

Not for Designers

On the Inadequacies of EU Design Law and How to Fix It

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Abstract: Design rights represent an interesting example of how the EU legislature has successfully regulated an otherwise heterogeneous field of law. Yet this type of protection is not for all. The tools created by EU intervention have been drafted paying much more attention to the industry sector rather than to designers themselves. In particular, modern, digitally based, individual or small-sized, 3D printing, open designers and their needs are largely neglected by such legislation. There is obviously nothing wrong in drafting legal tools around the needs of an industrial sector with an important role in the EU economy, on the contrary, this is a legitimate and good decision of industrial policy. However, good legislation should be fair, balanced, and (technologically) neutral in order to offer suitable solutions to all the players in the market, and all the citizens in the society, without discriminating the smallest or the newest: the cost would be to stifle innovation. The use of printing machinery to manufacture physical objects created digitally thanks to computer programs such as Computer-Aided Design (CAD) software has been in place for quite a few years, and it is actually the standard in many industrial fields, from aeronautics

to home furniture. The change in recent years that has the potential to be a paradigm-shifting factor is a combination between the popularization of such technologies (price, size, usability, quality) and the diffusion of a culture based on access to and reuse of knowledge. We will call this blend Open Design. It is probably still too early, however, to say whether 3D printing will be used in the future to refer to a major event in human history, or instead will be relegated to a lonely Wikipedia entry similarly to ³Betamax² (copyright scholars are familiar with it for other reasons). It is not too early, however, to develop a legal analysis that will hopefully contribute to clarifying the major issues found in current EU design law structure, why many modern open designers will probably find better protection in copyright, and whether they can successfully rely on open licenses to achieve their goals. With regard to the latter point, we will use Creative Commons (CC) licenses to test our hypothesis due to their unique characteristic to be modular, i.e. to have different license elements (clauses) that licensors can choose in order to adapt the license to their own needs."

Keywords: Design Rights, Novelty, CDR, OHIM, Creative Commons, CC0, Open Design

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A. Introduction

- 1 Design rights represent an interesting example of how the EU legislature has successfully regulated

an otherwise heterogeneous field of law. Yet this type of protection is not for all. The tools created by EU intervention have been drafted paying much more attention to the industry sector rather than to designers themselves. In particular, modern,

digitally based, individual or small-sized, 3D printing, open designers and their needs are largely neglected by such legislation. The absence in the whole legal framework of a clear definition of the word “designer” is a first warning. Another can be taken in the amount of Recitals making reference to the needs of the industrial sector in the Community Design Regulation, including 7, 8, 13, 14, 15, 16 and 25.¹ Individual designers find some recognition only in Recitals 7 and 24. This is certainly not a conclusive argument by itself, but it is quite symptomatic of the level of the debate during the drafting phase.

- 2 The historical moment when this legislation was drafted (the Green Paper is from 1991²) offers only a partial justification. It is true that this was a time when products of industrial design meant industrially based enterprises, and where the state of the technology, its costs, and dissemination did not allow individual designers, or even small enterprises, to play a relevant role. However, the equation seems inversely proportional: the technology evolved from 1998 (the year of the Design Directive) to 2002 (the year of the Design Regulation), giving wider access to individual designers, but their relevance in the statutes did not evolve accordingly. On the contrary, the needs of the industrial sector found a sounder recognition in the most recent legislation.
- 3 There is obviously nothing wrong in drafting legal tools around the needs of an industrial sector with an important role in the EU economy; on the contrary, this is a legitimate and good decision of industrial policy. However, good legislation should be fair, general, and (technologically) neutral in order to offer suitable solutions to all the players in the market and all the citizens in the society, without discriminating against the smallest or the newest. Failure to fulfil this commonly accepted public policy goal would represent an obstacle for innovation.
- 4 Thanks to technological evolution, the role of small and individual players in the game of design has grown exponentially without the law apparently being able to catch the shift or the consequences it entails.
- 5 Nowadays, the situation in technological terms is diametrically different from the time when EU design law was enacted, as witnessed by “personal” 3D printing solutions and the number of projects implementing them.³ The proportions of the relationship recall IBM’s 1970 data processing units that occupied entire rooms contrasted with today’s tablets.
- 6 The use of printing machinery to manufacture physical objects created digitally thanks to computer programs such as Computer-Aided Design (CAD) software has been in place for quite a few years, and it is actually the standard in many industrial fields, from aeronautics to home furniture. The change in recent

years that has the potential to be a paradigm-shifting factor is a combination between the popularization of such technologies (price, size, usability, quality) and the diffusion of a culture based on access to and reuse of knowledge.⁴ We will call this blend Open Design.⁵

- 7 Many Open Design supporters argue that 3D printing technology and mass customization can be seen as the cornerstone of a third industrial revolution,⁶ much like the steam engine and the spinning mule were for the first, and mass production and standardization for the second.⁷ 3D printing has an endless number of possible applications, from food to aerospace, from biotech to jewellery. In particular, Open Source 3D printing – i.e. the use of 3D printers created and licensed following the FLOSS model – promise the achievement of economically efficient *distributed manufacturing models* that will reduce shipping and storage costs, improve efficiency of the affected economic sectors, create new markets and new forms of social interaction, and reduce pollution (such as that connected with shipment).⁸
- 8 As it has already happened in the past, when legislative interventions fail to recognize new technological, economic, and business needs, social change happens and new forms creation and dissemination flourish beyond, or in spite of the law. It is fundamental, from a policy point of view, not to turn this social change form *beyond* to *against* the law. From a legal point of view, a careful balancing of the different rights and interests at stake can lead to shared solutions that empower institutions, stake holders, citizens and global welfare. From an economic point of view, turning thousands or millions of potential customers into transgressors can hardly be seen as a good business plan.
- 9 It is probably still too early, however, to say whether 3D printing will be used in the future to refer to a major event in human history, or instead will be relegated to a lonely Wikipedia entry similarly to “Betamax” (copyright scholars are familiar with it for other reasons). It is not too early, however, to develop a legal analysis that will hopefully contribute to clarifying the major issues found in current EU design law structure, why many modern open designers will probably find better protection in copyright, and whether they can successfully rely on open licenses to achieve their goals. With regard to the latter point, we will use Creative Commons (CC) licenses to test our hypothesis due to their unique characteristic to be modular, i.e. to have different license elements (clauses) that licensors can choose in order to adapt the license to their own needs.⁹ CC licenses are already employed in a number of 3D projects.¹⁰
- 10 It must be borne in mind, however, that other legal tools may play an important role in the protec-

tion of products of design, such as patents, models and trademarks (especially three-dimensional trademarks). Nonetheless, a thorough analysis of such aspects would exceed the scope of this work, and therefore they are not addressed here.¹¹ This analysis is from a EU perspective: Copyright and maybe even more design rights may operate quite differently in extra EU jurisdictions¹².

- 11 The structure of the paper is as follows: Part I deals with legislative-based protection and its interpretation by courts. In this part, after this short introduction (section 1), we will analyse the relevant EU design law provisions (section 2) and copyright (section 3), with some brief but interesting national examples. Part II of the paper is dedicated to what we can do to fix the EU legal framework available to products of design. We start by outlining the most relevant aspects of CC licenses in section 4. In section 5 we try to understand how these licenses apply, if at all, to products of design, and whether the resulting structure can lead to a working legal framework for Open Design. In our conclusions (section 6), we indicate that a first superficial answer is negative. CC licenses are copyright licenses and it is not possible to expand their scope to include design rights. However, a more detailed answer is not that straightforward, and even if CC licenses and design rights remain two different and incompatible legal instruments, given the specific features of each one, it is arguably possible to combine them in order to create a legal framework for the development of Open Design under the name of CC-Plus-Design.

B. Design rights in the EU

- 12 The attention that the EU legislator has directed to the field of design led to the enactment of two important pieces of legislation: the Design Directive (DD)¹³ and the Community Design Regulation (CDR).¹⁴
- 13 The DD of 1998, the oldest of the two, was enacted with the goal of harmonizing the – sometimes significantly heterogeneous – national legislations of Member States in the field of registered design products. The CDR, in force since 2002, possesses the different objective of creating a unified system of protection for design products at the EU level, and along with the registered option (Registered Community Design, RCD) offers an unregistered form of protection (Unregistered Community Design, UCD). The DD harmonizes only in the field of registered design (and within this field only substantive and not procedural rules), and does not create (but does not preclude the survival at the national level of) any form of unregistered design scheme.¹⁵
- 14 In light of such double-tier protection, the options available to a hypothetical European-based designer are twofold. First, a national registered form of pro-

tection based on common substantive law principles throughout the EU – procedural rules regarding registration and maintenance can in fact vary from country to country. National registration offers protection only for the national territory where registration is filed,¹⁶ in addition to the usual terms of priority offered on the basis of the Paris Convention.¹⁷

