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Dyson and Samsung compared – functionality and aesthetics in the design infringement analysis

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Abstract:
How far to protect functionally-influenced designs is a critical question in design law. Comparison of two leading UK infringement disputes, Dyson v Vax and Samsung v Apple, reveals how apparent reluctance to grant protection to such designs in Dyson has now given way in Samsung to a greater receptiveness towards functionally-influenced designs which is more aligned to the European design regime.

Introduction
The extent to which design laws should protect functional or semi-functional design is longstanding and controversial question. Divergences across Member States’ national laws were to be addressed in the harmonised European design regime enacted by the Designs Directive (‘DD’) and Community Design Regulation (‘CDR’). The European regime adopted a new ‘design approach’, marked among other key features by its inclusion of both the functional and the aesthetic in the definition of ‘design’. Despite this, however, the debate over protection of functionally-influenced design in Europe remains very much alive.

The main focus of this debate since enactment of the European regime has been on interpretation of the exclusion from protection for design features ‘solely dictated by… technical function’ at Articles 7(1) DD and 8(1) CDR. It is, however, clear that a very great many functionally-influenced designs will survive this exclusion, whatever interpretation is preferred. The aim of the European regime was clearly to provide some measure of protection for such designs. But how much? In particular, how should functionally-influenced designs be treated when approaching the comparison with potentially conflicting other designs?

This issue, which has been much less examined and debated than the Article 7(1)/8(1) exclusion, is the focus of analysis in this article. This article compares the treatment of functionally-influenced designs in the infringement analysis in two leading UK cases, Dyson Limited v Vax Limited and Samsung Electronics (UK) Limited v Apple Inc. Both involved high-profile litigants seeking to protect designs at the cutting-edge of style and technology. Both also show how tensions surrounding functionally-influenced design are coming into increasingly sharp focus in the developing infringement case law. The comparison between these cases reveals a degree of apparent reluctance on the part of the English High Court and Court of Appeal in Dyson to attribute weight to functionally-influenced design features in the assessment of infringement. However, in Samsung this has given way to a more nuanced view of the design process in which the English High Court looked more closely and with greater consideration at the balancing of functional requirements and aesthetic freedom. As a result, in Samsung design features were less readily dismissed from the infringement analysis because of their functional influences. This outcome has been upheld by the English Court of Appeal in its recent dismissal of Apple’s appeal against the first instance finding of non-infringement. It will be argued that the more rounded approach to functionally-influenced design in Samsung is better aligned with the aims of the European design regime.
Background: the European design regime and the role of the concept of ‘design freedom’ in moderating the protection of functionally-influenced designs

The definition of ‘design’ in the DD and CDR focuses on one key factor - the ‘appearance’ of the whole or part of a product:

“Design’ means the appearance of the whole or part of a product resulting from the features of, in particular, the lines, contours, colours, shape, texture and/or materials of the product itself and/or its ornamentation”. 6

A ‘product’ can be ‘any industrial or handicraft item’.7 The definition of ‘design’ – containing, as it does, no reference to either the aesthetic or the functional - was described at the time that the new regime was working its way towards enactment as ‘arguably the most important contribution that the proposals make to the advancement of design protection laws’, the European Commission having ‘repudiat[ed]’ the problematic ‘functional/aesthetic dichotomy’. 8

In the European design regime, the tests of novelty and individual character are now the principal requirements governing entitlement to protection. A design is ‘new’ if no ‘identical design’ has been made available to the public before the relevant date, designs being deemed to be identical if ‘their features differ only in immaterial details’; a design has ‘individual character’ if ‘the overall impression it produces on the informed user differs from the overall impression produced on such a user by any design which has been made available to the public’ before the relevant date.9 The scope of protection conferred upon a design by the European regime is also dependent on the concept of ‘overall impression’, a protected design being infringed by any design which does not produce on the informed user a different overall impression.10 None of the concepts of novelty, individual character or overall impression are defined in terms of aesthetics or functionality.11

This basic position is subject to two caveats as regards functionally-influenced designs. The first is the exclusion from protection of design features ‘solely dictated by… technical function’ at Articles 7(1) DD and 8(1) CDR. Article 7(1) DD provides:

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

As noted in the early literature, this exclusion gave rise to an immediate tension in terms of the apparent intention of the Commission to protect both functional and aesthetic designs.12 Articles 7(1) DD and 8(1) CDR also employ language which is notoriously unclear.13 This has been problematic, but is not the main focus of this article which is concerned instead with the second particular issue for functional designs, relating to the treatment of functionally-influenced design features in the comparison of conflicting designs for validity and infringement purposes. Whatever interpretation of Articles 7(1) DD and 8(1) CDR is preferred, this has the potential to affect a far greater number of functionally-influenced designs than the Article 7(1) / 8(1) exclusion.

In the comparison of conflicting designs, the debate over the extent of protection to be afforded to functionally-influenced design finds its outlet ‘indirectly’ in the requirement in Articles 5(2) and 9(2) DD and Articles 6(2) and 10(2) CDR that the ‘degree of freedom of the designer’ must be ‘taken into consideration’ when assessing the individual character of a design for validity purposes and its scope of protection against infringement. 14 For infringement purposes, Articles 9(2) DD and 10(2) CDR state:

‘In assessing the scope of protection, the degree of freedom of the designer in developing his design shall be taken into consideration’.
There is, however, no substantive difference between taking design freedom into account for the purposes of assessing validity or for assessing scope of protection.\textsuperscript{15}

The proper application of the ‘design freedom’ test was identified in early literature as essential to the success of the new ‘design approach’ of the DD and CDR.\textsuperscript{16} The exercise of ascribing greater or lesser significance to the different features of a design is key to building up a picture of the ‘overall impression’ produced on the informed user, this being the core legal concept underpinning the DD and CDR for validity and infringement purposes.\textsuperscript{17} Taking ‘design freedom’ into account reflects the fact that product designers operate within constraints which artists do not.\textsuperscript{18} Some of those constraints will affect how the informed user perceives similarities and differences between designs. The balance between the weight attributed to design features affected by some form of restriction on design freedom and the weight to be attributed to features where there is none determines whether and, if so, how far the European regime favours more aesthetic or more functional designs.

The recitals to the DD and CDR state that ‘design freedom’ is to be taken into consideration alongside the nature of the product to which the design is applied and the industrial sector to which it belongs, as part of assessing the overall impression of a design relative to the existing design corpus.\textsuperscript{19} Beyond this, however, the DD and CDR give no further guidance on ‘design freedom’. What types of factor are relevant? Technical matters only or matters such as cost, efficiency or market acceptability? How should the relevant factors be ‘taken into consideration'? And how much of an impact on design freedom does there need to be to affect the informed user’s perception of overall impression?

General Court case law on ‘design freedom’: \textit{Grupo Promer} and \textit{Shenzhen}

The assessment of ‘overall impression’ has been the subject of a number of appeals from decisions of OHIM to the General Court and, in two instances, from there to the Court of Justice. These cases deal with a range of important matters, including the legal characterisation of the ‘informed user’ and other matters which are outwith the scope of this article.\textsuperscript{20} On the specific issue of ‘design freedom’ which is the focus here, the key authorities are the judgments of the General Court in \textit{Grupo Promer Mon Graphic SA v OHIM} and \textit{Shenzhen v OHIM}.\textsuperscript{21}

\textit{Grupo Promer} was the first case to reach the General Court under the new European design regime. It arose from an invalidity challenge to a Community registered design belonging to PepsiCo, Inc. relating to children’s toys called ‘pogs’, ‘tazos’ or ‘rappers’. These consist of small, round, metal discs and are often distributed as free gifts inside other products. OHIM’s Invalidity Division had declared PepsiCo’s Community registered design invalid because of its conflict with an earlier design belonging to the challenger, Grupo Promer – see Figures 1 and 2 below:\textsuperscript{22}

\textbf{Figure 1 - PepsiCo’s Community registered design:}
Figure 2 – Grupo Promer’s prior design:

This decision was reversed by the OHIM Third Board of Appeal, which upheld the Community registered design, and the case was thereafter appealed by Grupo Promer to the General Court. The key issue was whether the PepsiCo and Grupo Promer designs produced the same overall impression on the informed user and, as a sub-question, whether and, if so, how that overall impression was impacted by taking into account design freedom. In dealing with these issues, the General Court gave guidance relevant to some of the questions on design freedom noted above as arising from the lack of detailed guidance in the DD and CDR.

