve a technical result. Instead, such evidence was treated as irrelevant in every case where it was raised. Likewise, the GC has refused to look whether, as a matter of fact, registering the sign in question, would lead to the grant of a monopoly in the technical result to a single undertaking. It should be noted though that this does not preclude the relevance of alternatives elsewhere in the functionality test.

---

65 Lego Juris v OHIM (C-48/09 P) [2010] E.T.M.R. 63 at [58].
66 This is the approach adopted in Bently et al., Intellectual Property Law, p.967: “The mere existence of other shapes that could achieve the same technical result is not of itself sufficient to overcome this ground for refusal.”
68 Tractel Greifzug GmbH v OAMI (T-621/15) EU:T:2017:254 at [28]; R1877/2017-2 Studex Corporation (“Piercing Cartridge”) at [24]; Madly v Werkaus Design & Produktion GmbH Cancellation No. 12442 (Invalidity) at p.8 (rubber band fastening system for cardboard furniture – irrelevant that other methods could be used for the fastening, or that bands of other shapes could be used). Although see the UK Trade Mark Registry’s approach in Jaguar Land Rover Ltd v Ineos Industries Holdings Ltd, UK Trade Marks Registry O-589-19 at [138]: “experience shows that the design and configuration of the usual features of such vehicles results in a seemingly endless variety of basically two box shapes. This is different to saying that the technical result(s) could be achieved using other shapes. In my view, there is a design element to the configuration of the elements making up the shapes at issue. In other words, there is a residue of form over function.” While this is not an acceptance of alternatives, it somewhat muddies the waters as to what role they should play. Similarly, Birkenstock Sales GmbH’s Registration, UK Trade Marks Registry O-505-16 at [92].
Without considering the availability of alternatives, it is impossible to conduct a Morton-Norwich-style analysis of the needs of competitors on the particular product market. Again, this is strongly suggestive that “need to copy” is not the policy underlying EU functionality.

4.3 Why competition and channelling do not conflict in Europe

Looking through the lens of the US commentaries, it might seem that there is an underlying tension in the EU, of the type identified by McKenna and Bone. All of the EU decisions on the meaning of Art.7(1)(c)(ii) contain references to both competition and channelling as the underlying policy (but without discussion of any “natural” right to copy of the sort identified by Bone). Bone and McKenna see this as the root of the uncertainty in the USA. However, I would argue that although both jurisdictions use similar terminology, in the EU - at least when it comes to the meaning of “shapes or other characteristics necessary to achieve a technical result” - the CJEU has consistently viewed technical functionality as a doctrine which channels technical subject-matter to other IPRs and prevents trade mark law from extending the protection offered by those other IPRs.70

Since Philips, the CJEU has always taken the approach that where “the essential functional characteristics of the shape of a product are attributable solely to the technical result” the technical shape exclusion “precludes registration of a sign consisting of that shape, even if that technical result can be achieved by other shapes.”71 In Lego, the Court explained that this was because:

(1) a shape mark holder would be able to block use of a significant number of shapes because the scope of protection extends to cover similar shapes; and

(2) an applicant might attempt to block-off a range of alternatives by seeking to register multiple functional shapes.72

While there is certainly an abstract acknowledgement of the needs of competitors, there is no market analysis of whether the registration of any particular sign will affect competition on any particular product market. Competition is there as a general policy objective. Its specific implementation is through channelling functional signs into patent law, which has a stricter threshold for protection and more limited term than trade mark law. This allows the protected subject-matter to enter into the public domain, and so be available to competitors, more quickly. Perhaps the CJEU is attempting to flag that the two policies articulated are in harmony by labelling competition as the “rationale” and channelling as the “aim”. What conflicts across the totality of the cases in the US does not do so in the EU because

---


72 Lego Juris v OHIM (C-48/09 P) [2010] E.T.M.R. 63 at [56]-[60].
of the generality of the “competition” of concern. In the EU, there is a competition-based desire to open up product features previously protected by other term-limited IPRs at the end of that term, rather than to lock them up with (potentially unlimited) trade mark protection. Indeed, this is similar to McKenna’s description of the Supreme Court’s approach in TrafFix. The general rule of free copying is in the background. However, “patent law’s limits embed policy choices about competition values at a structural level” and so “the functionality doctrine is not primarily concerned with the competitive position of the parties in a particular case.”

There is an underlying question though. If the EU functionality doctrine is underpinned by a policy of channelling technical product features into patent law, what happens when subject-matter falls short of the requirements of patent protection? A likely approach would be that this is an integral part of channelling. An exclusively technical shape which is within the broad ambit of patent law but which is not, for example, novel or non-obvious should as a matter of patent policy fall outside IPR protection and should vest in the public domain. In such a situation, channelling viewed as the broad policy to be followed, rather than a legislative test. Any other approach would put the trade mark applicant for a sign containing sub-patentable technology in a better position than one whose shape embodies a patentable/patented invention. Indeed, there are a number of examples in the Board of Appeal’s cases of “basic” non-patentable technology falling within the second part of the functionality test. A similar approach is taken in the US under TrafFix, where, as Bone explains, signs that have never been patented are subject to an equally rigorous functionality test as those which have not.