- 15 Second, the designer can opt for a community design protection, register her design through the OHIP¹⁸ registrar office and obtain an EU-wide legal title that protects her design in the whole EU. A key aspect of the CDR is the unitary character of protection, which mandates that a community design shall have equal effect throughout the Community and cannot be registered, transferred or surrendered or be the subject of a decision declaring it invalid, nor can its use be prohibited, save in respect of the whole Community.¹⁹
- 16 If the designer does not register her design at any level, she can still enjoy a three-year unregistered (UCD) protection which can operate regardless of any other form of national unregistered design protection. Such an eventuality is observed in the UK, for example, where an unregistered form of protection was available long before the CDR; it still survives and offers some limited advantages over the UCD.²⁰
- 17 Regarding the substantive law aspects, it can be observed that the DD and the CDR create an almost identical set of provisions, and therefore, unless otherwise noted, the analysis, albeit focusing on the CDR, reflects this identity.²¹

I. Definitions and requirements for protection

- 18 Article 3 CDR defines two major concepts in design law: *design* and *product*. Combining the two definitions and removing the list of examples therein contained, it emerges that the protection offered to products of design covers “the appearance of the whole or a part of ... any industrial or handicraft item resulting from the features of the product itself ... and/or its ornamentation”.
- 19 The types of features Article 3 enumerates include *lines, contours, colours, shape, texture and/or materials*.²² The definition of *products* includes *parts intended to be assembled into a complex product, packaging, get-up, graphic symbols and typographic typefaces, but excluding computer programs*.²³ Pivotal to the definition of what is protected is indeed the concept of “appearance”, which has to be construed broadly as confirmed by the non-exhaustive list of elements that qualifies it. This definition, has been said, should be

broad enough to “encapsulate any economic value that is attached to the appearance of the product”.²⁴

- 20 Given such a generous definition, it is possible to include in the scope of protection of the CDR both 2D[i-mensional] (e.g. ornaments) and 3D[i-mensional] (e.g. shapes) products in a huge variety of conformations. As has been expressed, it is a much easier exercise to focus on the aspects that are explicitly excluded from the definition than on those that could be potentially included.²⁵ Of particular relevance among the items explicitly excluded from registration: blueprints for houses or other architectural plans directed to a house (though they can be registered as “other printed matters” following the Locarno classification²⁶), a single colour as such, mere verbal elements (words *per se*), music and sounds (but not their graphical representation registrable as “other printed matters”) and living plants.²⁷
- 21 Fragrances and smells were listed as another exclusion item by Musker, but in the consulted Manual there is no sign of them anymore.²⁸ Suthersanen suggests that given the definition of design – which is strongly linked to the concept of appearance of a product, and therefore to a visual dimension – it would be unlikely that a court would expand the definition to protect characteristics such as sound or smell.²⁹ This interpretation is supported by many commentators, although some point out that even though the CDR³⁰ and the Green Paper³¹ strongly focus on the visual dimension of the concept of appearance, therefore excluding sounds and smell from this notion, references in Article 3 to *texture* and *material* imply that touch may be an important attribute of a design.³² Process design and service design seems to fall squarely outside the protection afforded by CDR as there is no industrial or handicraft product identifiable.³³ Interior and exterior design do not seem to be directed to a product either, though it is considered protectable by some scholars.³⁴ Web design appears to be a borderline category. On the one side, the appearance of a website (eliminating sounds, and reducing it down to what can be filed as supporting documentation at the OHIM office, therefore excluding also dynamic elements) seems not to differ significantly from the appearance of, say, a book’s front cover. However, “product” is strictly defined as an industrial or handicraft item, and under this point of view it should be impossible for web design to meet such a definition. It seems, therefore, that web design in general should be excluded from protection, with the exception of computer icons and graphic user interfaces (GUI), for which there is a specific, though only indirect, provision. GUI and computer icons usually do not form part of the underlying computer program, an aspect that disqualifies them from the exclusion granted to software.³⁵ This is, however, an extremely contentious issue (see *infra*).³⁶

- 22 Nonetheless, not all the designs that conform with the – overly broad – definition outlined above can be protected. Two key requirements need to be met: *novelty* and *individual character*.³⁷

II. Novelty and individual character

- 23 Novelty is defined by Article 5 CDR, which mandates that no other “identical design” must have been made available to the public before the date on which the design for which protection is claimed was first made available to the public (for UCD); or before the date of filing of the application for registration of the design for which protection is claimed; or if priority is claimed, the date of priority (for RCD). The body of designs constituting the prior art, i.e. the threshold against which novelty needs to be tested, is defined in detailed by Article 7 in a way that significantly reduces the broadness of Article 5 (and of Article 6, see below). Such details include territorial, business sectors, confidentiality- and intentionality-related issues to an extent that “the broad, objective novelty notion [is transformed] into a peculiar and complex form of local novelty”.³⁸
- 24 Section 2 of the same article briefly describes the concept of *being identical* and stipulates that identity has to be found when the features of two designs differ only in immaterial details.³⁹ Therefore, in order to be considered new, a design has to look different in material details from everything that has been produced before, regardless of whether the designer has copied from any prior art.⁴⁰
- 25 The second requirement to be met in order to enjoy CDR protection is the individual character. Article 6 explains that in order to possess individual character, the design must produce an overall impression on the informed user that is different from the overall impression produced on such a user by any design which has been made available to the public before the relevant date (i.e. before the date it was first made available to the public for UCD or before the date of filing or priority for RCD).
- 26 Section 2 of the Article indicates that the degree of freedom of the designer in developing the design shall be taken into consideration in assessing the requirement. In order to establish the individual character, the standard reference is the “informed user”. This informed user has been defined “as particularly observant and [with] some awareness of the state of the prior art, that is to say the previous designs relating to the product in question”.⁴¹ The informed user is a concept that lies somewhere in between that of the average consumer – applicable in trade mark matters – who needs not have any specific knowledge and who makes no direct comparison between the trade marks in conflict, and the sectorial expert, who is an expert with detailed tech-

nical expertise (somehow closer to the person skilled in the art found in patent law⁴²). Therefore, the concept of the informed user refers not to a user of average attention – this is a particularly observant one, either because of his personal experience or his extensive knowledge of the sector in question – but it is still a user, not an expert in the sector.⁴³

- 27 In light of this connotation of the threshold for the informed user, it is necessary to clarify the connected standard of *overall impression*. As the expression suggests, all the features of the design should be taken into account to perform this comparison, although the comparison is based exclusively on what is visible to the informed users during normal use, therefore excluding features that are not visible or are only under special circumstances.⁴⁴
- 28 Excluded from the overall impression test shall also be those features that are entirely dictated by technical function, in accordance with the same Article 8. An important parameter to determine the individual character is the freedom of the designer. The more a design is pre-determined by technical conditions, the smaller the possibility for its design to diverge from a given pattern. In light of this, a design which could seem as not creating a different overall impression on the informed user (a given design is too similar to existing prior art) could after all be protected since it should create a different overall impression on the informed user who is aware of the technical constraint.⁴⁵ The other face of the coin of such limited designer freedom is the limited protection that applies in this specific case in light of Article 10(2) CDR, which states that in assessing the scope of protection, the degree of freedom of the designer in developing his design shall be taken into consideration.⁴⁶
- 29 Once established that in order to possess individual character a design should produce an *overall impression* on an *informed user* which is different from that produced on her by the existing design corpus, we should enquire *how different* this overall impression should be. As a hermeneutic tool, we are helped by Recital 14 CDR, which establishes that the difference needs to be *clear*.⁴⁷ Therefore, only if a design's overall impression on an informed user *clearly differs* from that produced on him by the existing design corpus, will the design possess an individual character and be protected, although this qualification (clearly) is only present in the mentioned *Recital* and not carried over into the wording of Article 6.⁴⁸ This view, expressed in detail by the UK Court of Appeal, has been only partially successful among commentators (for a detailed discussion, see *infra*).⁴⁹
- 30 As for the type of prior art contemplated by the CDR, Article 7 indicates that we are in the presence of an absolute novelty requirement. In fact, any form of disclosure is accepted in order to create prior art and destroy novelty. The Article states that for the purpose of Articles 5 (novelty) and 6 (individual character), a design shall be deemed to have been made available to the public if it has been legitimately (i.e. in the absence of any abuse or breach of confidence) published following registration or otherwise, or exhibited, used in trade or otherwise disclosed before the relevant date (which is indicated respectively at Articles 5(1)(a)&(b) and 6(1)(a)&(b)). However, this absolute prior art test is considerably reduced in significance by a list of exceptions.
- 31 Previous disclosures, in fact, do not destroy novelty when the aforementioned events (publication, exhibition, use in trade, etc.) could not reasonably have become known in the normal course of business to the circles specialized in the sector concerned, operating within the Community.⁵⁰ Another major exception is represented by the 12-month grace period set forth by Article 7(2), during which the disclosure is excused. In the present case, the making available to the public needs to be occasioned by the designer, her successor in title, or even a third party, but as the result of information or actions of the designer. As said, under these conditions, and only during a period of 12 months, is such making available to the public deemed irrelevant towards both novelty and individual character tests, with the consequence that the designer is still entitled to file an application for registration. During this 12-month period (and for the following 24), the design will most likely be protected by UCD, which offers protection to the designer against acts of copying. Accordingly, a third-party independent application for an identical design to the one subject to the 12-month grace period would be rejected for lack of novelty, while a corresponding use (i.e. the use of a UCD that has not been copied but independently developed, see *infra*) would not represent an act of infringement. In the case where a third party legitimately uses (not copying) a design protected only by UCD during the 12-month grace period, and before the expiration of that period the UCD holder registers an RCD, the third party can continue in her activity within the limits of pre-use as long as she acts in good faith, she has not copied the design,⁵¹ and most importantly, her use does not constitute a disclosure. In fact, it must be borne in mind that this grace period is not a right of priority,⁵² nor does it have similar consequences: any third-party independent (i.e. not occasioned by information or actions of the designer) disclosure operates along the normal rules, meaning that it would prevent the designer who finds herself in the 12-month grace period from the possibility of successfully filing a registration for lack of novelty.⁵³
- 32 An important limit contained in the CDR is that of Article 8, which excludes from protection those features (not the entire design) that are dictated entirely by technical considerations (as a logical corollary of what was established by Article 6 above).