In Grupo Promer, the General Court looked first at the type of factor relevant to design freedom, holding that:

‘… the designer’s degree of freedom in developing his design is established, inter alia, by the constraints of the features imposed by the technical function of the product or an element thereof, or by statutory requirements applicable to the product. Those constraints result in a standardisation of certain features, which will thus be common to the designs applied to the product concerned’. 23

The General Court also explained how the degree of design freedom affects assessment of overall impression. It held:

‘In the specific assessment of the overall impression of the designs at issue on the informed user, who has some awareness of the state of the prior art, the designer’s degree of freedom in developing the contested design must be taken into account… [I]n so far as similarities between the designs at issue relate to common features such as those described [above], those similarities will have only minor importance in the overall impression produced by those designs on the informed user. In addition, the more the designer’s freedom in developing the design is restricted, the more likely minor differences between the designs at issue will be sufficient to produce a different overall impression on the informed user’. 24

For reasons which will be addressed further below, on the facts the General Court upheld the Board of Appeal’s conclusion that design freedom was ‘severely restricted’; however, taking that into account when comparing the designs in suit, the General Court reached the opposite conclusion on validity, concluding that the PepsiCo design did not produce a different overall impression to the earlier Grupo Promer design and that PepsiCo’s Community design registration was therefore invalid. 25

Shenzhen was the second design case to reach the General Court on the assessment of ‘overall impression’. This dispute concerned a Community registered design for a unit intended to be used by speakers at conferences.
On appeal to the General Court, the owner of the Community registered design argued that many design features – such as the speaker, microphone, control buttons and screen - and their configuration in the unit were dictated by the technical function of the device and that design freedom was in any event also constrained by a general trend favouring small, flat, rectangular devices such as that depicted in the registration. However, the General Court held that that a ‘general trend’ is not a relevant factor to be taken into account when assessing design freedom. The General Court also distinguished between a need for certain features to be generally present, which did not amount to a constraint on design freedom, and a need governing the actual specific appearance of the designs in suit, which is a relevant constraint: on the facts, while the General Court accepted that the speaker, microphone, control buttons and screen were needed in the device, that concerned only the presence of those features in the unit and did not have a significant impact on their configuration or on the form and general appearance of the unit itself. On the facts, the General Court held that the degree of freedom of the designer of conference units was relatively wide and, after comparing the designs in suit, concluded that the designs produced the same overall impression and that the Community registered design was therefore invalid.

These rulings undoubtedly give some assistance to national courts on how to incorporate assessment of ‘design freedom’ into their infringement analysis, although a number of uncertainties remain, particularly arising from the General Court’s application of its legal ruling to the facts in Grupo Promer. These, and other matters, have been explored in the two UK cases, Dyson v Vax and Samsung v Apple, to which this article now turns.

Dyson v Vax – design freedom constrained

This case concerned alleged infringement of a UK registered design relating to Dyson’s award-winning DC02 multi-stage bag-free cyclonic vacuum cleaner by a competing cyclonic vacuum cleaner called the ‘Mach Zen’. Images from Dyson’s UK design registration and corresponding views of the ‘Mach Zen’ are at Figures 3 and 4 below:

Figure 3 – images from Dyson’s UK design registration:
There was no challenge to the validity as such of Dyson’s design, although Vax did argue that the transparent dirt-collecting bin forming part of Dyson’s registered design, a concept also present in Vax’s ‘Mach Zen’, was excluded from protection under Article 7(1) DD as ‘solely dictated by… technical function’. In dealing with this argument, perhaps unexpectedly Arnold J at first instance favoured an interpretation of Article 7(1) DD in which the exclusion was not determined by the availability of alternative designs capable of fulfilling the same function, as had been thought by many to be the correct approach, but instead by whether the design of the feature in question was attributable solely to functional considerations. On the evidence, that challenge failed. While Arnold J’s preferred interpretation of Article 7(1) DD has implications discussed further below, the potentially more difficult and less examined issue in Dyson lies in the approach at first instance and on appeal to the assessment of ‘design freedom’ in the infringement analysis.

Although stressing the importance of overall impression, Dyson identified nine particular respects in which it contended that the ‘Mach Zen’ was similar to its registered design:

- its collecting bin, inclined at ‘substantially halfway’ between vertical and horizontal;
- the transparency of that bin, with the cyclone mechanism visible through it;
- the presence of a pair of co-axial wheels at the rear of the machine, oversized so that they extended to ‘approximately half the height of the body of the machine’;
- the spacing apart of the wheels ‘to define the widest part of the machine’;
- prominent wheel arches extending over the top of the wheels, part of each formed by an elongated operational button;
- its cyclone top, increasing in height towards the rear of the machine;
- a lower bin support, said to form a ‘sweeping and curved’ forward extension of the wheel arches;
- a long ‘arcuate’ (i.e. curved) handle said to ‘sweep’ from above the bin to the rear of the machine above and behind the wheel overarching the cyclone top; and
• a body portion sloping downwards from the cyclone top towards the rear of the machine.35

At first instance, Arnold J drew from some aspects of the General Court judgments quoted above on ‘design freedom’ and also made his own findings on various issues. 36 Arnold J held that relevant constraints on design freedom were the technical function of the product or an element thereof, the need to incorporate features common to the relevant products and economic considerations; he also added, after hearing argument from the parties, that the technical specification of the product (for example, whether a high-performance or low-performance device) was also a relevant constraint. 37

On the facts, Arnold J found that all but two of the design features highlighted by Dyson (the lower bin support, held not to be present in the ‘Mach Zen’ at all, and the curved shape of the longitudinal handle) were restricted to such a degree as to greatly reduce their significance in the eyes of the informed user. 38 For example, the orientation of the parties’ collecting bins half way between horizontal and vertical was held to be ‘not of great significance’ to the informed user because, although common ground that it was possible to orient a multi-cyclone separator at any angle, the ‘trade-off’ between a vertical and a horizontal orientation ‘favoured’ an angle of ‘around’ 45 degrees and design freedom was therefore constrained if the designer wanted to achieve the ‘best technical compromise’. 39 The transparency of the bin was also ‘not of great significance’ because, although common ground that there were other possible solutions which would allow the user to know when the bin was full (such as a window, tinted bin or indicator), such alternatives had ‘drawbacks’ with ‘ease of use and cost considerations’ both ‘pointing’ towards adoption of a transparent bin. Thus, design freedom was restricted if the designer wished to achieve ‘the best solution’. 40

Similar conclusions were reached in relation to remaining features highlighted by Dyson. Although accepted by both sides as not necessary to have large rear wheels, their presence in both designs was not of great significance to the informed user because there was ‘an advantage’ to having a pair of large wheels and ‘an advantage’ to situating them close to the motor at the rear of the machine. 41 The positioning of the wheels was also restricted in that spacing them apart was ‘advantageous’ for stability reasons. 42 The prominence of the wheel arches resulted from a need to prevent debris falling into the wheel mechanism and because the arches were ‘bound to have some prominence’ as a result of the size of the wheels themselves. 43 The operational buttons forming part of the wheel arches were restricted by a need to have these in the product and because it was ‘desirable, although not necessary’ to locate them as in the Dyson design/‘Mach Zen’, it being common in the design corpus for such buttons to be at the rear of the machine. 44 The design of the cyclone top was restricted in following the air path between the cyclone and the motor. 45 The sloping configuration of the body portion was restricted because it was ‘technically sensible’ to follow the same line as the air ducts, building up the housing in a different way being liable to take up ‘unnecessary space and material’. 46 Although common ground that the handle did not have to be centrally or longitudinally positioned, this also reflected a design restriction because it was ‘advantageous’ in terms of ease of carrying. 47

A number of differences in appearance, some of which Arnold J regarded as considerable, were also stressed throughout the judgment in relation to several of the features relied upon by Dyson. 48 Arnold J also identified number of further visual differences between the ‘Mach Zen’ and registered design, some of which he regarded as striking. 49 In conclusion, ‘standing back’ from the detail and taking into account the design corpus and his views on design constraints, Arnold J held that the ‘Mach Zen’ produced a different overall impression to Dyson’s registered design, the former being ‘rugged, angular and industrial, even somewhat brutal’ while the latter was ‘smooth, curving and elegant’; as a result, even allowing that Dyson’s design was entitled to a ‘fairly broad scope of protection’ because of the differences between it and the prior art, the ‘Mach Zen’ did not infringe. 50
In the Court of Appeal, Dyson challenged Arnold J’s conclusion that the ‘Mach Zen’ produced a different overall impression to its registered design. Much of the argument focussed on Arnold J’s approach to ‘design freedom’. Dyson argued that the judge’s approach had, in effect, been to find restrictions on design freedom and to discount the key similarities in the ‘Mach Zen’ because Dyson’s design represented a ‘particularly good compromise’ such that any departure from it would adversely affect the product in some way; the net effect of such an approach was, as senior counsel for Dyson put it, ‘the better your design… the less design freedom, and the narrower your protection’. However, giving the main judgment of the Court of Appeal, Sir Robin Jacob found no error of principle in Arnold J’s approach. Instead, according to Sir Robin Jacob, for all of the common features in relation to which design freedom had been an issue, Arnold J had correctly considered ‘to what extent they had technical significance and thus affected the degree of design freedom’ and had found on the evidence that there was ‘a technical reason’ for each of them. In any event, highlighting the differences in appearance between the designs and criticising the list of common design features relied upon by Dyson as ‘far too general’, Sir Robin Jacob noted that he also would have concluded that the ‘Mach Zen’ produced a different overall impression had he been free to form and substitute his own opinion; he noted that this would have been his conclusion even making an allowance for greater weight to be given to the features identified by Arnold J as functionally constrained.