5. Signs Which Consist “Exclusively” of Characteristics Necessary to Achieve a Technical Result

The meaning of “necessary to achieve a technical result” is however only part of the test for technical functionality. To fall within the exclusion from registration, the sign must not only include a characteristic which is necessary to achieve a technical result, it must also consist exclusively of such a characteristic. In this section I will argue that, although Dinwoodie suggests that the CJEU has adopted a strict approach, in practice, the term “exclusively” has been interpreted in a way that allows too many signs which combine functional and non-functional features (which for brevity I will call “hybrid marks”) to escape the exclusion and proceed to registration. This undermines the “channelling” policy behind the “necessary to achieve a technical result” element of the test.

---

73 McKenna, “(Dys)functionality” at 836. In a rare citation of US law, in Lego Juris v OHIM (C-48/09 P) [2010] E.T.M.R. 63 at [AG67], the Advocate-General identifies a link with TrafFix.
74 See e.g. R0582/2017-5 Wladimir Poljanskii; R1222/2012-1 and R1231/2012-1 Louis Vuitton Malletier SA v C&A Buying KG; R2048/2013-5 Lindén International AB.
75 It had been argued that, in contrast to where there is a patent, in the absence of a patent, competitive necessity should be considered – Bone, “Functionality Reexamined” at 30.
76 Note, the “exclusively” requirement applies also to Art.7(1)(e)(i) and (iii). While a detailed examination is outside the scope of this article, there may be a similar conflict of policies in relation to those provisions too.
5.1 Why “exclusively”?

The Lego court held that the terms “necessary” and “exclusively” in Art.7(1)(e)(ii) are designed to ensure that only those shapes which “actually impede the use of that technical solution by other undertakings” (emphasis added) are denied registration.\textsuperscript{77} The CJEU concluded that a sign will consist \textit{exclusively} of the shape of goods \textit{necessary} to achieve a technical result when all of its essential characteristics perform a technical function.\textsuperscript{78} In such a case, a competitor will “easily have access to alternative shapes with equivalent functionality.”\textsuperscript{79}

This has echoes of Bone’s proposal. To recap, he advocates a twin-track rule: competitive necessity would apply where there are obviously many equally effective alternatives whereas a \textit{per se} bar would be better where it is difficult to evaluate the availability of alternatives. In a case where there is at least one non-functional essential characteristics, the CJEU has presumed that there will be many alternatives available. Unlike in Bone’s test, however, there is no market-based assessment of competitive necessity, such as a specific factual analysis whether a particular shape will (not) impede the use of the technical solution by others, or any factual assessment of potential alternatives to the specific shape before the court. Instead, where there is at least \textit{one} essential characteristic that is \textit{not} technical, such as a decorative or imaginative element,\textsuperscript{80} the \textit{entire} sign escapes the exclusion.

5.2 Identifying “essential characteristics”

It will only be possible for competitors to design around the functional elements if the non-functional elements truly are significant. However, this is not what has happened in subsequent decisions.

The CJEU has provided fairly loose guidance in how the “essential characteristics” are to be identified. This is to be done on a case-by-case basis. There is no hierarchy of which elements of a sign are most important\textsuperscript{81} and there is no balancing of those elements.\textsuperscript{82} Moreover, in some cases it will be appropriate to establish which are the most important elements by looking at the impression given by the sign as a whole. In others it will be necessary to consider the individual elements one at a time.\textsuperscript{83} In terms of the evidence required, the finding that a characteristic is essential can be through a simple visual analysis,

\textsuperscript{77} Lego Juris v OHIM (C-48/09 P) [2010] E.T.M.R. 63 at [48].
\textsuperscript{78} For other suggested meanings of “exclusively” see Alison Firth, “Shapes as trade marks: public policy, functional considerations and consumer perception” (2001) 23 E.I.P.R. 86 at 91.
\textsuperscript{79} Lego Juris v OHIM (C-48/09 P) [2010] E.T.M.R. 63 at [72].
\textsuperscript{80} Lego Juris v OHIM (C-48/09 P) [2010] E.T.M.R. 63 at [52] and [72].
\textsuperscript{81} Lego Juris v OHIM (C-48/09 P) [2010] E.T.M.R. 63 at [70].
\textsuperscript{82} Reddig v OHMI (T-164/11) EU:T:2012:443 at [34]-[35].
\textsuperscript{83} Lego Juris v OHIM (C-48/09 P) [2010] E.T.M.R. 63 at [70].
or through a detailed analysis taking into account survey evidence, expert opinions and data regarding previous intellectual property rights.\textsuperscript{84}

Consequently, it is fair to say that the approach taken to defining which elements are “essential” has not always been consistent. Additionally, there is only a small pool of cases in which courts and registries have had the opportunity to consider whether a non-functional element is “essential” enough to take the entire mark beyond the scope of the functionality exceptions. Nonetheless, in a significant number of those cases, an element which does not appear particularly dominant or distinctive\textsuperscript{85} at first blush has been classed as the essential element which served to save an otherwise entirely functional mark from exclusion.