Article 8 embraces two different cases: the first case of exclusion is mandated when the form of a product is dictated by a technical function, while the second is observable where the form is dictated by the need to mechanically combine or connect with other products. The rationale of this exclusion is explained in Recital 10 CDR, according to which technological innovation should not be hampered by granting design protection to features dictated solely by a technical function. In particular, the purpose of such provisions is to prevent design rights from being used to obtain monopolies over technical solutions without meeting the relatively more stringent conditions laid down in patent law.⁵⁴

III. Scope of protection and infringement

- 33 Article 10 deals with the key aspect of the scope of protection. The scope of protection is based on the parameters contained in Articles 5 and 6, and states that the protection conferred by a community design (CD) includes any design which does not produce on the informed user a different overall impression assessed in consideration of the degree of freedom of the designer in developing his design. Remarkably, the scope of protection of a CD as such is not affected by the products and classifications to which the design is applied or incorporated.⁵⁵ This means that a design protected as applied to a lamp could be infringed by a completely different product, such as a personal bag. However, it seems that the correct reading of the provisions of Articles 10 and 36(6) is that the fact that the design is incorporated in two different products should not *per se* exclude an infringement. In fact, the ultimate test remains that of a different overall impression on the informed user, who can obtain or not obtain such similar or different impression also in light of whether the design is incorporated in different and unrelated products.⁵⁶
- 34 Therefore, in a hypothetical infringement test, an informed user should compare the two designs as they are applied to the respective specific products.⁵⁷ If the same design is applied to a fork and to a spoon, there is a higher likelihood that the informed user gets a similar overall impression. However, if the same spoon shape is applied to an 80-meter-long, 2000-ton space shuttle, the informed user's overall impression might be quite different. This reading of the test contributes to a more balanced view of the protection offered by CD, and helps to justify the requirement to indicate the class of products for which protection is claimed during the registration phase. It also contributes to limiting possible unjustified monopolies of forms on products not even identified.
- 35 The relevance of the product to which a design is applied or incorporated is confirmed by the OHIM, where it establishes that a certain design can only be registered for some class of products and not for others (for example, blueprints for houses can only be registered as "other printed subject matter", and not as "building"; see above). The rule seems to follow logics: if the goal of CD is to protect the appearance of a product, protection is given, and infringement can take place only in the presence of those products' appearance (the protected one and the infringing one). The fact that the product is defined broadly implies that protection and infringement will occur more often than if the definition had been narrower, but the presence of a product is still necessary. The fact that Article 36(6) establishes that protection is not limited to the class of products for which registration is filed represents a – questionable – policy decision that can only be interpreted systematically as excluding the fact that a different class of products would automatically determine a non-infringement finding. Still, as the OHIM practice recognizes, the fact that a design is applied or incorporated to different products does have consequences, sometimes as serious as to cause the rejection of the application.
- 36 Another aspect that should be considered in the infringement test is the *type* of overall impression in light of what we observed when analysing Article 6 (see *supra*). In other words, should the infringement test employ the "clearly different" standard as found in Recital 14? This consideration has direct practical consequences, since it will determine whether a product (its overall impression on the informed user) needs to be just different, or *clearly* different from a protected one, in order to discard infringement. In the silence of the CDR, it seems to this author that should be followed the theory sustaining that "clearly" operates only in the case of Article 6 (prior art test) and not in the case of Article 10 (infringement test).⁵⁸ The main reasons are based on policy considerations:
- 37 It is one thing to restrict the grant of a monopoly right to designs which are shown "clearly" to differ from the existing design corpus. That makes sense – you need clear blue water between the registered design and the "prior art", otherwise there is a real risk that design monopolies will or may interfere with routine, ordinary, minor, every-day design modifications – what patent lawyers call "mere workshop modifications." But no such policy applies to the scope of protection. It is sufficient to avoid infringement if the accused product is of a design which produces a "different overall impression." There is no policy requirement that the difference be "clear." If a design differs, that is enough – an informed user can discriminate.⁵⁹

38 This view, though offering a justification to the specific difference in the wording of Recital 14 and in that of Article 10, seems to be only partially accepted by commentators.⁶⁰ A better drafting technique would have helped to avoid such an interpretative loophole.

IV. Registered and unregistered

39 In order to benefit from the protection offered by CDR, it is not necessary to file an application and obtain the consequent registration of the design. Registration is a requirement only for RCD, which offers a stronger protection to its holder (it offers protection also against design independently developed). However, if the designer decides not to register her design (or during the 12-month grace period), she will enjoy UCD protection, which offers the same extent of protection as the RCD, but only against acts of direct copying. Albeit different in nature, the broader right granted by registration and the anti-copying right granted by UCD – once validly registered or validly substantiated during a court proceeding⁶¹ – offer to their proprietor the same type of rights: the right to use the corresponding product of design and to prevent any third party not having her consent from using it.⁶² The difference between CDR and UCD in terms of the type of protection offered resides in the nature of the alleged infringing design: any infringing design in the case of RCD, or only infringing design resulting from copying of the protected design.⁶³ In particular, the contested design shall not be deemed based on an act of copying if it results from an independent activity by a designer who may be reasonably thought not to be familiar with the design made available to the public by the holder.⁶⁴ This means that the CDR creates a sort of simple presumption in favour of the UCD holder, given the fact that it is the alleged infringer who has to prove that she is not familiar with the “original” design (which needs to be disclosed in the public in the first place in order to trigger UCD protection).⁶⁵

V. Rights granted by community design

40 Article 19 specifies that a CD confers on its holder the exclusive right to use it and to prevent any third party from doing the same. The Article further offers a non-exhaustive but detailed list of what “use” shall mean: the making, offering, putting on the market, importing, exporting or using of a product in which the design is incorporated or to which it is applied.⁶⁶ Once more we can observe how the CDR is far from clear in its use of legal terms. With regard to the present Article, it is not clear whether an infringement is caused by an unauthorized use of the design or of a product to which the design is applied or in-

corporated. Article 19’s literal structure is not conclusive in this regard, as in the first sentence it only employs the word “design” (*a community design shall confer ... the right to use it*, i.e. the right to use the community design), while in the second sentence’s list of possible acts of infringement, all the given examples make reference to the presence of a product in which the design is incorporated or applied.

- 41 It must be noted that the concept of *product* is central to the entire CD structure: only if a product exists can there be a design right applying to it, and consequently also an infringement can only be occasioned by a product incorporating the design.⁶⁷ After all, the same Article 3, defining a CD, clearly states that the essence of a design is the *appearance of a product*. This means that infringement can only occur where a person deals with or uses another product with the same appearance.
- 42 Although reduced in importance by the broad definition of product, the determination of whether a product is necessary to cause infringement is not without relevant consequences. Bently asks whether a cartoon character registered as a design is *used* when the cartoon is broadcast on TV or otherwise communicated online. In such cases of on-air or online uses, can we still speak of an *industrial or handicraft* product? In that author’s opinion, the answer should be in the negative, rooting this view not only in the literal and systematic analysis of Article 19, and more in general in the whole structure of CD, which, as mentioned, is construed around the concept of product, but also on Recital 21, which specifies that a CD right should extend to trade in products embodying infringing designs.⁶⁸
- 43 The same author, however, notes that the definition of design clearly indicates that the appearance of graphic symbols is to be protected. In this respect, confining *use* to material products – excluding immaterial media such as the web – seems unduly limiting. The effect of this narrow construction, the author explains, is also to exclude web design from the field of designs law.⁶⁹
- 44 Focusing on the semantic meaning of the concept, it seems that the “use” of an “industrial” or “handicraft” product is linked to its physical dimension, where it can carry out the function for which it is manufactured. However, in light of the current technological development that allows uses of physical products on immaterial medias, it does not seem possible to conclude that the CDR explicitly excludes such acts from the definition of use, a definition that is general and open ended.
- 45 A possible help to untangle this complex problem could perhaps be found by looking once again at the test for infringement. A community design of a screwdriver is infringed, for example, when other

identical screwdrivers are manufactured without the rightholder's consent. But the use of the screwdriver's appearance on a monitor (such as when reading an eBook) seems not to be tantamount to an act of infringement: First, one could argue that there is no use of the product; there is only the appearance without the product (after all, there is no screwdriver). Second, and maybe more importantly, even assuming that a product is present (if an eBook can be considered a product, after all, although a quite different one for this purpose), the overall impression on the informed user is different, as few would confuse the product screwdriver with the product eBook that at page xy has a 2D representation of a screwdriver (assuming that a normal use of an eBook makes its pages visible). If this difference is able to cause a different overall impression on an informed user, no infringement occurs.