**Samsung v Apple - design freedom retained**

Only a matter of months after the Court of Appeal’s judgment in *Dyson*, the issues surrounding design freedom came to the fore again in the English *Samsung v Apple* litigation. This very high-profile dispute concerned a Community design registration comprising a series of line-drawing views of, in essence, the Apple iPad. Apple’s Community design was alleged to be infringed by three of Samsung’s ‘Galaxy’ tablet computers, the 10.1, 8.9 and 7.7. Images from Apple’s Community design registration and views of Samsung’s ‘Galaxy’ 10.1 are at Figures 5 and 6 below:

**Figure 5 – images from Apple’s Community design registration:**

![Figure 5](#)
Apple identified seven common features in its design and the Samsung devices which it argued gave rise to infringement, namely their:

- shapes as ‘broadly rectangular, bi-axially symmetrical slabs’ with four ‘evenly, slightly rounded’ corners;
- flat transparent surfaces ‘without any ornamentation’ covering the entire front face of the devices up to the rim;
- very thin rims ‘of constant width’, ‘surrounding and flush with’ the front transparent surface;
- rectangular display screens surrounded by a plain border ‘of generally constant width’ centred beneath the transparent surface;
- substantially flat rear surfaces which curved upwards at the sides and came to meet the front surface at a ‘crisp outer edge’;
- thin profiles, the impression of which was emphasised by the above; and
- overall, designs of ‘extreme simplicity’ without features specifying orientation.

As well as highlighting a number of differences in appearance between its devices and the Community design, Samsung cited an extensive body of prior art which it said was close to and reduced the impact of
similarities between its devices and the Apple design. Samsung also argued that there was very limited
design freedom.

There was some dispute between the parties as to the range of factors which could be taken into account
as design constraints (for example, whether economic considerations were relevant as held in Dyson), but
Judge Birss held that he did not need to decide the issue and the only constraints considered by him were
functional ones. On the facts, Judge Birss rejected Samsung’s arguments on design freedom for
essentially all features in dispute.

For example, noting that the rectangular and bi-axially symmetrical ‘slab’ shape was ‘to a large extent’
driven by the function of using a rectangular screen, Judge Birss held that designers nonetheless had a
‘fair degree’ of design freedom and ‘an important aspect’ of the exercise of that freedom related to
aesthetics. In respect of the products’ rounded corners, while noting Samsung’s evidence that rounded
corners were preferred for manufacturing and ergonomic reasons and that their dimensions were
influenced by factors relating to the size and volume of the device, Judge Birss held that the degree of
rounding on devices in the design corpus differed substantially and that the considerations of volume,
display size and ergonomics were simply trade-offs which illustrated the design choices which the
designer would have to make, the appearance of the product playing “an important part of that process
of choice”. Other than the rectangular display screen itself which was ‘banal and determined solely by
function’, such design constraints as there were could not account for the identity between the Apple
design and Samsung devices.

Judge Birss reached similar conclusions in relation to the other features highlighted by Apple. While the
screen had to be transparent and design freedom was constrained in so far as all displays had a border of
some sort, there were no constraints requiring the designer to do away with a bezel completely as had
been done by both Apple and Samsung nor any constraints dictating the extent of ornamentation on the
front of the device. Aesthetics ‘played’ a part in the choice of border feature; the degree of
ornamentation on the front of the device was also ‘a matter of the designer’s choice’ with ‘functional
trade-offs to consider but… also aesthetic considerations’. While there were ‘modest’ design constraints
in relation to the configuration of the front surface, they therefore did not account for the close similarity
between the Samsung tablets and the Apple design. The same was true of the rim: within a ‘general
overall constraint’ requiring a rim of some sort, the designer had ‘significant aesthetic design freedom’ to
choose, in a trade-off involving functional and aesthetic considerations, between a bezel or flush rim and
to choose the rim thickness and configuration around the device. Again, the identity between the
Samsung device and Apple design was not a result of design constraints.

Even where design freedom was ‘considerably’ constrained in terms of the need for some sort of touch-
insensitive border around the screen, that alone did not account for the similarity between the Samsung
devices and the Apple design. As for the rear surface and curved sides of the devices, there was only
one serious design constraint – the need for the back to be generally flat – otherwise there was
‘considerable design freedom’, the curved sides in particular being ‘almost entirely aesthetic’ despite their
effects on technical matters such as the internal volume of the device. As regards the profile of the
devices, while it was accepted that designers of handheld computers with screens of this size were
constrained to make their products ‘relatively thin’, this included ‘a wide range of actual thicknesses’. There
was also no functional constraint forcing designers to make extremely simple, featureless designs or
requiring a design without features specifying orientation.

In short, although various constraints on ‘design freedom’ were recognised by Judge Birss, none was
sufficient to explain the identity or similarity between the Apple and Samsung designs. Nonetheless, the
infringement claim failed because of the similarity of Apple’s design to the existing design corpus. As a
result, the identity or close similarity of the common features in the Samsung devices was reduced in significance. Conversely, differences in design – Samsung’s devices being much thinner and having unusual detailing on the rear – had greater prominence in the eyes of the informed user. Overall, Judge Birss concluded that, while from the front the Apple and Samsung devices appeared to be members of the same ‘family’ of designs, the Samsung device was very thin, ‘almost insubstantial’ with ‘unusual details’ on the back; Apple’s design was ‘a cool design’, but Samsung’s devices were ‘not as cool’. Lacking the same ‘understated and extreme simplicity’ of the Apple design, their overall impression was different and the Samsung devices did not infringe.

After the ruling by Judge Birss, the dispute rapidly came before the English Court of Appeal which issued its decision just over three months later. On appeal, the focus of argument turned on the informed user’s perception of the designs and the assessment of overall impression. Apple criticised Judge Birss for having approached the design corpus wrongly and for failing properly to consider the designs as a whole, with too much of a feature-by-feature comparison. These arguments were rejected by the Court of Appeal, which found no error of principle in Judge Birss’ approach; indeed, as in Dyson, giving the main judgment on behalf of the Court, Sir Robin Jacob noted he would have reached the same conclusion on overall impression as the judge at first instance were he required to form his own view. No particular complaints were levelled at Judge Birss’ approach to design freedom and his findings on this issue were upheld.

Dyson and Samsung compared – two different approaches to ‘design freedom’

In high-level terms, the courts in Dyson and Samsung approached the assessment of overall impression the same way. Judge Birss in Samsung articulated his approach the most clearly. He stressed that the outcome of the infringement claim depended on overall impression. However, as a practical matter the designs in suit had to be broken down into features in order to give each feature ‘appropriate significance or weight’ in a three-step process: first, disregarding the feature completely if dictated solely by function, then considering that feature against the design corpus and from the point of view of design freedom. Differences, as well as similarities, needed to be addressed in this way. Taking into account the similarities and differences appropriately weighted in terms of their significance to the informed user, the court could then come to a view on overall impression.

It is, however, notable that on the issue of ‘design freedom’ Dyson and Samsung are almost polar opposites. In Dyson, all but one of the common design features were held to be restricted in a way significantly affecting overall impression. In contrast, in Samsung, apart from the rectangular screens and flat backs of the devices, no design features were held to be constrained to a relevant degree. Closer comparison of the first instance and Court of Appeal judgments in Dyson on the one hand and the first instance judgment in Samsung on the other reveals significant divergence in their treatment of the functionally-influenced elements of the designs in suit. This was not remarked upon by the Court of Appeal in the Samsung appeal.

It must be stressed that the outcome in Dyson ultimately turned on the visual differences between the two designs. However, it is submitted here that both Arnold J and the Court of Appeal appear nonetheless to have misapplied the ‘design freedom’ test and were too ready to dismiss the common features highlighted by Dyson because of their functional influences. As noted above, the Court of Appeal held that Arnold J had, for each of the features in suit, considered ‘to what extent they had technical significance and thus affected the degree of design freedom’. It is, however, hard to locate any such assessment in the judgment at first instance, with no attempt by Arnold J to quantify the extent of the impact of the design constraints identified.
The situation is not helped by the cursory way in which the first instance judgement addresses the parties’ evidence. 84 Dyson also did nothing to assist their case given the level of generality at which some of the relevant similarities were said to exist. 85 However, even where specifics were pleaded, no consideration is given to them in the first instance judgment. For example, while it was held that the ‘favoured’ angle for orientation of the transparent bin was ‘around’ 45 degrees, 86 there is no discussion by Arnold J of the extent to which a deviation from that angle would result in inferior performance, what the reduction in performance would be, what were therefore the acceptable parameters for orienting the bin and thus what actually was the degree of design freedom for this feature. Similarly, there is no explanation of why the technical ‘advantages’ said to constrain the design of the rear wheels required those wheels to have the specific proportions pleaded by Dyson (‘approximately half the height of the body of the machine’), nor why the ‘advantages’ of wide spacing required them to be positioned in either design in the exact way they were (‘defin[ing] the widest part of the machine’). 87 There is no explanation of why and how far the ‘ease and cost considerations’ identified as constraints militating against configuring the collecting bin with a window or indicator led to, or were mitigated by, the adoption of a fully transparent bin instead. It is only in relation to one feature that the relationship between constraint and design was considered, Arnold J conceding that constraints did ‘not dictate the precise shape of’ the cyclone top. 88

In other words, at no point in his judgment did Arnold J identify the actual degree of design freedom - the explicit requirement of the DD and CDR – surrounding the design features in suit. There was consequently no assessment in his judgment of how far the design restrictions which he held to exist in fact led to the specific design features in question. This was not commented upon by the Court of Appeal.