On occasion,\textsuperscript{86} colour has been identified as an essential characteristic, although this is very much fact-specific. In \textit{Piercing Cartridge}, while finding the shape functional, the Board of Appeal implicitly recognised that colour may be an essential characteristic, since it noted that “colours, word elements or the like are missing, nor are there any visible decorative or imaginative elements which play an important role in the shape.”\textsuperscript{87} In \textit{Golden Bottle}, the “reflective golden colour” of a bottle was identified as an essential characteristic of this sign.\textsuperscript{88} In \textit{Babybel}, the red colour of an individually-wrapped portion of cheese was recognised as an essential characteristic which was sufficient to remove mark from the functionality exclusion.\textsuperscript{89}

The addition of a word, word mark, logo or other small feature to an otherwise functional shape can count as essential characteristic of the mark, even when it is very small. In a Cancellation Decision, the word HAVAIANAS “displayed in a prominent position” on the strap of the flip-flop was an essential characteristic.\textsuperscript{90} Similarly, the Board of Appeal held that a “clearly visible” crocodile logo on the side of a CROCS clog was an essential characteristic.\textsuperscript{91} In \textit{Flamagas}, the General Court accepted that a word element may be an essential characteristic of a mark, provided that it is clearly visible to consumers without any extra effort on their part. (This requirement was not met in that case. Not only was the word CLIPPER on the side of a cigarette lighter small, but the text was coloured grey against a grey

\textsuperscript{84} \textit{Lego Juris v OHIM} (C-48/09 P) [2010] E.T.M.R. 63 at [71].

\textsuperscript{85} I use the terms in the sense used in relation to composite marks: a “dominant” element may be one that is prominent because of its size or positioning whereas a “distinctive” element is one that consumers recognise in a traditional trade mark sense – see further Ilanah Fhima and Dev Gangjee \textit{The Test of Confusion in EU Trade Mark Law}, (Oxford, Oxford University Press, 2019), pp.68-71.

\textsuperscript{86} Although not in \textit{Lego Juris v OHIM} (C-48/09 P) [2010] E.T.M.R. 63, see [15] and [74].

\textsuperscript{87} R1877/2017-2 Studex Corporation at [25].

\textsuperscript{88} R1036/2017-1 Vinicola Tombacco (VI.TO.) Srl v EUIPO (“Golden Bottle”) at [53], upheld by the GC in T-324/18 ECLI:EU:T:2019:297.

\textsuperscript{89} Fromageries Bel SA v J. Sainsbury plc, UK Trade Mark Registry (Invalidation), O-086-19 (“Babybel”) at [42], appeal dismissed in Fromageries Bel SA v J Sainsbury Plc [2019] EWHC 3454 (Ch).

\textsuperscript{90} Cancellation No 6665 C (Invalidity) \textit{Le Marche du Monde v Alpargatas SA} at [23].

\textsuperscript{91} R3021/2014-5 \textit{Lidl Stiftung & Co. KG v Crocs, Inc} (29/01/2016) at [26]-[28] and [37].
background.\textsuperscript{92} In \textit{Fence Post}, small but apparently functionless flattened shoulders took the shape of the entire fence post outside the technical functionality exclusion.\textsuperscript{93}

In \textit{Whirlpool v Kenwood}, the decision suggests that an essential characteristic must be distinctive in its own right to save an otherwise functional mark.\textsuperscript{94} While this would widen the scope of the “exclusively” clause, it is hard to see why distinctiveness should be a requirement, since its role is to provide some aspect/s of a protected mark that competitors can change while still retaining the other functional characteristics. In other words, the provision is concerned with competition, not trade mark function. Of course, a sign’s ability, as a whole, to function as a trade mark will still be vital when its distinctiveness is considered, which is a separate “absolute” ground for validity of registration.\textsuperscript{95} It is true that often consumers will not view functional shapes as indicating source, and in that instance, the addition of any wording etc. would need to be distinctive to compensate for this. However, there tends to be very little cross-fertilisation between the consideration of whether shapes are non-distinctive and whether they are functional (under Arts.7(1)(b) and 7(1)(e) EUTMR, and its equivalents, respectively). Instead, a prominent concern in considering whether features are essential characteristics are whether they will be noticed by consumers, rather than whether they will be independently distinctive. For example, in \textit{Babybel},\textsuperscript{96} the Hearing Officer noted that the red colour was “not incidental” because consumers would look for the colour to convey information about the flavour or age of the cheese. This would mean that the colour is descriptive – the antithesis of a trade mark that satisfies Art.7(1)(b).\textsuperscript{97} This contrasts with cases where the colour red was considered “arbitrary” such as \textit{Lego} (the bricks have to be a colour, but come in a variety of colours, so consumers would not notice which)\textsuperscript{98} or predetermined as in the \textit{Transdermal Patch} case,\textsuperscript{99} where impregnated patches designed to be stuck discretely on the skin had to be skin-coloured. It is likewise noticeable that in \textit{HAVAIANAS} and \textit{Flamagas}, there is no discussion of the distinctiveness, or otherwise, of the word element of the sign, just a consideration of its prominence.\textsuperscript{100}