VI. Computer icons and other computer-based designs

- 46 The practice of OHIM specifically allows registrations for computer icons and graphic user interfaces (GUI) produced by computer programs, usually in Locarno class 14.⁷⁰ In light of the OHIM manual, it seems that a protectable immaterial product could certainly be the graphical user interface of a computer screen layout with the exclusion of sounds. Whether moving images and dynamic user interfaces can be held protectable is not clear. However, the concept of appearance of a product seems to exclude that dynamic elements, many times governed by the final user, can be included under the scope of protection. Further, it would be difficult to document such unpredictable dynamic aspects in the registration process.
- 47 It must be noted that, while protection of computer icons and GUI would probably be considered highly debatable, in the absence of a specific provision, an industrial or handicraft product represented in digital form is probably enough to trigger protection. There is a clear conceptual difference between the digital item "computer icon" – which is neither an industrial or handicraft product nor possesses the characteristic to be made, manufactured or printed into one, and that unfolds its function exclusively on the computer screen as a digital immaterial item – and a spoon represented digitally as a CAD file. A design that is computer created using a computer-assisted design program (CAD) and that represents perfectly the appearance of the product (therefore in the correct number of dimensions, sizes, colours, indications of materials, and more generally all the information that is required to define its appearance), can most likely be deemed protectable, and its actual manufacture is probably not necessary in order to activate the CD.
- 48 Once more the legal framework is not absolutely clear in this specific case, which is quite common to many modern designers, as we will see. We know, though, that the OHIM is not interested in such aspects in its determination of whether to grant a registered community design: "Whether the product indicated is actually made or used, or can be made or used, in an industrial or handicraft manner, shall not be examined".⁷¹
- 49 The very same process of registration does not require a specimen of the claimed CD, save for the limited case of Article 36(1)(c).⁷² And Article 11, defining the commencement of protection of the UCD, includes among the acts that constitute a communication to the public the publication of the design (incorporated or applied to a product). It is not clear if the term publication is limited to the case of 2D designs such as ornaments, but it seems plausible that as long as the outer appearance of a product is communicated to the public, this is sufficient to trigger the legal effects of CD. It has been argued that as long as the appearance of the product is made available to the public, even an oral disclosure could achieve the purpose.⁷³
- 50 The same Examination Guidelines seem to require – *a contrario* – that a design exists only in relation to an industrial or handicraft item, which has to exist or be passible/subject to coming into existence.

VII. Exceptions and limitations

- 51 Article 20 provides for certain limitations of the rights conferred by a CD. The rights conferred by a CD shall not be exercised in respect of: (i) acts done privately and for non-commercial purposes, (ii) acts done for experimental purposes, and (iii) acts of reproduction for the purpose of making citations or of teaching.⁷⁴ Article 20 also provides for another set of exception (sec. 2) that are specific to the repair of aircrafts and ships, but these are not of interest here.
- 52 In the first of the listed exceptions, Article 20 specifies that it is not sufficient that an act be done for non-commercial purposes, but it must also be "private".⁷⁵ Therefore, a non-commercial public use will fall outside the present exception. This double restriction (private and non-commercial) is not required by international sources, and it should be ascertained whether under a policy perspective it is desirable.⁷⁶ It is not required, however, that the use be personal; therefore, all uses that are not public – including a private number of individuals and those that are done for non-commercial purposes – will be deemed covered by the provision.⁷⁷
- 53 The exception for experimental purposes is drafted following a similar provision in the Topography Directive.⁷⁸ In particular, it seems that acts done for ex-

perimental commercial purposes should be included within the scope of this exemption.⁷⁹ It is unclear whether experiments have to be concerned with the design itself, or whether any type of experiment employing a protected product of design are exempted, therefore including those cases where the experimentation is directed to something different than the design, but where the latter is used.⁸⁰

- 54 The third exception should look quite familiar to copyright scholars. It provides that acts of reproduction for the purpose of making citations or of teaching are exempted from protection, provided that mention of the source is made, and that such acts do not unduly prejudice the normal exploitation of the design. Citation is not further defined, and it seems that any act is allowed that reproduces a design as long as this is in accordance with fair trade practice and does not prejudice the normal exploitation of the design. Bently brings the example of a book about design, where designs of shapes (3D) are reproduced in the book. He argues that in such a case, there should be no need to resort to such an exception in the first place (the design is not applied to a product). However, should it not be the case, the present exception will be a helpful demonstration.⁸¹ The teaching limitation is broadly defined and should not be limited to educational institutions (public or private) but extend to any act connected with teaching.⁸² This will, of course, be limited to acts of reproduction for teaching, and will clearly not extend to dealing in products involving such reproductions.⁸³ A third and final condition is required: mention of the source. Once again, this is a provision with an obscure meaning – not only do we lack a definition of *source* but also of *designer*. Bently observes that it is unclear who – among the manufacturer, the designer and the design proprietor – should be taken as the source, and cautiously suggests mentioning those three.⁸⁴ Musker, on the other side, believes that the designer/author does not need any recognition, limiting the mention to the manufacturer or the supplier, at least in the case of UCD, since in the case of a registered design, a mention of the CD Bulletin number will suffice.⁸⁵

or specified under national law. This last provision is not deemed applicable in cases of commissioned designs, where in the absence of a specific agreement the right to CD will vest in the designer.⁸⁶

- 55 Article 14 is silent on who qualifies as a designer. It has been noted how CD has been created and implemented with industry and market interests in mind, not designers, and this pillar of CD is observable, for example, in the attention given to the concept of design as an industrial product, rather than in the figure of the designers as individuals undertaking productive and innovative activities.
- 57 The chosen wording – a designer does not *create* a design, but *develops* it – suggests further that there is a weak link between the designer and the design, and a much stronger one between the product and its industrial or handicraft background. To determine who is the designer, especially in the case (not central to the entire CD framework) of individual designers, is not an easy task. Musker notes that since “design” is the appearance of the whole or a part of a product (Art. 3(a)), designers are those who define that appearance.⁸⁷ However, this consideration will not have a conclusive result with many instances of collaborative development, since “a given design may involve contributions at many levels, from setting the specification or brief (which is probably at too high a level to specify the appearance of a product sufficiently to qualify the setter as a designer in most cases) down to making the production drawings or CAD file (which is probably at too low a level to do so in most cases)”.⁸⁸ In some instances, where rights other than CD are protecting the product of a design (such as copyright, or trade-marks, or other forms of national protection), it might well happen that these rights follow different ownership rules, and consequently lead to a product that can be defined as “complex” from the subjective point of view, or in other words, where different property rights are allocated to different owners: a clear case of economic inefficiency also known as “tragedy of the anti-commons”.⁸⁹

VIII. Ownership

- 55 Entitlement to a right in community design is dealt by Article 14, which identifies the (not better defined) designer or his successor in title as the owner of the right to the community design. In the next section, the same Article recognizes the possibility of joint development by different designers, in which case this right shall vest in them jointly. Section 3 clarifies that in the case of an employee developing the design in execution of his duties or following the instructions given by his employer, the right to CD shall vest in the employer, unless otherwise agreed

C. Copyright

- 58 Copyright plays a key role in the protection of applied art and industrial design. It also represents a difficult element to analyse from an EU perspective. The EU legal framework in the field of design protection establishes the principle of cumulation with copyright, but leaves the determination of the extent and the conditions of this protection (and especially the levels of originality required) to be determined by each member state.⁹⁰
- 59 This provision, which arguably represents the attempt to reconcile the many different national approaches, is unfortunate for the consequences it cre-

ates under a common market (and society) point of view. It partially misses the objective to create a more consistent European framework for the protection of designs, since it mandates cumulation with a legal tool that is all but harmonized within the EU. The explicit provision that every Member State can determine the extent and the conditions under which copyright protection for works of industrial design is granted, pushes towards an even wider plethora of possible solutions, furthering diversity of approaches at the national level.