At the same time, it is striking to note the language used by both Arnold J and the Court of Appeal in Dyson to describe the relevant design restrictions all of which, it should be remembered, were accepted as impacting significantly on overall impression. Arnold J accepted that such restrictions existed where a technical trade-off or compromise ‘favour[ed]’ a particular design (or something ‘around’ that particular design), where alternatives to the design had ‘drawbacks’ which ‘point[ed] towards’ adoption of the design in suit or which would have involved ‘unnecessary’ extra space or material, or even just where a particular feature was ‘advantageous’, ‘desirable’ or technically ‘sensible’.89 The Court of Appeal found it sufficient to justify the finding that each of these design features was significantly diminished in terms of overall impression that there was ‘a technical reason’ for designing each feature that way. 90

In the Samsung case, ostensibly Judge Birss followed Dyson on the issue of ‘design freedom’, noting the requirement, as stated by Sir Robin Jacob in the Court of Appeal and quoted above, to consider for each design feature in suit ‘to what extent they had technical significance and thus affected the degree of design freedom’.91 However, thereafter Judge Birss developed his own, more refined approach.

In particular, while there was (to use the language of the Court of Appeal in Dyson) a technical reason to design all of the disputed features in Samsung a certain way, Judge Birss did not treat that alone as enough to impact on overall impression. Judge Birss emphasised that the issue is not simply a ‘binary question’ of whether or not a feature is dictated solely by function.92 Instead, the question is one of weight: for any given feature, it is pertinent to know if there are relevant technical considerations; where a feature could represent the product of a mixture of technical considerations and aesthetics, it is also relevant to know if there are alternative ways of designing the feature in question. According to Judge Birss, the balancing of these factors is a key part of the task of assessing infringement. 93 Adopting this approach and as is evident from the summary of his findings above, as Judge Birss worked his way through the various design features in suit, he assessed more closely and explained more clearly the extent of the relevant design constraints and thus how far those constraints could really be said to have caused any identity or similarity between the registered design and alleged infringements.94 It was as a result of the rigour of this
analysis that Samsung’s case on design freedom failed so roundly. This level of analysis was, however, missing from *Dyson* both at first instance and on appeal.

**Samsung preferred—restoring protection for functionally-influenced designs**

The judgment of the General Court in *Grupo Promer* quoted earlier in this article, referring to ‘constraints’ which are ‘imposed by’ technical function or statutory requirements and which result in ‘standardisation’ of features, clearly implies that a much higher degree of design constraint than was accepted by the courts in *Dyson* is needed to affect overall impression. This is supported by the Advocate-General’s Opinion in the *Grupo Promer* appeal to the Court of Justice, in which he describes the ‘design freedom’ test as directed to situations of ‘compulsory standardisation’ in which certain features of a design are considered ‘mandatory’, design freedom needing to be taken into account in the assessment of overall impression:

‘because some features of the product to which the design relates are, so to speak, “compulsory”: as a result, the designer is not free to change them…’ (emphasis added).

Similar language of compulsion and necessity has been used in other General Court decisions. It is also clear from *Shenzhen* and other General Court judgements that there must be a causal link between any design constraint and the precise particular configuration of the design in suit: without that all that is shown is that certain features must be present in the design in some way, but no more.

It is respectfully suggested that, in *Dyson*, Arnold J and the Court of Appeal did not properly reflect these principles in their approach to ‘design freedom’. It is, of course, difficult fully to assess the correctness of the outcome in *Dyson* without a greater understanding of the evidence before the court and the choice of language in both judgments may have been unfortunate. However, looked at in the round *Dyson* does seem to reveal a degree of reluctance to grant much, if any, protection to design features with functional or other practically-oriented influences. As well as the courts’ apparently relaxed approach to the actual extent of impact of the relevant design constraints, Arnold J’s choice of interpretation of the exclusion for designs ‘dictated solely by… function’ at Articles 7(1) DD / 8(1) CDR adopts the more encompassing of the two possible interpretations of this provision, endorsing a legal test which has been said by some to re-introduce an aesthetic requirement into entitlement to protection. In addition, a broad range of factors were taken into account as design constraints, not just the ‘features imposed by the technical function of the product’ or ‘statutory requirements’ referred to in the passage quoted from *Grupo Promer* above. Relatively little also was said relating the particular design features relied upon by Dyson to the existing design corpus which, given the accepted striking novelty of the Dyson design, was the key counterbalance to the courts’ findings on design freedom.

Of course, *Dyson* may yet become the prevailing European approach on the Article 7(1)/8(1) exclusion and on the range of relevant design constraints. *Samsung* reinforces *Dyson* on the former and does little to help settle the outstanding questions on the latter. On any view, however, the *Dyson* approach to design freedom is problematic. Taking the judgment of the Court of Appeal at face value and to its logical extreme, to hold that it is sufficient for design features to be significantly reduced in importance in the assessment of overall impression simply if there is a ‘technical reason’ for those features would, in effect, deny all but ornamental designs any meaningful protection. Setting the bar so low would wrongly result in functionally-influenced design features effectively being ignored in the infringement comparison. Examining the judgments closely, it is hard to avoid the suspicion that *Dyson* is a case where the courts’ willingness to dismiss from the infringement analysis the functional-influenced elements of Dyson’s design to some degree penalised design work which had identified an ‘optimal’ balance of form and function. Despite the Court of Appeal’s rejection of criticism to this effect, it does appear that Arnold J
was indeed concerned to keep free the ‘best technical compromise’ or ‘best solution’ at least in relation to some aspects of the Dyson design, swayed by Vax’s submission that ‘the freedom of the designer referred to in Article 9(2) is not the freedom to develop a technically inferior product’.105 This is despite the argument that, as noted in the early literature, ‘optimal designs’ are arguably:

‘exactly the fusion of function and appeal that the Commission intended to protect’.106

Almost all design activity involves a process of compromise and optimisation.107 It can also be difficult, if not impossible, to differentiate between functional and non-functional elements of a design.108 From a design industry perspective, the modern view of design emphasises the importance of the combination of function and style, aiming for the optimal interrelationship between function and form.109 This renders even harder the drawing of distinctions between functionality and aesthetics, described by one commentator as an ‘implausible, and impossible, task’.110 In dismissing so readily the functionally-influenced elements of the disputed design, and in doing so in a manner which appears to suggest an unrealistically clear demarcation between the functional and non-functional, Dyson risks undermining the ethos and innovation of the European regime’s ‘design approach’.111

In contrast, in Samsung Judge Birss’ judgment probes and analyses ‘design freedom’ in a manner much more aligned with the General Court’s rulings and Advocate-General’s comments on this issue. Like Dyson, Samsung is a case in which, at the end of the day, matters of visual appearance were key to the finding of non-infringement and the relationship of Apple’s design to existing design corpus, discussed in much more detail in Samsung than in Dyson, was critical.112 However, the different approach taken by Judge Birss on the issue of ‘design freedom’ is also important. In Samsung, for each design feature in suit the judge assessed both the degree of design constraint and, conversely, the degree of aesthetic freedom remaining open to a designer in deciding what the impact of each design constraint actually was. The net effect of such an approach is that a greater degree of design constraint, and a causal link between constraint and design, are required before overall impression is affected. Functionally-influenced design features are less readily dismissed from the assessment of overall impression; instead, the complexities of the design process, the continual compromises in the exercise of design choice and the inter-relationship of functional and aesthetic factors underlying design features are all recognised with much more nuance.

Although the Court of Appeal addressed ‘design freedom’ in much more substantive detail in its earlier judgment in Dyson, it is submitted that the first instance approach to ‘design freedom’ in Samsung should be the preferred model for future cases given its greater alignment with EU-level authorities. Although the Court of Appeal did not explicitly remark on the difference in Judge Birss’ analysis compared to Dyson, it is submitted that the Court of Appeal’s unequivocal support for Judge Birss’ findings on ‘design freedom’ in Samsung should nonetheless be seen as an endorsement of his approach going forward.113 Of course, the Samsung case will no doubt continue to attract debate, particularly for its treatment of the design corpus and the net effect of the prior art on the scope of protection afforded to Apple’s design. The case raises interesting questions as to how far more complicated or technical issues on ‘design freedom’ can be properly dealt with while at the same time assessing overall impression through the eyes of the informed user.114 Samsung also rather confounds the much-repeated mantra that designs cases must necessarily be simple ones.115 However, adopting the Samsung approach brings us much closer to ensuring that design infringement reflects design’s need for a ‘methodology of its own’ reflecting that design is ‘neither a scientific process nor exactly art-like’, but a ‘mixture of art and technology’.116 After the apparently backward shift in Dyson, Samsung goes a long way to restoring more balanced protection to functionally-influenced design in line with the intentions of the European regime.
Designs are the least harmonised of the principal intellectual property rights at the international level, leaving considerable discretion in how jurisdictions may choose to protect designs and resulting in a global diversity of approaches, see: Fischman Afori, O. ‘Reconceptualizing property in designs’ 25 Cardozo Arts & Ent. L.J. 1105 2007-2008, pages 1128-1131; Kingsbury, A. ‘International harmonisation of designs law: the case for diversity’ E.I.P.R. 2010, 32(8), 382-395, pages 382 and 385-391; and Suthersanen, U. Design Law: European Union and United States of America (2nd edition, Sweet & Maxwell, 2010), chapter 3. The only provision at an international level which touches on the status of functional designs is the optional exclusion from protection at Article 25(1) TRIPS which states: ‘Members may provide that… protection shall not extend to designs dictated essentially by technical or functional considerations’. The discretionary nature of this provision is indicative of the lack of international consensus on the issue: Pires de Carvalho, N. The TRIPS Regime of Trademarks and Designs (2006, Kluwer Law International), paragraph 25.7, page 402; Kingsbury (above) page 388.