\textsuperscript{92} \textit{Flamagas, SA v EUIPO} (T-580/15) [2017] E.T.M.R. 33.
\textsuperscript{93} R2526/2013-5 \textit{Siderurgica Ferro Bulloni SPA v Grillages Vermigli SA} (“\textit{Fence Post}”) at [48].
\textsuperscript{94} \textit{Whirlpool Corp v Kenwood Ltd} [2008] EWHC 1930 (Ch); [2009] E.T.M.R. 5 at [19]-[20] in relation to the interpretation of Communication No.2/98 of the President of OHIM which applied to Art.7(1)(e), as well as distinctiveness, which was at issue in that case.
\textsuperscript{95} Arts.7(1)(b)-(d) EUTMR.
\textsuperscript{96} \textit{Fromageries Bel SA v J. Sainsbury plc}, UK Trade Mark Registry (Invalidation), O-086-19 at [39].
\textsuperscript{97} Unless, this element had acquired distinctiveness, but perhaps unlikely if it is conveying descriptive information to consumers.
\textsuperscript{98} \textit{Fromageries Bel SA v J. Sainsbury plc}, UK Trade Mark Registry (Invalidation), O-086-19 at [38].
\textsuperscript{99} \textit{Novartis v EUIPO} (T-44/16) EU:T:2018:48 at [100].
\textsuperscript{100} Likewise R1036/2017-1 \textit{Vinicola Tombacco (VI.TO.) Srl v EUIPO} (where the letter B and flame logo were not essential characteristics because they were small and were the same colour as the bottle and so had little “visual impact”). \textit{Contra}, see R2696/2017-1 \textit{eXpresio, Creative Study v Etablissement AMRA} at [35]-[36] (both the distinctiveness and the dominance of the word elements were discussed).
These examples demonstrate that, at least in some cases, allowing the registration of marks based on non-functional essential characteristics acts as a weak filter for those that competitors need to access. Rather than considering in detail what competitors actually need in order to compete (the stated aim of allowing the registration of hybrid marks), tribunals tend to question whether the non-functional characteristic is noticeable to consumers, and if so, the entire sign, including both functional and non-functional elements, is registrable. There is no exercise in ranking the relative importance of the non-functional and functional characteristics, or any attempt to balance functional and non-functional features to reach and overall view of the functionality of the sign “as a whole”. Equally, there is no consideration of the practicalities of requiring competitors to “design around” the non-functional characteristic/s. This is in contrast with the approach in the US. There McCarthy notes that: “When the thing claimed…consists of a combination of individual design features, then it is the functionality of the overall combination that controls”. According to Morton-Norwich, this can assessed by weighing the functional and non-functional features “one against another to develop an understanding of the whether the mark as a whole is essentially functional and thus non-registrable.”

In itself, the low threshold applied to non-functional but “essential” characteristics is a failure of the law to live up to the Lego policy of considering competitive concerns at the point of considering whether the mark in question consists “exclusively” of a shape which is necessary to achieve a technical result. More significantly, it undermines the policy of channelling functional signs out of the trade mark system identified in relation to the “necessary to achieve a technical result” element of Art.7(1)(e)(ii). Many marks containing technical features will simply never reach the rigorous test applied in considering whether those features are “necessary to achieve a technical result” because the mark as a whole is being mischaracterised as non-functional at the preliminary stage of ascertaining what the “essential characteristics” of the mark are, based on relatively minor non-functional features. As a matter of policy, the undermining of the policy of the second clause of Art.7(1)(e)(ii) by its first clause is troubling in itself. However, it is particularly worrisome if these expansive trade mark registrations can then be used to prevent competitors from using the functional shape (or a similar one) without the non-functional essential characteristic. It is to this issue that we will now turn.

101 Dinwoodie, “Conceptual Lessons”, p.29 sees Lego as an example of rigorous application of the “essential characteristics” test, but I would argue that this rigour has not continued in subsequent cases.
103 In re Morton-Norwich Products, Inc., 671 F 2d 1332 (CCPA 1982). If the sign is functional overall, the would-be trade mark owner may still be able to secure protection of those individual elements that are non-functional, see Christopher Buccafusco and Mark Lemley, “Functionality Screens” (2017) 103(7) Virginia Law Review 1293, 1343-1344 discussing the TrafFix court’s treatment of features which are “arbitrary, incidental or ornamental” (p.34).
6. Are Essential Characteristics an Effective Filter to Back-Door Confusion Protection of Functional Characteristics?

The approach of the CJEU is that if there is an essential characteristic of the sign which is not functional, the sign escapes from the exclusion, even though it may contain one or more functional elements. The CJEU’s justification for this is that competitors are still free to use those functional elements by designing around the registered mark and omitting the essential non-functional element/s. The difficulty with this is that once granted, as Gangjee forcefully argues, trade protection permits its holder to stop others using “similar” marks. An overly-wide approach to the validity of hybrid marks (as discussed in the preceding section) becomes an even bigger problem if the scope of protection is defined too generously. Thus, we shall see that the proprietor of a mark with a non-functional essential element may challenge the use or registration of another mark which includes all the functional elements (which, if assessed alone under the “necessary to achieve a technical result” element of the test would remain free for others to copy), but not the non-functional essential element.