- 60 It can be observed that in different countries the level of originality required for products of design differs greatly, ranging from the standard level required for any other work (perfect cumulation approach⁹¹), to much higher levels, such as the requirement of artistic value (partial cumulation approach⁹²). An effect of the EU legislative policy in design protection has certainly been to get rid of those approaches that did not allow cumulation or only under certain strict conditions (such as in the case of “separability” in place in Italy before the entry into force of the DD).
- 61 This small step forward under the light of standardization cannot make up for a solution that fosters differences rather than similarities, and it is hard to understand how this can produce positive effects in the European market and society.
- 62 The InfoSoc Directive makes little to no reference to the issue of cumulability with design rights. A reference to them can be found in the final section of the Directive dealing with common provisions. Article 9, titled “Continued application of other legal provisions”, states that “this directive shall be without prejudice to provisions concerning in particular ... design rights”.⁹³ As we will see in more detail below, other major international copyright instruments, such as the Berne Convention or the TRIPs Agreements, tend to leave broad directionality to Members in terms of cumulation.⁹⁴

I. EU directives: Scope of protection and protected rights

- 63 Policy criticisms aside, a brief analysis of the relevant aspects of EU copyright law will help to understand the relationship between the latter, design rights and CC. As mentioned, EU copyright law has witnessed different attempts of harmonization; nonetheless, this plurality has not led to a unique harmonized EU framework. Partly due to the limited scope of some of the directives,⁹⁵ partly because, even when the directives had a more horizontal scope, they only harmonized “certain aspects”,⁹⁶ we are still nowadays in the presence of an only partially harmonized EU copyright framework.

- 64 The most relevant – for our purposes – of the copyright directives is certainly the Directive 2001/29/EC on the harmonization of certain aspects of copyright and related rights in the information society (InfoSoc)⁹⁷. The scope of the InfoSoc Directive is to harmonize the legal protection (some aspects thereof) of copyright and related rights in the framework of the internal market, with particular emphasis on the information society.⁹⁸ It harmonizes in the first instance the type of rights that right-holders should be granted in the digital environment. Member States shall provide for the exclusive right of reproduction for authors and for rightholders of related rights,⁹⁹ of communication and making available to the public by wire or wireless and “on-demand” for authors and other rightholders,¹⁰⁰ and of the right of distribution of works.¹⁰¹ Article 5 of the Directive provides for a list of possible exceptions and limitations to copyright (ELC) to the aforementioned rights. This Article encompasses a closed list of non-mandatory ELC (save for the case of temporary acts of reproductions¹⁰²) whose harmonization effects – in light of such an extremely modest legislative technique – have already been criticized in a number of publications, and with good reason.¹⁰³ Suffice it here to restate that if the objective is to harmonize EU copyright law, the act of creating a closed list of non-mandatory ELC, whose implementation is left to each Member State to be decided upon, simply misses the goal of the Directive as a tool of EU legal harmonization.
- 65 That being said – and with the limits of a set of rights subject to 27 different possible combinations of ELC – the aforementioned rights do form a core of protected activities that are harmonized at the Member State level and that can therefore be considered reserved to their copyright-holder across the EU territory in a more or less consistent way.

II. Protected works and elaborations

- 66 Crucial to our analysis is to note how the InfoSoc Directive does not define two concepts. The first is the fundamental concept of protected work, i.e. a definition of the protected subject matter by EU copyright law. The second is the concept of derivative work or adaptation (we will fully discover the importance of this concept *infra*). These two aspects are left untouched by the InfoSoc or any other EU Directive, and Member States are left free to offer protection to the subject matter (and derivatives) of their choice – at least from an EU perspective. It is true, in fact, that beyond the EU Directives – and CJEU decisions¹⁰⁴ – another major source for copyright harmonization, or at least coordination, is represented by the international agreements concluded in the area of copyright and intellectual property more generally.

- 67 In our field there are at least three major international instruments that cannot be forgotten in this analysis: the Berne Convention (BC),¹⁰⁵ the WIPO Copyright Treaty (WCT)¹⁰⁶ and the TRIPs agreements.¹⁰⁷ For our limited goal (definition of protected works and of derivative works), it would suffice to analyse the relevant provisions of the BC given the intertwined system created by the aforementioned three instruments for what concerns some basic rules.¹⁰⁸ The BC, in Article 2, offers a non-exhaustive but quite detailed list of protected works, which (selected on the basis of their relevance for this study) includes “every production in the literary, scientific and artistic domain ... such as works of drawing, painting, architecture, sculpture, works of applied art, ... plans, sketches, ... and three dimensional works relative to ... architecture or science”.¹⁰⁹ Section 3 of Article 2 indicates that “[t]ranslations, adaptations, arrangements of music and other alterations of a literary or artistic work shall be protected as original works without prejudice to the copyright in the original work”.¹¹⁰ It is interesting to note that section 7 of the same Article establishes a specific provision for the case of applied art, industrial design and models, leaving it as a matter for legislation at the national level “... to determine the extent of the application of their laws to works of applied art and industrial designs and models, as well as the conditions under which such works, designs and models shall be protected”.
- 68 This specific provision has played an important role at the EU level towards the adoption of the principle of cumulation, in order to overcome the possible discriminations of protection on the basis of the country of origin and reciprocity rule.¹¹¹

III. Some national examples

- 69 Accordingly, it is possible to find at the national level of EU Member States the presence of provisions in copyright law regarding the protectability of works of industrial design and applied art, though significant differences survive, especially in the pre-DD era.

1. Netherlands

- 70 Illustratively, the Dutch Copyright Act clarifies in Article 10 that “literary, scientific or artistic works includes ... works of applied art and industrial designs and models”¹¹² and that “reproductions of a literary, scientific or artistic work in a modified form, such as translations, arrangements of music ... and other adaptations ... shall be protected as separate works, without prejudice to the copyright in the original work”. No special requirements are present in the Dutch Copyright Act regarding the protection of de-

sign, nor does the Dutch design law prescribe any particular requisite.

- 71 As mentioned earlier, the Benelux (the union of states formed by Belgium, the Netherlands and Luxembourg) is governed by uniform design law provisions in virtue of the Benelux Convention on Intellectual Property (Trade-marks and Designs).¹¹³ Under the Convention, Benelux offers a good example of a perfect cumulation approach.¹¹⁴ Under the old Benelux Design Law, however, the situation was different, as that act required a “clear artistic” character in order for designs to be able to attract copyright protection.¹¹⁵ The Court of Justice of Benelux, however, clarified that the threshold for copyright protection for works of applied art should be reached when the work has an original character showing the author’s personality, not much differently from any other copyrightable subject matter, and accordingly Article 21 of the old design act, requiring this extra condition, was repealed.¹¹⁶

2. Italy

- 72 The Italian Copyright Act¹¹⁷ protects works of ingenuity possessing creative character in the field of literature, figurative arts and architecture regardless of the form of expression. In particular, the protection includes “works of industrial design that present by themselves creative character and artistic value”.¹¹⁸ It is therefore not easy to reach copyright protection for designs in Italy. Designs need to possess not only creative character but also the new and arguably difficult-to-reach parameter of artistic value. Artistic value can be reached when “wide acknowledgement is expressed by different cultural institutions, in favour of the belonging of the work to an ambit of expression which is rooted and expresses tendencies and influences of artistic movements, beyond the intentions and the very same awareness of its author, as the work of artistic content acquires value in itself thanks to its expressive and communicative characteristics”.¹¹⁹
- 73 This high requirement creates a system where very few designs and works of applied art are able to enjoy copyright protection. It also seems quite clear that, even if it is not possible to speak of separability (*scindibilità*) anymore, a requisite as high as “artistic value” is as close to the pre-Design Directive standard as legitimately possible after the entry into force of said Directive.
- 74 Italian-based designers should also consider the separate issue of the repeatedly reformed transitory provision contained in Article 239 of the Industrial Property Code, which in its current wording grants a 13-year period of time during which products of design that were in the public domain before 19 April 2001 (the date that sanctioned the cumulation of

protections in the Italian system) can still be produced without infringing the relative copyright by those third parties who by that date were already – legitimately because in the public domain – producing such items, but only within the limits (including quantitative limits) of the pre-use. Said period of time (13 years) has been introduced very recently by a law of 2012¹²⁰ amending the previous period of time of five years. The five-year period was in place between the reported reform of the law of 2012 and 2010.¹²¹ Before 2010 the transitory provision was of 10 years.¹²² Note that the 10-year period was the object of the preliminary ruling of the ECJ, which declared it in contrast to EU law.¹²³ How a reform that brings the period of 10 years (judged excessive by the Court) to 13 years can be held legitimate remains obscure. Courts in Italy have already taken the stand that this 13-year period is clearly in contradiction to EU law and therefore should not be applied.¹²⁴