Directive 98/71/EC of the European Parliament and of the Council of 13 October 1998 on the legal protection of designs (‘DD’); Council Regulation 6/2002/EC of 12 December 2001 on Community designs (‘CDR’). The DD harmonises the principal substantive aspects of national registered design protection across EU Member States. In the UK, this took the form of very substantial revision to the Registered Designs Act 1949. The CDR creates two unitary pan-EU design rights, the Community registered design and Community unregistered design, the substantive provisions for which mirror those of the DD for all purposes relevant to this article. For full details of the European design regime, see: Howe, M. Russell-Clarke and Howe on Industrial Designs (Sweet & Maxwell, 8th ed, 2010) chapter 2; Suthersanen, Design Law (note 1 above), chapters 5-7; and Laddie, H.I.L. et al The Modern Law of Copyright and Designs (LexisNexis, 4th ed, 2011), chapters 51-60. The harmonisation effected by the European design regime does not affect other forms of intellectual property protection which may be available for designs and leaves open the potential for cumulation between these and the protection available under the DD and the CDR, see: Recitals 7 and 8 and Articles 16 and 17 DD and Recitals 31 and 32 and Article 96 CDR. As a result, national preferences for or against aesthetic or functional designs may continue to be expressed through the availability (or otherwise) of alternative protection in non-harmonised regimes such as copyright. Cumulation of design and copyright protection has recently been addressed by the Court of Justice in Flos SpA v Semeraro Casa e Famiglia SpA (Case C-168/09) [2011] R.P.C. 10. On the cumulation between copyright and design protection under the DD and CDR, see: Suthersanen, Design Law (note 1 above), paragraph 9-003; Howe (above) paragraphs 2-012 to 2-015; Laddie et al (above) paragraphs 43.53-43.56.

The Commission’s Green Paper on the legal protection of industrial design, Commission, June 1991, III-F/5131/91-EN, paragraph 5.4.6.1 comments that a system which provides for exclusion from protection of features dictated by function ‘leaves… completely open the question of the interplay of the two aspects, functional and aesthetic, which are both present in the vast majority of cases’ (emphasis added). See also: Suthersanen, U. ‘Breaking down the intellectual property barriers’ I.P.Q. 1998, 3, 267-294, page 268 where it is noted: ‘In practice one may often come across features of designs which are substantially influenced by function, but seldom, if ever, solely dictated by the function’ (emphasis added).


aspects of functionality in the infringement analysis (e.g. Proctor & Gamble Company v Reckitt Benckiser (UK) Limited [2008] E.S.R. 8 and Rawlaun Ltd v Turfmech Machinery Ltd [2008] R.P.C. 27), they did so relatively briefly and without the benefit of the recent General Court case law discussed in the main body of this article.

6 Articles 1(a) DD and 3(a) CDR. See also Suthersanen, Design Law (note 1 above), paragraph 2-002.

7 Articles 1(b) DD and 3(b) CDR: “P[roduct] means any industrial or handicraft item, including inter alia parts intended to be assembled into a complex product, packaging, get-up, graphic symbols and typographic typefaces, but excluding computer programs’.


9 Articles 3-5 DD and Articles 4-6 CDR.

10 Articles 9(1) DD and 10(1) CDR.

11 Beier (note 8 above), page 842; Franzosi, M. ‘Design protection Italian style’ J.I.P.L.P. 2006, 1(9), 599-602, page 600; Franzosi commentary, section 6.1, page 59 and Levin commentary, page 69 in Franzosi, M. et al European Design Protection (note 8 above); and Fischman Afori (note 1 above), page 1136. The General Court has distinguished between aesthetics and the concepts of individual character/overall impression in Shenzhen Taiden Industrial Co Ltd v Office for Harmonisation in the Internal Market (Trade Marks and Designs) (OHIM), Bosch Security Systems BV’ (Case T-153/08, 22 June 2010, currently unreported): rejecting the submission that ‘general trends’ limited the designer’s freedom, the Court stated that such trends might be relevant ‘at the most, in relation to the aesthetic perception of the design concerned’ but were not relevant in the examination of individual character because that examination ‘consists in verifying whether the overall impression produced by [the design] differs from the overall impressions produced by the designs made available earlier, irrespective of the aesthetic or commercial considerations’ (paragraph 58, emphasis added).

12 Musker (note 8 above), paragraph 1-073.

13 See: Musker (note 8 above) paragraphs 1-078 to 1-086, and note 33 below. Articles 7(2) DD and 8(2) CDR also exclude from protection ‘features of appearance of a product which must necessarily be reproduced in their exact form and dimensions in order to permit the product in which the design is incorporated or to which it is to be applied to be mechanically connected to or placed in, around or against another product so that either may perform its function’, subject to a carve-out at Articles 7(3) DD and 8(3) CDR maintaining protection for ‘a design serving the purpose of allowing multiple assembly or connection of mutually interchangeable products within a modular system’. This carve-out has been the subject of criticism, for example: Beier (note 8 above), pages 856-857.


Speyart (note 8 above), page 607. Speyart notes that this introduces ‘an important element of flexibility in the determination of the threshold for protection’ enabling the courts to ‘set different standards for design areas which are more crowded (eg textiles) or more technical than others’.

Articles 5(1) and 9(1) DD and Articles 6(1) and 10(1) CDR.

As noted by Judge Birss at first instance in Samsung: ‘The difference between a work of art and a work of design is that design is concerned with both form and function… Function imposes constraints on a designer’s freedom which do not apply to an artist’: Samsung, High Court (note 5 above), paragraph 57. See also: Musker (note 8 above), paragraph 1-008; Koschital (note 4 above), page 305; Fischman Afori (note 1 above), page 1107.

Recitals 13 DD and 14 CDR. While these Recitals refer to the assessment of overall impression for the purposes of evaluating individual character, the same matters are also relevant to assessment of overall impression for infringement purposes: Proctor & Gamble Company v Reckitt Benckiser (UK) Limited (English Court of Appeal) [2008] F.S.R. 8, paragraphs 15-19; Dyson, Court of Appeal (note 5 above), paragraph 34; Gimex International Groupe Import Export v The Chill Bag Company Limited and Others [2012] E.W.P.C.C. 31 (English Patents County Court, currently unreported), paragraph 35. In Dyson, the English Court of Appeal corrected and reversed the ruling in its earlier decision in Proctor & Gamble to the effect that different degrees of difference in overall impression were required for validity and infringement purposes: the position is now that the same degree of ‘different overall impression’ is required: Dyson, Court of Appeal (note 5 above), paragraph 34.

See: Grupo Promer Mon Graphic S.A v Office for Harmonisation in the Internal Market (Trade Marks and Designs) (OHIM) with PepsiCo Inc (Intervener) (General Court, Case T-9/07) [2010] E.C.D.R. 7 and on appeal to the Court of Justice PepsiCo Inc v Grupo Promer Mon Graphic S.A (Court of Justice, Case C-281/10 P) [2012] F.S.R. 5; Shenzhen Taiden Industrial Co Ltd v Office for Harmonisation in the Internal Market (Trade Marks and Designs) (OHIM), Bosch Security Systems BV (Case T-153/08, 22 June 2010, currently unreported); Jose Manuel Barba Grupo SA v Office for Harmonisation in the Internal Market (Trade Marks and Designs) (OHIM) (General Court, Case T-513/09, 16 December 2010, currently unreported and only available in French or Spanish) and on appeal to the Court of Justice (Court of Justice, Joined Cases C-101/11 P and C-102/11 P) [2013] E.C.D.R. 3; Sphere Time v OHIM and Punch S.A (Case T-68/10, 14 June 2011, currently unreported); Kwang Yang Motor Co, Ltd v OHIM and Honda Giken Kogyo Kabushiki Kaisha (Case T-10/08, 9 September 2011, [2012] E.C.D.R. 2); Kwang Yang Motor Co, Ltd v OHIM and Honda Giken Kogyo Kabushiki Kaisha (Case T-11/08, 9 September 2011, currently unreported); and Industrias Francisco Ivars, SL v OHIM and Motive Srl (Case T-246/10, 6 October 2011, currently unreported and only available in Spanish and French).

See note 20 above.