As both Gangjee and Dinwoodie point out, a similar issue has occurred in relation to distinctiveness (although a defence for honest use of signs which are descriptive or non-distinctive has since been introduced in the latest versions of the EU Trade Mark legislation\textsuperscript{105}). Some trade mark owners have successfully registered non-distinctive trade marks that would otherwise remain free for other traders to use but for the addition of what Arnold J (as he then was) has called a “figurative figleaf”.\textsuperscript{106} They have then attempted to enforce their marks against third party users of the non-distinctive component. Dinwoodie uses the example from that case where the registered mark consisting of the word NOW (a descriptive word when used as here for on-demand television services) with a “figleaf” in the form of a sunburst being raised against the words NOW TV.\textsuperscript{107} Gangjee gives the example of a gold-wrapped chocolate Easter bunny (a traditional seasonal delicacy) registered on account of a red ribbon around its neck and the words LINDT GOLDHASE being raised (albeit unsuccessfully) against a gold bunny with a brown ribbon around its neck stamped with a different name.\textsuperscript{108} Gangjee and this author have also highlighted a number of EU Member State decisions where 3D marks featuring a distinctive word

\textsuperscript{104} Dev Gangjee, “Paying the Price for Admission: Non-Traditional Marks across Registration and Enforcement” in Calboli and Senftleben, Non-Conventional Trademarks, particularly p.83 onwards.

\textsuperscript{105} Art.14(1)(b) EUTMR.

\textsuperscript{106} Starbucks (UK) Ltd v British Sky Broadcasting Group Plc & Others [2012] EWHC 1842 (Ch) at [117]: “I would comment that it appears to me that PCCW only succeeded in obtaining registration of the CTM because it included figurative elements. Yet PCCW is seeking to enforce the CTM against signs which do not include the figurative elements or anything like them. That was an entirely foreseeable consequence of permitting registration of the CTM. Trade mark registries should be astute to this consequence of registering descriptive marks under the cover of a figurative figleaf of distinctiveness, and refuse registration of such marks in the first place.”

\textsuperscript{107} Dinwoodie, “Conceptual Lessons”, p.28.

\textsuperscript{108} Gangjee, “Paying the Price for Admission”, p.85 citing Oberlandsesgricht Frankfurt am Main, Lindt v Riegelein Confsseries [2012] GRUR-RR 255.
or logo element were held to be infringed based solely on the reproduction of the 3D element without the distinctive word or logo.\textsuperscript{109}

It should be noted that even if courts have been reticent to actually provide overwide protection in some of these cases, the mere existence of a registered hybrid trade mark may have a chilling effect on competition, since the trade mark owner may use it as the basis of a letter before action based on the technical characteristics of its registered mark.

A discounting of the sort of small detail on a shape that might amount to an essential non-functional characteristic can be seen in EU design cases where the validity of a design has been challenged based upon the likelihood of confusion grounds by an earlier trade mark. In \textit{Su-Shan Chen}, the transparency of part of the shape of the later design for a square “cleaning device” with a spray nozzle was not enough to dispel confusion with the earlier trade mark for a similar shaped device.\textsuperscript{110}

It is also possible to see analogous reasoning at work in a case where the CJEU has failed to revoke for non-use 3D marks that have been used in a slightly different form to that registered. In \textit{Klement}, the registered mark consistent of the shape of the proprietor’s oven.\textsuperscript{111} The revocation applicant argued that the mark had been used in a different distinctive form to that registered because it had always been used with the word BULLERJAN affixed to the goods.\textsuperscript{112} Ultimately, after lengthy and complicated proceedings, the CJEU rejected this argument because the shape of the oven was considered to have a highly distinctive character.\textsuperscript{113} Affixing the less distinctive word mark did not alter the distinctiveness of the shape, and its recognition by consumers.\textsuperscript{114} In other words, consumers would perceive the mark as the same conceptual unit whether it consisted of the shape alone, or the shape plus the word. This suggests that in an infringement comparison, an unusual but functional shape registered because it incorporates a (non-functional) word element would be able to block third party use of that shape without that word element because the two marks would share the same distinctive component. What is particularly striking about this case is that an application to register the oven shape alone had previously been refused based upon the technical shape exclusion,\textsuperscript{115} but was subsequently registered on the basis of a mark that also included the word BULLERJAN, albeit not with particular prominence.

\textsuperscript{109} Fhima and Gangjee, \textit{Test of Confusion}, p.253.

\textsuperscript{110} \textit{Su-Shan Chen v OHIM} (T-55/12) EU:T:2013:219; [2014] E.C.D.R. 2 at [27] and [50]. The senior mark also featured initials which were too small for consumers to decipher, so would, for our purposes, be unlikely to be classed as an essential characteristic. In this case, the earlier IPR was an EU registered design. At the time of the decision, less strict technical functionality requirements applied to EU designs than to trade marks.

\textsuperscript{111} \textit{Klement v EUIPO} (C-698/17 P) EU:C:2019:48. See also \textit{Galletas Gallón v EUIPO} (T-418/16) EU:T:2017:746 at [31]–[33] - although colours may be “important” enough to amount to an “essential characteristics” in respect of functionality issues, in this case a colour alternation was not important enough to alter the distinctive form of the mark used for non-use purposes.

\textsuperscript{112} As required under Art.18(1)(a) EUTMR.

\textsuperscript{113} \textit{Klement v EUIPO} (C-698/17 P) EU:C:2019:48 at [34].

\textsuperscript{114} \textit{Klement v EUIPO} (C-698/17 P) EU:C:2019:48 at [41].

\textsuperscript{115} R0808/2009-2 “Shape of an Oven”.