3. UK

- 75 In the UK, copyright law¹²⁵ confers protection to designs by protecting the form and decoration of articles as artistic works (sculptures, engravings, or works of artistic craftsmanship¹²⁶). Copyright provides protection also to preliminary documents on which a design has been based, usually as a graphic work.¹²⁷
- 76 Of special interest in the UK legal landscape are the specific rules that apply to the interface between copyright and design rights. In particular, section 51 of the CDPA states that copyright is not infringed by making an article from a design document or a model which records or embodies a design where the design is for anything other than an artistic work or a typeface.¹²⁸ This is a fundamental aspect for our analysis: “copyright in a blueprint for a three-dimensional industrial design will not be infringed where a person makes articles that embody the drawing”.¹²⁹ Note that for section 51, design means the design of any aspect of the shape or configuration (whether internal or external) of the whole or part of an article, other than surface decoration. This includes non-visible parts (which are excluded from CD), but excludes surface decorations (which are included in CD). Also, the existence of an unregistered form of protection peculiar to the UK legal system has to be accounted for: making an article from a 3D blueprint may represent an infringement of unregistered design rights.¹³⁰
- 77 Section 51 operates only in the case of a design document, which must be for something other than an artistic work, and applies only to the creation of a 3D article copied from the design document. Section 51 will not apply in the case of decorations or other 2D designs. Section 4(1) CDPA defines artistic work as “a graphic work, photograph, sculpture or collage, irrespective of artistic quality, a work of architecture being a building or a model for a building, or a work of artistic craftsmanship”. Given such a broad meaning of artistic work, the real extent of section 51’s relevance is probably quite limited.¹³¹
- 78 The CDPA is also interesting as in section 52 it contains a limitation of the term of protection for copyright: when an artistic work has been exploited by an industrial process by making more than 50 articles, all of which are copies, copyright will last only 25 years from when the article was first marketed (counting from the end of the calendar year).¹³² However, articles such as works of sculpture, printed matter, maps, plans and the like are explicitly excluded from the exception.¹³³ Section 52 operates as a defence, and only with regards to acts that apply the design to a product. The mere reproduction of the copyright disconnected from any design does not benefit from the defence (meaning that copyright will regain its natural term). The future survival of section 52 is uncertain as proposals for its repeal have been discussed.¹³⁴

IV. Final observations to part I

- 79 As a conclusion to the part dedicated to designs protection, we can observe that in the EU products of design can be protected by a quite conspicuous and overlapping number of rights. Even limiting our analysis to only two of them (the most relevant anyway: design rights and copyright), the possible different rules that apply in function of the relevant jurisdiction are many. For example, a product of design, protected by a registered community design, is likely protected also by copyright, unless the applicable law has provisions similar to the Italian one, in which case it should be ascertained whether the product is not only creative but also possesses an artistic value, or any other threshold that domestic law has established.
- 80 As a matter of fact, the same product can be protected by copyright in one country (Germany) and not in another one (Italy) as some case law has demonstrated.¹³⁵ This possesses a clear negative impact on the free circulation of goods in the internal market.
- 81 However, the failure to implement a consistent cumulation scheme in the internal market is only one, although quite serious, reason for criticisms. From what we have seen thus far, design law, though having achieved some remarkable harmonizing effects, has nonetheless failed to regulate the field of design rights in a consistent and technologically neutral way. In particular it lacks the flexibility to offer a suitable form of protection to modern, small-sized, 3D printing, EU-based, open designers. Aspects such as the lack of prior art search during registration

and the consequent bad quality titles that this produces, the threshold of “difference” in prior art and infringement tests, the fact that registration requires the indication of the class of products without limiting the scope of protection, the absence of a clear definition of designer, the extremely limited ambit of operation of exceptions and limitations, and the confusing terminology employed when it comes to identifying an industrial or handicraft item and when it is used, are but the major identified flaws. Their reform would contribute to bringing the entire EU design law framework closer not just to the needs of Open Designers, but more generally to the needs of a more efficient EU legal and economic system.

- 82 Copyright, on the other side, while suffering from some of the same flaws, seems a more flexible tool. However, it is poorly harmonized throughout Europe, a situation exacerbated in the specific case of works of industrial design and applied art by the fact that it is left to Member States to establish the levels of originality for protection. In the next section we will see whether contracts (a peculiar typology thereof) can be successfully employed to overcome such shortcomings.

D. Creative Commons

- 83 Creative Commons (CC) is a non-profit organization that endorses a modern view of copyright – the famous *some rights reserved* principle – and offers licenses and other legal tools for free public use. There are different licenses that CC offers, but the most relevant in terms of use is the CC Public License (CCPL), which comes with different license elements (clauses) depending on the selection that users can make on the online license chooser.¹³⁶ Another interesting license is CC0 (CC zero), which comes in just one “flavour” and is better seen as a waiver of different rights that the affirmer has on the work or other material. There is a fair amount of available information, mostly online, on CC operations and the licenses.¹³⁷ Here we will specifically focus on a few features that are relevant in cases of products of design and applied art.¹³⁸ We will make reference to the CCPL in its current version 3 (CCPLv3). In the second half of 2012, a deep revision of CCPLv3 was initiated with the objective to develop a new version 4 (CCPLv4) by 2013. When this paper was written, CCPLv4 had not yet reached final public release; nonetheless, we will make specific reference to the changes in the new version that could have an impact on the aspects hereby studied.¹³⁹

I. The Creative Commons Public License (CCPL)

- 84 The CCPL offers a core of rights that are always licensed regardless of the options that licensors choose. These rights include the right to reproduce, redistribute, communicate to the public, make available to the public and perform the work. Licensors can further choose among the following optional conditions:

BY – Attribution: Attribution must be given to the licensor in the modalities indicated in the license. Attribution is not actually an option anymore since it applies per default since version 2.0.

NC – Non Commercial: Licensor offers the rights identified above only for purposes that are not primarily intended for or directed towards commercial advantage or private monetary compensation.¹⁴⁰

ND – Non Derivatives: Licensor reserves the right to create derivative works.

SA – Share Alike: Licensor allows the creation of derivative works only under the condition that those are licensed under the same – or an equivalent – license.

- 85 The main question that this paper attempts to answer is whether a CCPL can be applied to design products and if yes, whether this can represent the basis to develop a legal theoretical framework fit for an Open Design model. In order to answer this question, we need to analyse CCPL’s scope and licensed rights.

II. CCPL’s scope and licensed rights

- 86 The license grant is contained in section 3 of the CCPL¹⁴¹ and provides that by using such license a licensor grants a worldwide, royalty-free, non-exclusive, perpetual (for the duration of the applicable copyright) license to exercise the rights in the Work as stated below:

- to Reproduce the Work, to incorporate the Work into one or more Collections, and to Reproduce the Work as incorporated in the Collections;
- to create and Reproduce Adaptations provided that any such Adaptation, including any translation in any medium, takes reasonable steps to clearly label, demarcate or otherwise identify that changes were made to the original Work. For example, a translation could be marked “The original work was translated from English to Spanish,” or a modification could indicate “The original work has been modified.”;

- to Distribute and Publicly Perform the Work including as incorporated in Collections; and,
- to Distribute and Publicly Perform Adaptations

87 In the 4th draft of version 4 (CCPL 4.0d4), the structure of the licenses has received major restructuring, and content-wise the license grant has been expanded substantially. Not only neighbouring rights, such as the *database sui generis right*, are explicitly included in the scope of the license, but the reservation clause typical of CCPL3.0 has been removed.¹⁴² As we will see, however, the now open-ended list of rights included in the scope of the license is not still capable, nor is it arguably intended, to capture design rights.

88 In the new version 4.0 there is a new definition in section 1.1, that of “Share”, which includes most of the activities listed in section 3 of the previous version.¹⁴³ The grant is contained now in section 2 and reads along the lines of the previous version 3 definition, save for employing the term *share* as defined in section 1.

89 In the CCPL version 3, “Work” is defined by section 1 as:

the literary and/or artistic work ... including without limitation any production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression including digital form ... such as ... a work of drawing, painting, architecture, sculpture, engraving or lithography; ...a work of applied art; an illustration, map, plan, sketch or three-dimensional work relative to geography, topography, architecture or science.

90 Version 4.0d4 has substituted the definition of work with that of “licensed material”, which is defined as “the artistic or literary work, database, or other material to which the Licensor has applied this Public License”. Copyright and neighbouring rights, on the other hand, are defined as “copyright and/or similar rights closely related to copyright including, without limitation, performance, broadcast, sound recording, and Sui Generis Database Rights, without regard to how the rights are labelled or categorized....”

91 Note the similarity in the terminology between version 3 and the BC terminology, and the fact that works of applied art are expressly included in the definition of “work”. Version 4.0d4 is much more succinct in its definition of licensed material and copyright, though it employs a formula which clearly comprehends any subject matter included in the protection offered by copyright. It seems unquestionable that both version 3 and the forthcoming version 4 cover in their scope works of applied art and design, as long as these are protected by copyright.

92 At the same time, however, it seems irrefutable from the license grant that the CCPL (both version 3 and 4) is a copyright license that additionally includes other rights closely related to copyright, but not rights that are different in nature, scope and structure. Design rights, as defined by the DD and CDR, are not only absent from the license’s enumeration, but their nature, scope and structure make them a completely different type of rights from copyright and from copyright-related rights – as confirmed, *inter alia*, by the fact that no sign of them is present in the Rome Convention nor in any EU copyright (and related rights) Directives.¹⁴⁴ Design rights, under a number of aspects (registration, subject matter, requirements, duration, competent offices, tests) are much closer to trademarks and patents, a set of rights that are unanimously outside the scope of the CCPL.¹⁴⁵

93 Accordingly, a CCPL applied to a design will only govern the copyright in the work, and not the design rights in the product. This may lead to the paradoxical consequence that a user of a CCPL work of applied art which is also protected by design rights is allowed to perform some given acts on the basis of the copyright regime, but prohibited to perform very similar activities on the basis of the – non-licensed – design rights.¹⁴⁶ We will analyse in detail the possible situation emerging from this duality of protection in section 5.