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Grupo Promer, General Court (note 20 above), paragraph 67. This appears implicitly to support the earlier conclusion of the English Court of Appeal that any relevant restrictions on design freedom must be those objectively relevant to any designer operating in the field: Proctor & Gamble Company v Reckitt Benckiser (UK) Limited (English Court of Appeal) [2008] F.S.R. 8, paragraph 31.
Grupo Promer, General Court (note 20 above), paragraph 72. In other words, as anticipated in early literature, where there is little design freedom, relatively little difference between designs will be sufficient to create a different overall impression on the informed user; where there is greater design freedom, larger differences are required: Musker (note 8 above), paragraph 1-057.

Grupo Promer, General Court (note 20 above), paragraphs 66-85.

Shenzhen (note 20 above), paragraph 52.

Shenzhen (note 20 above), paragraph 58.

Shenzhen (note 20 above), paragraph 54.

Shenzhen (note 20 above), paragraphs 62-75.

On the facts, the General Court upheld the Board of Appeal's conclusion that design freedom was 'severely restricted' in relation to a number of features: Grupo Promer, General Court (note 20 above), paragraphs 68-70. The difficulties with the General Court's application of its ruling to the facts will be discussed further in the main body of this article and at note 102 below. However, although this aspect of General Court's decision was included in the appeal to the Court of Justice, the legal tests articulated by the General Court quoted in the main body of this article were not challenged and, as a result, were not substantively considered by the Court of Justice which simply referred to them without comment: PepsiCo Inc (Court of Justice, note 20 above), paragraphs 43-46.

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Dyson, High Court (note 5 above), paragraph 1. Because Dyson's UK registered design pre-dated the DD and corresponding amendments to the UK Registered Designs Act 1949, under the UK transitional provisions any challenge to validity would have been governed by pre-harmonisation UK law while infringement was to be determined under the new European regime: Dyson, High Court (note 5 above), paragraph 17.

Dyson, High Court (note 5 above), paragraphs 23-31, in which Arnold J quotes at length from the decision of the OHIM Third Board of Appeal in Lindner Recyclingtech GmbH v Fransson Verkstäder AB [2010] E.C.D.R. 1. See also: Howell, C. 'Trade marks, registered designs and the monopolisation of functional shapes: a consideration of Lego and Dyson' I.P.R. 2011, 33(1), 60-62; and Finn, M. 'Dyson fails to clean up' C.I.P.A.J. 2010, 39(8), 473-475, pages 474-475. The initial general consensus among commentators as the DD and CDR proceeded towards enactment and in the period after their coming into force had been that even purely functional designs were not excluded from protection provided that that particular design was not the only way of achieving the desired function; if there was at least one alternative design capable of achieving the same function, the design was not excluded. This is the so-called 'multiplicity-of-forms' approach. See: Beier (note 8 above), pages 850-851 and 856; Horton (note 8 above), page 54; Levin commentary, page 74, Phillips commentary, pages 84-91 and Franzosi commentary, page 90 in Franzosi, M. et al European Design Protection (note 8 above); Dinwoodie (note 8 above), page 671 (although advocating a slightly different approach at page 674); Lahore, J. 'The protection of functional designs: the amended approach for a European Designs Directive' I.P.Q. 1997, 1, 128-133, pages 128-130; Scanlan and Gale (note 8 above), page 101; Koschtial (note 4 above), pages 308-309 (although Koschtial is critical of this approach); Schloetelburg, M. 'Design protection for technical products' I.P.L.P. 2006, 1(10), 675-678, page 678. This interpretation opens up protection for functional designs to a very wide degree and avoids having to address any question of aesthetics. However, the ‘multiplicity-of-forms’ approach has been much criticised. The alternative interpretation of this exclusion which is prevalent in the literature excludes from protection designs which are determined solely by functional considerations, where aesthetic considerations played no part in the design process. This mirrors the approach of the House of Lords to the old UK RDA 1949 in the pre-harmonisation case of Amp Inc v Utilico Pty Ltd [1972] R.P.C. 103. For comparison of the two approaches, see: Scanlan and Gale (note 8 above), pages
98-103; Howe (note 2 above), paragraphs 2-025 to 2-030; Suthersanen, Design Law (note 1 above), paragraphs 6-010 to 6-015; Laddie et al (note 2 above), paragraphs 54.28-54.31. The shift towards an Amp-style approach, marked by strong criticism of the 'multiplicity-of-forms' analysis, in effect began in the decision of the OHIM Third Board of Appeal in Lindner and has the potential to exclude from protection a broader set of functional designs. In favouring the Lindner approach, in Dyson Arnold J departed from the earlier English Court of Appeal judgment in Landor & Hawa International Ltd v Azure Ltd [2007] E.S.R. 9, which had adopted the multiplicity-of-forms theory: Dyson, High Court (note 5 above), paragraphs 24-29. Arnold J’s ruling on this issue was not challenged on appeal and this interpretation of Articles 7(1) DD / 8(1) CDR is now consolidating without further controversy in subsequent cases in the English courts: Samsung, High Court (note 5 above), paragraphs 36-38 and Court of Appeal (note 5 above), paragraph 31; see also Louver-Lite Limited v Harris Parts Limited [2012] E.W.P.C.C. 53 (English Patents County Court, currently unreported), paragraph 10. It also seems to have become accepted at OHIM: see Samsung, High Court (note 5 above), paragraph 38; A.C.V. Manufacturing NV v AIC S.A [2012] E.C.D.R. 13, paragraph 15; Du Mont and Janis (note 14 above), page 32 and footnote 179. However, it remains to be seen whether this shift in approach will be followed in other jurisdictions: as noted by the OHIM Third Board of Appeal and by commentators, many national courts and commentators have endorsed the ‘multiplicity-of-forms’ approach and a reference to the Court of Justice may be required to resolve the issue, see: Lindner and Du Mont and Janis (note 14 above), pages 29, 32 and 41, where it is the ‘multiplicity-of-forms’ approach which is described as ‘the dominant analytical standard’.

34 It was held that the design of the bin reflected a mixture of both functional and aesthetic considerations: Dyson, High Court (note 5 above), paragraph 59. On the facts, this was always highly likely to have been the outcome whichever interpretation of Article 7(1) DD was preferred: see Laddie et al (note 2 above) paragraph 54.30.

35 Dyson, High Court (note 5 above), paragraphs 65, 68, 72, 75, 76, 79, 80, 81 and 84.

36 See: Finn (note 33 above), page 475. Although not made wholly clear, Arnold J appears to have accepted that the existence of other intellectual property rights might be a relevant constraint, but on the facts this issue was not developed as Vax did not substantiate this element of their case: Dyson, High Court (note 5 above), paragraph 63. After argument from the parties, Arnold J also developed from Grupo Promer a further refinement on how design constraints affect how a registered design should be viewed relative to the prior art: in particular, where particularly striking elements of the registered design were ones in relation to which there was little design freedom, because of that limited freedom those elements would not be considered to have the same high level of impact on the informer user as they would otherwise have done: Dyson, High Court (note 5 above), paragraph 41; approved in Samsung, High Court (note 5 above), paragraphs 48-49.

37 Dyson, High Court (note 5 above), paragraphs 33-34 and 61-62.

38 On the lower bin support and curved shape of the handle, see Dyson, High Court (note 5 above), paragraphs 80 and 82.

39 Dyson, High Court (note 5 above), paragraphs 65-66.

40 Dyson, High Court (note 5 above), paragraphs 69-70.

41 Dyson, High Court (note 5 above), paragraphs 72-73.

42 Dyson, High Court (note 5 above), paragraph 75.

43 Dyson, High Court (note 5 above), paragraph 77.

44 Dyson, High Court (note 5 above), paragraph 78.

45 Dyson, High Court (note 5 above), paragraph 79.

46 Dyson, High Court (note 5 above), paragraph 84.
47 Dyson, High Court (note 5 above), paragraph 81.

48 Dyson, High Court (note 5 above), paragraphs 67 and 70 (in relation to the design of the transparent bin), 71 (design of the cyclone visible through the transparent bin), 74 (design of the rear wheels), 75 (appearance of the rear wheel spacing), 77 (design of the rear wheel arches), 78 (shape of the operational pedals), 79 (shape of the cyclone top), 80 (lower bin support), 83 (handle shape) and 84 (shape of the body portion housing air ducts etc).

49 Dyson, High Court (note 5 above), paragraphs 85-91 (rear of the machine, hose connector position, front wheels, cut-away base, footprint and wand handle).

50 Dyson, High Court (note 5 above), paragraphs 92-94.

51 The Court of Appeal could only reverse Arnold J’s judgment if shown that he had erred in principle: Dyson, Court of Appeal (note 5 above), paragraphs 16-17.

52 Quoted from an exchange in court between Dyson’s counsel and Black LJ, reproduced in full by Sir Robin Jacob in Dyson, Court of Appeal (note 5 above), paragraphs 21-22.

53 Dyson, Court of Appeal (note 5 above), paragraphs 22-24. There was only one point of disagreement between the Court of Appeal and Arnold J, on the question of whether the design freedom to be taken into account in the infringement analysis was that of the designer of Dyson’s design or of the ‘Mach Zen’. Sir Robin Jacob held that Arnold J should have addressed the former not the latter, but concluded that this made no difference on the facts as there was no evidence of any change in design constraints in the period between the date of Dyson’s registered design and the designing of the ‘Mach Zen’: Dyson, Court of Appeal (note 5 above), paragraphs 18-20.