23
Moreover, the CJEU rejected an argument that the mark was functional in this case. This suggests an unwillingness on the part of the CJEU when comparing marks to engage with registrability issues.

What all of these cases demonstrate is that when comparing marks, there is a willingness on the part of courts, even those at the highest levels, to discount the sort of product characteristics that according to the test of Art.7(1)(e)(ii) are classed as non-functional essential characteristics. This has the result that tribunals will be blocking competitors from using the very functional features that Art.7(1)(e)(ii) should retain in the public domain under. This is the exact opposite of what Dinwoodie argues should be happening. Empirical concerns grounded in consumer perception have justified the policy of limiting the exclusion to marks that are “exclusively” functional and have led the definition of which characteristics of a sign are “essential”. However, at least in some cases, courts appear to have lost sight of the normative interest behind limiting the protection available to functional features when constructing their scope of protection.

7. Possible Solutions

It has been argued that the CJEU has articulated, and the GC and EUIPO Boards of Appeal have implemented, a clear policy underlying the “necessary to achieve a technical result” element of Art.7(1)(e)(ii). This is to channel protection (or not) of technically functional product characteristics away from trade mark protection and into the patent systems. However, this channelling has been undermined by the way in which the first part of Art.7(1)(e)(ii) has been interpreted. Where a sign consists of a mixture of functional and non-functional “essential characteristics”, the entirety of the sign escapes the exclusion and enjoys trade mark protection. Moreover, the bar for what amounts to an “essential” characteristic is set low. Thus, based on the presence relatively trivial non-functional characteristics, many signs containing functional characteristics will never reach the second part of Art.7(1)(e)(ii), and so will never be considered for channelling. The impact that this has on the availability of otherwise functional features to third party traders is compounded by the fact that analogous cases suggests that, in infringement and opposition cases, courts will be willing to find likelihood of confusion where what has been reproduced is the functional characteristic alone. This is so even where the non-functional characteristic that secured the registration has not been reproduced.

This section considers options for ensuring that the second part of Art.7(1)(e)(ii) aligns with the policy of channelling technically functional characteristics into the patent system and then into the public domain to remain available for other traders to use.

116 Klement v EUIPO (C-698/17 P) EU:C:2019:48 at [33]-[34].
117 See analogously BSH v EUIPO (C-43/15 P) EU:C:2016:837 at [68] (CJEU unwilling to consider whether national mark in confusion case lacked distinctiveness and so had been improperly registered).
118 And also the UK Trade Mark Registry in the one reasoned decision found by this author.
7.1 Remove the term “exclusively”

One option would be to alter the functionality exclusion in Art.7(1)(e) so that it applies to every sign which includes a shape or other characteristic necessary to achieve a technical result, rather than just to those which consist “exclusively” of such characteristics. This would be that every potentially functional sign would proceed straight to a consideration of whether its characteristics are “necessary to achieve a technical result” and the channelling that takes place under that part of the exclusion. This is unlikely to happen as it would require an amendment of the EUTMR and the EUTMD (which has just been extensively amended) to remove the word “exclusively”.

I would also argue that it would be undesirable. As both Kur\textsuperscript{119} and Dinwoodie\textsuperscript{120} point out, when a trade mark is refused on functionality grounds, a sign which may be serving to indicate the origin of goods to consumers is refused protection. Such a refusal may lead to consumer confusion. The policy behind the inclusion of the term “exclusively” is the recognition that, where there is a combination of functional and “important” non-functional elements, competitors can access alternative shapes with the same functionality. Where access is possible, the reasons for withholding protection from signs which consumers may have come to recognise as indications of origin are less compelling. It is in this element of the exclusion that EU law attempts to recognise the sorts of concern that the US commentators have labelled the “need to copy”. There is a balance to be made between ensuring that functional characteristics are available to competitors and ensuring that signs which consumer use to distinguish origin can be protected. The term “exclusively” serves to strike this balance in the EU. Rather than removing this, it would better serve the interests of consumers and the market more widely if this element of the functionality exclusion was recalibrated in order to strike this balance more effectively.

7.2 “Essential characteristics” really should be essential

The difficulty with Art.7(1)(e)(ii) is not that it permits hybrid marks to be registered, but rather the way the test is applied to categorise a mark as a hybrid one. Although the terminology used requires a hybrid mark to include non-functional elements as “essential” characteristics, it has been seen that relatively minor additions to otherwise functional shapes, such as small logos or words, colouring and barely noticeable product features, have been classed “essential”. Were tribunals to adopt a more rigorous view as to which non-functional product features really are “essential” would mean more marks would continue to be examined under the second part of Art.7(1)(1)(e)(ii) evaluation. This in turn will allow the first part of the exclusion to fulfil its stated objective i.e. to allow registration of those marks where it is possible for others to “design around”.


\textsuperscript{120} Dinwoodie, “Conceptual Lessons”.

25
We might go further, and adopt the US approach of balancing the functional and non-functional characteristics to assess their relative importance described above. This approach would mean that only marks which survive the exclusion are those where the non-functional essential characteristics are more important than the functional features, thus leaving scope for competitors to “design around”. In practice though, it might be difficult to implement a test which balances consumer perceptions of different features of goods consistently and predictably.