III. CCO

94 Another CC license that deserves a brief mention is the CCO, a waiver more than a license, particularly popular in the field of data and databases. CCO is interesting in our analysis for two main reasons: a) its scope; and b) how it deals with the rights included in its scope.

95 Regarding the first point, we can observe that CCO’s scope is much broader than that of the CCPL. It includes the right to reproduce, adapt, distribute, perform, display, communicate and translate a Work; *publicity and privacy* rights; rights protecting *against unfair competition* with regard to a work; rights protecting the extraction, dissemination, use and reuse of data in a Work; database rights; and other similar, equivalent or corresponding rights throughout the world based on applicable law or treaty. In particular, the specific indication of privacy rights and unfair competition rights, and the general clause including equivalent or corresponding rights throughout the world, might trigger a doubt as to whether there is space for inclusion of design rights in such a broad and open-ended scope of protection.

96 The answer will most likely be in the negative for the case of registered design rights (as the specific exclusion of patents and trademarks may suggest¹⁴⁷),

but a positive answer might be plausible in the case of UCD or other national unregistered design forms of protections, given the nature of such unregistered rights, which can be found close to copyright under more than one aspect (absence of registration, scope, nature of protection and infringement). Unregistered community design also recalls some provisions of unfair competition (a defence against acts of deliberate and slavish copying), which is specifically listed in the CC0 scope.

- 97 The second aspect of interest is the waiver: To the greatest extent permitted by, but not in contravention of, applicable law, the affirmer fully and permanently waives, abandons and surrenders all of its copyright and related rights and associated claims and causes of action, whether now known or not. Therefore, although this seems to be a case of very limited practical relevance, it could be possible to apply a CC0 to a product of design, and by this act the designer would surrender any copyright in it, as well as any UCD-based claim against acts of copying of the design. Of course, the designer would still be entitled to file a registration for an RCD within a period of 12 months from the date of the first disclosure of the product, but after this grace period, anybody should feel free to reproduce the design.¹⁴⁸ In light of the fact that a CC0 by itself would probably not solve issues connected with the relinquishment of the right to file for a registered community design, coupled with the fact that the applicability to unregistered design rights is based more on interpretation than on actual wording or known case law, this solution remains highly hypothetical and should not attract the attention of those interested in anything more than purely academic speculation. If it did – and we repeat that it shouldn't – it must be borne in mind that CC0 is a waiver; therefore, it would not be possible to employ CCPL license elements (BY, ND, NC, SA).

E. Open Design

- 98 In the dynamics of what we call an Open Design workflow,¹⁴⁹ we have observed that a common practice among “open designers” is that of sharing their blueprints online in order to allow everybody to benefit from their creations.¹⁵⁰ Designers who do that are inspired by different sentiments, though. For some, the sharing of the knowledge is the major reward and incentive, and accordingly those designers tend to employ licenses with few restrictions, among which are usually “copyleft” clauses.¹⁵¹ Others contrast such a libertarian stand with a much more pragmatic one. In their intentions the sharing should contribute to spread their work and their name in ways (or at costs) that common marketing tools could not reach, and accordingly they release their blueprints under terms that restrict

the creation of derivative works or the commercial exploitation.

- 99 In light of this observation, our analysis requires a slight shift in angle: given the centrality of the blueprint, it is precisely from this element that we should start. Blueprints, when reaching the required level of originality or creativity, can be considered a work of authorship in their own right. Alternatively, when purely technical and lacking any originality, it is arguable that blueprints are not protected by copyright, though in some countries we have found a specific neighbouring right on the reproduction of the plan and on the realization of a project of engineering in absence of the project drafter's consent.¹⁵² Blueprints, however, when disclosing the outer appearance of the product, could also be considered part of the product, or even as the product of design themselves, and accordingly attract the protection offered by design law (see above section 2.6).
- 100 Given the plurality of roles played by a blueprint, it can help to resort to a simple example. Let us imagine that a designer creates a blueprint and makes it available online under a CC license that allows derivative works under a Share Alike (SA) provision (therefore employing a CCPL BY-SA). For the sake of clarity, we will analyse separately what can be done with the blueprint as a work of authorship and what can be done with the resulting product.

I. The blueprint

- 101 The first aspect at issue (the blueprint and the possibility to modify it) represents an easier case which follows usual copyright rules, if any. The blueprint can be of a purely technical nature and lack any possible form of copyright protection. This is an unlikely scenario considering how low the required level of originality usually is; however, especially in the most technical environments, this remains a possibility that cannot be excluded *a priori*. A technical drawing reporting the calculation of the acceleration of a particle released from a given height and lacking any original or creative addition, can indeed be considered too technical for copyright protection, at least in those jurisdictions with higher standards.¹⁵³
- 102 In such a case, the blueprint is not protected by copyright or usually by any other neighbouring right.¹⁵⁴ The blueprint is said to be in the public domain, a legal status that allows everybody, for copyright purposes, to use and reuse the material. The application of a CC license to this public domain blueprint should be harmless (and pointless), since CC licenses base their operation on the copyright protecting the work. In the absence of any copyright, no term of the CC license should be considered enforceable.¹⁵⁵

- 103** In the opposite case, where the blueprint meets copyright standards, the license is triggered and the creation of any other work covered by its scope should conform to the conditions established in the license. Therefore, if a licensee decides to modify the blueprint in an original way, for example adding a new creative element to it, this will be possible, in our case (use of a CCPL BY-SA), under the condition that the licensee correctly report the attribution, and applies the same, or an equivalent, license to the resulting blueprint.¹⁵⁶
- 104** But what about the possibility to manufacture a product based on the blueprint?

II. The product

- 105** A more complex analysis regards this second issue, i.e. the manufacture of a product from the blueprint. Let us imagine that a second designer finds the same blueprint online. She downloads the blueprint's file and sends it to her 3D printer in order to obtain the corresponding object. At this point we need to determine what is the legal status of the object under: a) copyright, and b) design rights.

1. Copyright

- 106** A first case is given by the possibility of identity between the copyrighted blueprint and the realized product. This means that the blueprint is not only the authors' own intellectual creation but is also complete and final: it determines the appearance of the product, to use design law wording. In this case the blueprint leaves no discretion to the manufacturer as to how to manufacture the product, and the manufacturer, on his side, adheres completely with no creative changes to the blueprint. In such a case, the digital blueprint (for example the CAD file¹⁵⁷) is "ready", in the sense that in order to print the product it will be sufficient to "send" the file to the 3D printer. Any intermediate act before printing takes place is limited to predetermined and technical interventions, such as "clean-up" of the CAD file from programming errors, the conversion of the CAD file in an executable code to be sent to the printer, and the specific regulations and parameters of the printing machinery.¹⁵⁸
- 107** Accordingly, the realization of the product (the 3D item) will very likely represent a *reproduction* of the blueprint to a different media or format not much different from what the printing of a digital journal article on a regular 2D printer would be. Also in this latter case, sometimes it is necessary to clean up the file from comments or typos, to convert the file into a format readable by the printer (usually done automatically by the software in a way that the user is completely unaware of), or configure some parameter of the printer, such as the type of paper, the order of collation, whether comments should be printed and the like. All these activities have a direct influence on the final print-out; however, they are marginal and not creative and will not be deemed sufficient to constitute a derivative work under copyright law. In a case of identity between the digital blueprint and the material product, where the blueprint embraces all the creative elements of the material product itself, the act of printing the article is covered by the right of reproduction, not by the right of creation of a derivative work.¹⁵⁹ Accordingly, the author of the copyrighted item is the author of the copyrighted blueprint, as there is only one copyright at stake here, one that is likely infringed – save for the presence of exceptions or authorizations – by the act of printing¹⁶⁰.
- 108** In our example (CCPL BY-SA blueprint), the license allows printing (reproducing) as many products as desired, copying them further, distributing them, showing them in public or communicating them to the public, with the only limitation to apply the same license in case of acts of redistribution of verbatim or derivative works and to mention the original author in the form she indicated. As long as the printing corresponds to an act of reproduction, blueprints distributed under a CCPL with the Non Derivative clause can also be legitimately printed.¹⁶¹ It should also be borne in mind that any possible ELC as present in the applicable copyright law is explicitly affirmed by the license.¹⁶²
- 109** A second different case is given when the printed item results in a substantially different work from the blueprint, either because the blueprint is not detailed enough to be printed right away (imagine that it consists of a drawing or image, maybe just in 2D, rather than in the complete final CAD file¹⁶³), or because the second designer decides to modify, enhance or in any way creatively adapt the blueprint, or in any other case in which the final printed item is substantially different from the blueprint. Under these circumstances (that can be analogized to the realization of a cinematographic adaptation from a novel), it must be established whether the intellectual creation as present in the original blueprint is identifiable in the final product in a way that may constitute a copyright infringement, or whether, on the contrary, we are in the presence of a product merely inspired by the blueprint but that does not reproduce the original creation in a way prohibited by copyright law.
- 110** In the former situation, the manufacturer (who creatively modifies the blueprint) will be the copyright holder of the derivative work (if her modifications amount to the level of originality required). Of course, this is without prejudice to the copyright in the original work. In our example, the creation

of a derivative work (the modified printed product) does not amount to an infringement, as it is allowed by the Share-Alike clause of the Creative Commons license under which the blueprint is distributed. Therefore, the second creative designer will be the author of the copyrighted item, but obliged to apply to its work the same – or an equivalent – license in order to comply with the requirements of the CC-BY-SA governing the use of the original work. Failing to do so (or in all cases where the original blueprint does not allow the creation of derivative works, such as the use of a CC with the Non Derivative clause) would trigger liability for copyright infringement, save for the eventual operation of any ELC.