54 Dyson, Court of Appeal (note 5 above), paragraphs 29-33.

55 As noted by the Court of Appeal, the actual iPad is ‘quite a lot different’ to Apple’s Community design and was not itself relevant to the infringement case: Samsung, Court of Appeal (note 5 above), paragraph 4.

56 These images are reproduced from the online version of the Court of Appeal’s judgment available at: http://www.bailii.org/cgi-bin/markup.cgi?doc=ew/cases/EWCA/Civ/2012/1339.html&query=apple+and+samsung&method=boolean. Images of the other Samsung devices in suit can also be found at this link.

57 See Samsung, Court of Appeal (note 5 above), paragraphs 5 and 55-63 for discussion of the proceedings in other Member States and in the US. In the English litigation, Samsung applied for a declaration of non-infringement in relation to its Galaxy tablet computers and Apple counterclaimed for infringement. Interim hearings before the English High Court and Court of Appeal had addressed the relationship between the English litigation and the co-pending OHIM invalidity challenge under Article 91(1) CDR; see Samsung Electronics (UK) Ltd and Another v Apple Inc (English High Court) [2013] F.S.R. 7 and (English Court of Appeal) [2013] F.S.R. 8. After argument at the full trial and noting the agreement of both sides to the counterclaim being heard and ruled upon, Judge Birss concluded that there were ‘special grounds’ within the meaning of Article 91(1) not to stay the infringement counterclaim and proceeded to deal with the application for a declaration of non-infringement and infringement counterclaim together: Samsung, High Court (note 5 above), paragraphs 18-24.

58 Samsung, High Court (note 5 above) paragraphs 36-38. This was endorsed on appeal: Samsung, Court of Appeal (note 5 above) paragraph 31. See also note 33 above.

59 Samsung, High Court (note 5 above), paragraph 16.

60 Samsung, High Court (note 5 above), paragraphs 42-47 and 67-71. Individual items of prior art are discussed at paragraphs 72-91. Judge Birss endorsed the ruling of Arnold J in Dyson to the effect that, although a design which is markedly different to the existing design corpus should normally be afforded a broad scope of protection, that may not be the case where a design is based on new technology which brings with it new design
constraints such that the comparison with the existing design corpus may have little relevance: Samsung, High Court (note 5 above), paragraph 49.

61 Samsung, High Court (note 5 above), paragraph 39.

62 Samsung, High Court (note 5 above), paragraphs 40-41. In his subsequent judgment in *Gimex International Groupe Import Export v The Chill Bag Company Limited and Others* [2012] E.C.D.R. 25 (English Patents County Court) which was issued only a couple of weeks later, Judge Birss adopted the *Dyson* approach that design freedom could be constrained by technical function, the need to incorporate features common to the products in question or economic considerations: paragraph 66. This was, however, common ground between the parties in *Gimex* see paragraph 66. The *Dyson* approach has also been adopted in *Mainetti (UK) Limited v Hangerlogic UK Limited* [2012] E.W.P.C.C. 42 (English Patents County Court, currently unreported, paragraph 22), although without detailed substantive consideration of the issue, and in *Louver-Lite Limited v Harris Parts Limited* [2012] E.W.P.C.C. 53 (English Patents County Court, currently unreported, paragraph 11), but without a formal decision on the issue given the common ground in the submissions of the parties.

63 Samsung, High Court (note 5 above), paragraphs 93-95.

64 Samsung, High Court (note 5 above), paragraphs 96-99.

65 Samsung, High Court (note 5 above), paragraph 104.

66 Samsung, High Court (note 5 above), paragraphs 105-116.

67 Samsung, High Court (note 5 above), paragraphs 117-122.

68 Samsung, High Court (note 5 above), paragraphs 123-134.

69 Samsung, High Court (note 5 above), paragraphs 135-150.

70 Samsung, High Court (note 5 above), paragraphs 151-154.

71 Samsung, High Court (note 5 above), paragraphs 164-166.

72 Samsung, High Court (note 5 above), paragraphs 104, 116, 122, 134 and 150 in particular.

73 Samsung, High Court (note 5 above), paragraphs 163, 175 and 185-190.

74 Samsung, High Court (note 5 above), paragraphs 182 and 189-190.

75 Samsung, High Court (note 5 above), paragraphs 190-191.

76 Samsung, Court of Appeal (note 5 above), paragraphs 10-24 (on the informed user’s perceptions) and paragraphs 27-54 (on overall impression).

77 Samsung, Court of Appeal (note 5 above), paragraph 27.

78 Samsung, Court of Appeal (note 5 above), paragraphs 28-54.

79 Samsung, Court of Appeal (note 5 above), paragraphs 34-39 and 45-46.

80 Samsung, High Court (note 5 above), paragraphs 53-56. Although not articulated explicitly, in effect this is broadly the approach taken by Arnold J in his assessment of overall impression, although with differences in his particular approach to the design corpus and design freedom which will be discussed further in the main body of this article: *Dyson*, High Court, (note 5 above), paragraphs 64-94.
The Court of Appeal emphasised in particular that overall impressions of the designs were too different and Dyson's case pleaded at too high a level of generality for the claim to succeed Dyson, Court of Appeal (note 5 above), paragraphs 29-33. See also: Daniels, M. and Parsons, G. ‘Vax found not to infringe Dyson's registered design’ I.P.M. 2011/12, Dec./Jan, 91-92, page 92.

Arnold J uses the words ‘to that extent’ in two instances in relation to design freedom, first as regards the angle of the transparent bin (Dyson, High Court, note 5 above, paragraph 65) and second in relation to the spacing apart of the wheels (Dyson, High Court, note 5 above, paragraph 75). However, these words are not expanded upon any further by him.

On the limited nature and extent of the evidence before the court and the very short time period in which the case was heard, see Finn (note 33 above), page 474.

See Dyson, Court of Appeal (note 5 above), paragraph 30, where Sir Robin Jacob notes that: ‘You cannot take the features of a design, turn them into general words and then treat those words like a patent claim’.

Arnold J uses the words ‘to that extent’ in two instances in relation to design freedom, first as regards the angle of the transparent bin (Dyson, High Court, note 5 above, paragraph 65) and second in relation to the spacing apart of the wheels (Dyson, High Court, note 5 above, paragraph 75). However, these words are not expanded upon any further by him.

There is also no discussion of the extent of the restrictions said to impact on the design of the wheel arches or handle: Dyson, High Court (note 5 above) paragraphs 76-78 and 81.

Relevant constraints are also described by the General Court as ones which the designer 'had to' take into account: Grupo Promer, General Court (note 20 above), paragraphs 67-70.

The Advocate-General also described the General Court's view as being one in which 'the constraints on creative freedom to be taken into consideration... are exclusively those which are dictated by the need for the goods to fulfil a certain function' and that standard features which the market expects but which are not 'technically necessary' are not relevant constraints for these purposes with 'mere market expectation' not being relevant: paragraphs AG31-AG32 (emphasis added). The element of compulsion in the language used by the Advocate-General in Grupo Promer is emphasised in Du Mont and Janis (note 14 above), page 35.
SL v OHIM and Motive Srl (General Court, Case T-246/10, currently unreported), paragraph 22 (all note 20 above).

98 Shenzhen (note 20 above), paragraph 54: ‘[T]hose restrictions concern the presence of certain features in the conference unit, but do not have a significant impact on their configuration and, therefore, on the form and general appearance of the conference unit itself’. See also Sphere Time, paragraph 69 and Kwang Yang Motor Co, Ltd, paragraph 36, both note 20 above.

99 The broad-brush nature of the courts’ approach to this issue is reinforced by comments on the nature of the expert evidence relevant to Article 9(2) DD, which are described as relating, on technical matters, typically to ‘why a thing or part of a thing must be shaped at least broadly in a particular way so as to perform its function’: Dyson, Court of Appeal (note 5 above), paragraph 13, emphasis added.

100 Suthersanen, Design Law (note 1 above), paragraph 6-015, commenting on the OHIM Third Board of Appeal in Lindner (note 33 above) and noting the conflict with the explanation in Recital 10 CDR and Recital 14 DD that, while technological innovation should not be hampered by granting design protection to features dictated solely by a technical function, ‘it is understood that this does not entail that a design must have an aesthetic quality’. As explained in note 33 above, Lindner was extensively quoted and applied by Arnold J in Dyson. In Lindner, the OHIM Third Board of Appeal stressed that it did not see its interpretation of the exclusion as ‘tantamount to introducing a requirement of aesthetic merit into the legislation’: paragraph 35. However, Suthersanen questions whether there is really any difference between a requirement of ‘aesthetic merit’ and, per Lindner, requiring that ‘aesthetic considerations’ play some part in the design process. For further criticism of the Lindner approach and its apparent revival of ‘the dubious distinction’ between functional and aesthetic design innovation, see Du Mont and Janis (note 14 above), pages 31-32.