### 7.3 Withdraw protection from functional features

A further option for tackling the problems identified by this research would be to withdraw protection from functional characteristics of registered trade marks. This would mean that where a mark combining functional and non-functional characteristics is registered, only the non-functional characteristics could form the basis of a likelihood of confusion or dilution claim. There is an analogy to be made here with the newly introduced defence permitting the use of “signs or indications which are not distinctive”. As Dinwoodie points out,\(^{121}\) this is difficult to understand because signs which are not distinctive should not be registered at all. Dinwoodie sees this as indication of the development of “‘thin’ marks, that is marks of extremely constrained scope.” These marks which are registrable, but only just (because they include descriptive or functional subject-matter that ordinarily would be excluded on normative grounds), and which as a consequence will only be protected against a certain subset of uses which affect the strongest part of the trade mark.\(^{122}\) I make some suggestions in this subsection as to how such a constrained scope of protection could be implemented in the case of hybrid marks which combine functional and non-functional aspects.

Withdrawing protection would not address the difficulties posed by too many overall functional marks evading the second stage and entering the register. However, it would address the fact that currently, those marks, once registered, could be used to stop competitors from using signs which only include the functional element and do not include the non-functional essential characteristic that formed the basis of the registration. Withdrawing protection from functional features could take a number of forms. A withdrawal of protection should not be necessary if the first solution identified above is adopted (if no functional characteristics are registered at all then then should be no need to withdraw protection from them). However, a withdrawal may still be necessary if with the second solution of applying a more rigorous approach to identifying non-functional essential characteristics is adopted because there remains the risk that, even with this higher threshold, that hybrid marks will be enforced against signs which reproduce only the functional element of the hybrid mark.

---


\(^{122}\) The “trade-marky bit” as Jacob J labelled it - see Dinwoodie, “Conceptual Lessons”, pp.26-27.
7.3.1 Defence

A defence which allowed third party use of product characteristics if used functionally would undo some of the competitive harm caused by the overly wide scope of protection offered to hybrid marks.\textsuperscript{123} It is not a perfect solution though as it places the burden on third parties to prove the defence. Moreover, defences in the EU tend to be subject to an “honest practices” proviso,\textsuperscript{124} which may cause difficulties for the user of a functional characteristic. CJEU jurisprudence has established that use is not in accordance with honest practices if the junior user creates the impression that there is a link between his sign and the senior user,\textsuperscript{125} and it is possible that consumers might come to link a functional characteristic with the trade mark holder. There would remain a public interest in that functional element being available to competitors and yet use which may simultaneously cause consumer confusion would not fit the CJEU’s current definition of honest practices. Finally, a defence will only be of assistance in infringement cases. It will not help those whose use of functional characteristics is opposed at the registration or invalidity stage.

7.3.2 Treat functional elements as disclaimed

Another option where there is a hybrid mark would be to treat the functional characteristics of such a mark as disclaimed.\textsuperscript{126} The difficulty with such an approach is that it was raised and rejected by the recent Max Planck Study which reviewed the EU trade mark system and was influential in the recent “recasting” of the EUTMR and EUTMD.\textsuperscript{127} The Study found that it would be too difficult for trade mark examiners “to ‘dissect’ every application, particularly applications for device marks or figurative marks, into the various elements, and subject them to separate tests of distinctiveness or functionality.”\textsuperscript{128} Consequently, the provision allowing for mandatory EUIPO-imposed disclaimers\textsuperscript{129} was deleted from the latest version of the EUTMR. Additionally, the validity of voluntary disclaimers under national trade mark laws has also been case into doubt by the CJEU.\textsuperscript{130}

7.3.3 Rule that functional elements not distinctive and dominant

Although they rejected disclaimers, the authors of the Max Planck Study were alive to the risk that findings of likelihood of confusion might be based on “non-protectable” elements of marks. In the context of a concern that by removing disclaimers, they were inadvertently signalling that a junior user’s

\textsuperscript{123} A proposal for such a defence was made in Martin Senftleben et al, “Recommendations on Measures to Safeguard Freedom of Expression and Undistorted Competition in EU Trade Mark Law” (2015) 37(6) E.I.P.R. 337.
\textsuperscript{124} Art.14(2) EUTMR.
\textsuperscript{125} The Gillette Company v LA Laboratories (C-228/03) EU:C:2005:177; E.T.M.R. 67.
\textsuperscript{126} See Lego Juris v OHIM (C-48/09 P) [2010] E.T.M.R. 63 at [AG73].
\textsuperscript{127} Max Planck Institute for Innovation and Competition, Study on the Overall Functioning of the European Trade Mark System (2011) ("MPI Study").
\textsuperscript{128} MPI Study at [2.46]-[2.47].
\textsuperscript{129} Formerly Art.37(2) CTMR.
\textsuperscript{130} Hansson (C-705/17) EU:C:2019:481.
reproduction of the non-protectable elements of the senior mark could now form the basis of claim they wrote:

“It needs to be observed, though, that such a move [removing disclaimers] would have detrimental effects if it were understood as signalling that functional, descriptive or non-distinctive elements of combination marks regularly carry a weight of their own in the assessment of the mark’s scope of protection vis-à-vis similar signs.”

Consequently, they called for the addition of a Preamble to the EUTMR and the EUTMD to the effect that “a finding of likelihood of confusion cannot be based on elements which are not distinctive or otherwise not eligible for protection”. No such preamble was added. Additionally, it is clear from Bullerjan in particular that, in certain contexts, non-protectable elements of marks have been treated as having “a weight of their own”. Further work is necessary to ensure functional characteristics cannot form the basis of likelihood of confusion (or dilution) decisions.

One mechanism for doing so could be by applying the approach taken to analysing composite marks. Where a sign is composed of two or more elements, most commonly a word and a figurative element, it is analysed to determine which are its distinctive and dominant components. Distinctiveness is the inherent capacity of the element to identify origin and dominance is the relative visual impact of that element compared to the rest of the sign. A junior mark is most likely to be confusingly similar if any of its distinctive or dominant components coincides with the distinctive or dominant components of the senior mark. This approach is also encapsulated in the EUIPO’s Common Practice Statement on weak marks, whereby national offices have agreed that where two marks correspond only in relation to non-distinctive elements, they will not be confusingly similar. Likewise, a correspondence in relation to weakly distinctive elements will be insufficient for a finding of confusion in the absence of some other factor.

In the context of hybrid marks, it would be possible to implement a rule whereby the functional elements of a mark will be considered not to be distinctive or dominant. One could argue that these elements will be perceived by consumers as indicating how the goods in which the functional element is embodied work, rather indicating origin or being particularly noticeable to consumers. Once functional elements do not dominate hybrid marks, it will be difficult to argue that the mark is similar

131 MPI Study at [2.47].
132 MPI Study at [2.49].
133 See Fhima and Gangjee, Test of Confusion, Chapter 3.
134 “CP5”, see: https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/contentPdfs/about_ohim/who_we_are/common_communication/common_communication5_en.pdf at pp.8-10.
135 Numerous informal rules have arisen regarding the comparison of marks which have been either articulated in GC case law or adopted as EUIPO practice and enshrined in the EUIPO Guidelines; see Fhima and Gangjee, Test of Confusion, Chapter 2.3.
to another mark containing the functional element unless the non-functional characteristic(s) are reproduced in the later mark. Unlike a defence, a presumption when comparing signs could apply to both opposition/invalidity and infringement cases.

7.4 Removal of trade mark protection for product shapes

A number of US commentators\textsuperscript{136} have suggested that trade mark protection should not be available at all for the shape of a product. They argue that protecting trade dress has enormous potential to block competition on product markets. At the same time, it is not necessary to incentivise trade mark owners to invest in trade dress because such investment will be made anyway for its own sake to make products that appeal to consumers\textsuperscript{137} and trade dress is often used alongside other distinctive signs, such as word marks and logos. Additionally, unfair competition protection is available for trade dress where there is consumer deception.

It is true that, in Europe, removing protection for trade dress (or in the terms of the EUTMR, the shape of goods or their packaging) would result in fewer functional marks being registered, and so some of the difficulties identified in the current law would not arise. However, I would argue that removing trade dress protection undesirable. As has already been discussed, removing trade mark protection from a category of marks leads to an increased risk of consumer confusion because consumers may be using such marks to identify the origin of goods. Unlike in the US, unfair competition cannot be relied upon as a fall-back for dealing with such confusion because unfair competition protection is not harmonised and so differs between Member States.\textsuperscript{138} Moreover, as both the Max Planck Study\textsuperscript{139} and Kur\textsuperscript{140} identify, withholding trade mark registration from a category of marks would not be legal under International trade mark law, as Article 15 TRIPs requires all that all forms of signs capable of distinguishing goods or services must be registerable.

8. Conclusion

US courts have vacillated between a technical functionality policy based on market-based competitive need and on a right to copy based on the intrinsic characteristics of the sign in question. This is with a view to channelling utilitarian marks into the patent system, or perhaps in recognition of a broader natural right to copy. On the other hand, the European courts have steadfastly articulated the policy behind technical functionality as channelling technical subject-matter that would fall within the realm

\textsuperscript{137} Buccafusco and Lemley, “Functionality Screens”, 1373.
\textsuperscript{138} See Dinwoodie, “Conceptual Lessons”, 29-32.
\textsuperscript{139} MPI Study at [2.26].
\textsuperscript{140} Kur, “Too Pretty to Protect?” 19.
of patent out of the trade mark system. The need to have a competitive market is there, but in the background, rather than as a tool for constructing a detailed functionality test. The focus on channelling has been consistently reflected in the GC and Board of Appeals’ unwillingness to consider availability of alternatives and their willingness to take pre-existing patents into account in determining whether a characteristic is “necessary to achieve a technical result”. However, the policy articulated in the second part of the functionality test has been undermined by the way in which hybrid marks have been characterised in the first “exclusively” part of the test. The net result is that inclusion of relatively minor non-functional features will take the mark completely outside of scope of the functionality exclusion, before any consideration under the second stage. Moreover, the intent to make functional features of hybrid marks freely availability for competitive use has been further eroded because tribunals seem willing to offer protection to the functional features of hybrid marks even when they are used without the non-functional features that secured the mark’s registration. This article has identified various options that could be taken to restore the role of channelling and the second part of the technical functionality test. This is achieved through introducing rules or defences that prevent an infringement action or opposition from succeeding based solely upon a coincidence of functional characteristics, or by having more rigorous examination of hybrid marks in the first place.