101 It was held in general terms that the Dyson design was strikingly different to the existing design corpus and this was taken into account in the conclusion on overall impression: Dyson, High Court (note 5 above), paragraph 94. However, in the detailed comparison of design features the existing design corpus is specifically mentioned only in relation to the bin, operational buttons and longitudinal handle: Dyson, High Court (note 5 above), paragraphs 70, 78 and 82. The Court of Appeal rejected the argument that the striking nature of the Dyson design had not been properly taken into account: Dyson, Court of Appeal (note 5 above), paragraphs 26-33.

102 See the arguments for and against the competing interpretations of the Article 7(1)/8(1) exclusion in the literature and case law cited at note 33 above. As regards the type of matters which may be treated as relevant design constraints, Dyson is explicable as a result of the rather unclear net effect of the General Court ruling in Grupo Promer. The Advocate-General in Grupo Promer took the view that ‘the constraints on creative freedom to be taken into consideration… are exclusively those constraints which are dictated by the need for the goods to fulfil a certain function’ and that the General Court had espoused that position (note 20 above, paragraph AG31) with any “standard” features which the market expects but which are not technically necessary’ not relevant to design freedom. This seems, however, a rather wishful reading of the General Court’s judgment in Grupo Promer given the General Court’s apparent approval of the OHIM Board of Appeal’s consideration of matters such as cost, fitness for purpose (in that case, as a promotional item) and market acceptability as relevant factors for the purpose of this assessment: Grupo Promer (note 20 above) paragraphs 68-70. These matters were not addressed in the appeal to the Court of Justice and a number of commentators have expressed disappointment that the Court of Justice did not take the opportunity to clarify this issue: Marrell, M. ‘CJEU Defines “Informed User” Concept in Pepsi Registered Community Design Dispute’ W.I.P.R. 2011, 25(11), 40-41, page 41; Crompton, S. ‘Big boost for design rights in Europe’ M.L.P. 2011, 214, 6-7, quotation at page 7. In the meantime, see also note 62 above for the contrasting positions taken by Judge Birss in Samsung and Gimex International Groupe Import Export v The Chill Bag Company Limited and Others [2012] E.C.D.R. 25, and the positions also adopted in Mainetti (UK) Limited v Hangerlogic UK Limited [2012] E.W.P.C. 42 (English Patents County Court, currently unreported) and Louver-Lite Limited v Harris Parts Limited [2012] E.W.P.C. 53 (English Patents County Court, currently unreported), showing the present uncertainty even in UK case law.

103 Dyson, Court of Appeal (note 5 above) paragraph 23.
As noted by commentators, ‘the degree of freedom enquiry speaks in terms of relative weight; it does not call for features to be factored out altogether so as to render the design invisible’: Du Mont and Janis (note 14 above), page 37.

Dyson, High Court (note 5 above) paragraphs 61, 65-66 and 69-70; Court of Appeal (note 5 above) paragraph 22. Dyson has attracted comment for the limited protection which it appeared to afford to design right holders: Wilkie, E. ‘Design Wars – Dyson v Vax’ I.P.M. 2010, Oct, 55-56 (on the decision of the English High Court); Daniels and Parsons (note 81 above, on the decision of the English Court of Appeal) noting that the appeal judgment does nothing to change the level of complexity surrounding design law and that this case ‘clearly demonstrates’ that ‘businesses should not expect too much from their registered designs’ (page 92); Smith, C. and Fowler, C. ‘Greater clarity means designs deserve a second look’ M.I.P. 2011/12, 215, 30-33, page 30, commenting that the courts appeared ‘reluctant’ to ‘find a registered design infringed too readily’. In France, in litigation based on the same design the ‘Mach Zen’ was found to infringe: Smith and Fowler, page 32.

Musker (note 8 above), paragraph 1-077. Musker notes that, provided infringers have a choice of alternative design which does the same thing (albeit less well), the public are not deprived of the benefits of competition: paragraph 1-077.

Musker (note 8 above) paragraph 1-077, noting that in many cases no feature of a design is absolutely essential and deviation may be tolerated if other parameters are varied: an optimal shape may be able to tolerate substantial deviations with some acceptable loss of advantage.

This distinction has been described as ‘illusory’ and ‘largely arbitrary’, see respectively: Dinwoodie (note 8 above), page 617; Proposal for a European Parliament and Council Regulation on the Community Design (note 4 above), Explanatory Memorandum, impact commentary at pages 110-112. See also: Levin commentary, page 73 (‘Function is part of the aesthetic appearance, and it is very difficult to draw a borderline between what is aesthetical and what is functional’) in Franzosi, M. et al European Design Protection (note 8 above); Fischman Afori, O. ‘The Role of the Non-Functionality Requirement in Design Law’ 20 Fordham Intell. Prop. Media & Ent. L.J. 847 (2009-2010), page 848; Kingsbury (note 1 above), page 388.

The ‘intent and purpose of modern design [lies] in the very combination of product aesthetics and optimum functional design’: Max Planck Institute ‘Towards a European Design Law’ 58, quoted in Du Mont and Janis (note 14 above), page 26, footnote 141. See also: Green Paper (note 3 above), paragraph 5.4.1 (‘[M]odern industrial design tends… to have the most intimate merger of functionalism and aesthetic value as its purpose’); Kur (note 8 above), page 376; Dinwoodie (note 8 above), page 650; Franzosi ‘Design protection Italian style’ (note 11 above), page 599; Schlötelburg (note 33 above), page 675. As noted by the OHIM Third Board of Appeal, the importance of combining functional and aesthetic elements exists even for large items of industrial equipment: see Lindner (note 33 above) paragraph 33.

Suthersanen, Design Law (note 1 above) paragraph 13-001.

Comments made in early literature in the context of discussion on the interpretation of the exclusion from protection for designs ‘dictated solely by… function’ are instructive: ‘The mere fact that a design is influenced by functional considerations should not disqualify it from protection. Otherwise, the innovation of these proposals -- the elimination of the threshold distinction between aesthetics and function -- will prove illusory and functionalist design will remain excluded from protection’: Dinwoodie (note 8 above), pages 670-671.

It was expressly noted by Judge Birss that Samsung highlighted the importance of properly taking into account the design corpus when forming a view of the overall impression created by a design: Samsung, High Court (note 5 above), paragraph 189. See also: Clark, S. ‘Too cool for law school?’ I.P.M. 2012, Sep, 72-73, page 73 commenting that the outcome of the case seems less surprising when the full factual picture regarding the existing design corpus and similarities/differences between the designs is understood, particularly when the simplicity of Apple’s Community design is taken into account, it being harder to distinguish such a simple design from the prior art and any differences in the alleged infringement also being more noticeable.
There was no major discussion of Judge Birss’ approach to ‘design freedom’ in the Court of Appeal judgment as the principal focus of the appeal was on Judge Birss’ approach to the design corpus and an alleged failure properly to have considered the designs as a whole. This was rejected by the Court of Appeal: Samsung, Court of Appeal (note 5 above) paragraphs 27-54. Within that, as noted in the main body of this article, all of Judge Birss’ findings on ‘design freedom’ were upheld: Samsung, Court of Appeal (notes 5 and 79 above), paragraphs 34-39 and 45-46.

According to the General Court and Court of Justice, the informed user is not a technical expert: Grupo Promer (Court of Justice, note 20 above) paragraph 59; see also Shenzhen (General Court, note 20 above), paragraph 48: the qualifier ‘informed’ ‘does not imply that the informed user is able to distinguish, beyond the experience gained from using the product concerned, the aspects of appearance of the product which are dictated by the product's technical function from those which are arbitrary’ (followed in Kwang Yang Motor Co Ltd v OHIM and Honda Giken Kogyo Kabushiki Kaisha (Case T-10/08, 9 September 2011, [2012] ECDR 2), paragraphs 26-27; Kwang Yang Motor Co Ltd v OHIM and Honda Giken Kogyo Kabushiki Kaisha (Case T-11/08, 9 September 2011, currently unreported) paragraphs 26-27; Industrias Francisco Ivars, SL v OHIM and Motive Srl (Case T-246/10), paragraph 16 (all note 20). As noted in the early literature, the degree of design freedom and the informed user's perception of the degree of design freedom may not be the same, see: Musker (note 8), paragraph 1-053, in which it is noted that 'it seems that one is intended to base the test on what the informed user assumes about the level of design freedom available to the designer'. Musker describes the adoption of the position that the informed user knows about design freedom in the relevant sector as a 'pretty artificial' legal fiction: paragraph 1-055. It has been suggested that users will 'only rarely' have a true idea of the freedom available to the designer; unless the informed user is deemed to be informed of design constraints to the level of an actual designer, if to be assessed through the informed user's eyes then the concept of design freedom should more properly be characterised as 'apparent design freedom' instead: Musker (note 8), paragraphs 1-055 and 1-057.

It has been noted that Samsung v Apple suggests that, in order to judge the scope of a [design], it will be ‘necessary as a matter of course, and not only as an exceptional matter’ to adduce evidence of the design corpus and expert evidence on design freedom as an ‘essential step’ in educating the judge into an informed user: Smyth, D. ‘Samsung v Apple: How does the judge become an ‘informed user’?’ J.I.P.L.P. 2012, 7(11), 776-778.

Fischman Afori (note 1 above) page 1144.