- 111** In a different situation, where the product is merely inspired but not copied from the blueprint, it is arguable that the product does not infringe the copyright in the blueprint, in the same way that a story-line regarding a doctor who creates a monster named after him does not infringe Mary Shelley's novel, as long as the former represents an independent intellectual creation of the author. In order to find precise application in a real case, however, the reported general principle needs to face the idiosyncrasies of the legal system where protection is sought, since, as reported above, the concept of derivative work has received very little attention at the EU as well as at the international level. Accordingly, the degree of creative autonomy that the new work needs to possess in order to qualify as independent and non-infringing can vary substantially. In order to find an answer to this issue, an analysis of the outer limits of the concept of derivative work should be undertaken for any relevant country, and with particular attention to the transition from two to three dimensions and the technical or creative elaborations this implies.

2. Design rights

- 112** Once the designer makes the blueprint publicly available online, as happens in our example, she most likely *discloses* it. This will happen when the blueprint reveals the outer appearance of the product, such as where there is an identification between the blueprint and the product of design. Accordingly, novelty (if present at all) becomes an impediment for any third party trying to claim design right protection for products that do not cause a (clearly) different impression.¹⁶⁴
- 113** This mechanism will represent an interesting option for those designers interested in sharing but who want to make sure that no one else can use their blueprints to obtain design protection. In those cases, designers need to consider that such a disclosure operates only if it reaches the normal circles of business in the relevant sector. The online publication (regardless of the type of license) seems to facilitate this possibility, though attention should be paid

to the specific circumstances of the case. The manufacture and exhibit of at least a few samples is advisable, in order to silence the possible objection (not shared here) that the design is disclosed only when applied or incorporated to the *material* product.¹⁶⁵

- 114** On the contrary, when the blueprint does not correspond to the appearance of a product of design, the act of making available the copyrighted blueprint does not correspond to the design law concepts of disclosure. A second designer could find inspiration from this publicly available documentation and manufacture an independent design with the intention to obtain registered or unregistered protection. This is a possible scenario that does not depend on the type of license under which the blueprint is distributed. It must be noted, however, that in such a case the difference between the blueprint (or any other design, documentation or information available) and the final design needs to be considerable, since the latter will have to be (clearly) different from the already available body of designs in order to pass novelty and individual character tests. Unfortunately, however, such tests will only come into play during eventual litigations, and not during the registration process, a mechanism that has already been criticized in this paper.¹⁶⁶

- 115** Another aspect to keep in consideration in such cases is that no parts of a copyrighted blueprint (or any other protected work) can be present in the claimed design in forms that would constitute a copyright infringement: Article 25 CDR lists among the reasons for invalidity of a CD the fact that the design constitutes an unauthorized use of a work protected under copyright law.¹⁶⁷

- 116** An interesting case is given by the eventuality in which the work of art applied to the product is licensed under a CCPL with a non-commercial clause. In this case, no commercial activity that involves the work under CCPL can be legitimately carried out; therefore, most likely the entire product will have to be dealt with in a non-commercial way.

- 117** As we have seen, however, the CCPL scope does not cover design rights. Therefore, while the inner structure of design law, and chiefly the effects of disclosure, can represent a satisfactory scheme for licensors, licensees will still find themselves in a situation of uncertainty since they might be infringing the unlicensed design rights.

3. The licensee's perspective

- 118** So far we have focused our analysis on the licensor in order to secure that she can rely on the expected legal effects that the application of a CCPL to the product of design should entail. Given the likely double layer of protection of products of design in

the EU and the application of a CCPL to the work of applied art, it seems that the licensor can reasonably achieve the prospected goals, at least on the basis of the copyright provisions. In fact, the use of a CCPL has no consequences on the rights stemming from community design protection. Therefore, our licensor will always have in her hands the power to enforce her rights on the product of design even in contradiction with her own determinations when licensing the copyright in the same product (with the obvious limitations regarding acts *contra factum proprium*). This can indeed be seen as irrational behaviour on the part of the licensor, but it is still technically possible. Further, licensors can change over time, transfer rights, change ideas, or simply be or become different persons depending on the rights at stake.¹⁶⁸

119 Accordingly, the last issue that needs to be addressed for a complete analysis concerns the conditions under which the licensee can reasonably trust that the acts undertaken on the basis of the CCPL will not infringe the licensor's design rights. In fact, in all those circumstances where the blueprint of a product of design discloses the appearance of the product and triggers protection, it can well happen that the blueprint's author is entitled to file registration for CDR or enjoy UCD anyway. As repeatedly pointed out in this study, we are not concerned with legal or procedural defences that may offer a resort against an act first permitted and then prohibited on the basis of a different right by the same person (acts *contra factum proprium*, and relative national epiphanies such as *bona fide* doctrines, estoppel, and other legal presumptions). Such defences and theories can actually prove extremely effective in preventing abuses; however, they will vary on a case-by-case basis, and here we are concerned in developing a consistent framework based on substantive law provisions.

120 Upon disclosure of the product of design, the designer enjoys the protection granted by UCD for a period of three years, together with a 12-month grace period to register the design. In these cases, potential licensees could feel extremely frustrated by the lack of legal certainty around their use of the product. Their use, in fact, is based on the CCPL and will only grant them the possibility to perform a number of acts on the basis of a copyright authorization, with the design rights still reserved to the designer. This would represent a major bias, especially for users beyond the amateur circle, such as in professional and commercial environments, where the eventual exceptions of private and non-commercial uses seen above would not find application.

III. A proposal

121 In order to overcome the situation of legal uncertainty caused by the use of a CCPL for products of design – that is to say, of an agreement that licenses the copyright but not design rights in a way that could lead many licensees in error – we propose to combine the CCPL with other CC tools.

122 As briefly mentioned, in addition to the CCPL, Creative Commons offers additional legal tools that can prove quite effective in cases such as the present. CC+ (CCPlus) is one of those. Strictly speaking, CC+ is not a license but a “protocol” composed by a standard CCPL license *plus* an additional agreement that allows licensors to offer additional permissions and more rights above and beyond those granted by the standard CCPL.¹⁶⁹

123 In our proposal, the “+” would be represented by a waiver whereby the affirmer relinquishes every possible right or interest stemming from EU community design, or from national design rights law. The specific wording should mirror, *mutatis mutandis*, the one found in the CC0, with the substitutions and adaptations of the case. The affirmer, in particular, should declare not to have filed any application for a CDR, and to relinquish the relative right (which would exist for a 12-month period from disclosure) to file for a registration. In a case in which a CDR has been filed and/or obtained, the waiver should contain specific wording declaring that the rights granted by the CDR are waived, abandoned or relinquished and will never be enforced. The affirmer should also explicitly abandon, waive and promise not to assert the UCD which will endure for a period of three years from disclosure regardless of any affirmative step taken by the designer. A specific reference in the waiver should be addressed to national unregistered design rights (such as in the UK case).

124 In order to ensure the maximum level of compliance with national laws, where and to the extent that such waivers are deemed invalid, the affirmer should grant a worldwide, non-exclusive license allowing the performance of all the acts that the waiver would have covered. The waiver should be preceded by a preamble clarifying the intentions and motives of the licensor in order to guide courts called upon to interpret this novel contractual structure in case of litigation. Again, the specific wording of the CC0 would represent a perfect *blueprint*.

125 With the combination of a standard CCPL and the type of waiver proposed, designers will finally have at their disposal an easy and practical way to share their works with the community under the conditions that so far have proven to be the most popular in Internet and digital based initiatives: attribution of paternity (in a way that community design

rights are not able to offer), permission/prohibition of creation of derivative works and eventual *share alike*, and the possibility to reserve the rights of commercial exploitation, an aspect particularly popular among those interested in experimenting with new business models.

126 However, this solution has a potential flaw. Or better, its application in jurisdictions featuring a partial cumulation approach could lead to unexpected results. Partial cumulation jurisdictions, as seen, establish different, usually higher, levels of originality for works of applied art and industrial design. Where this level is particularly high, e.g. in Italy where an artistic value is required, works of applied art and industrial design do not usually reach that threshold, and are thus only protected by design rights, not by copyright. This legislative solution makes perfect logical sense. It excludes cumulation in the majority of cases (and de facto circumvents the prohibition of “*scindibilità*”), offering design rights protection to products, copyright protection to works, and both only in those exceptional cases when a product is also a work of art. However, in the EU only a minority of countries follow this solution, which leads to cross-border issues and consequent legal uncertainty.

127 The solution we just proposed, i.e. to waive design rights and rely on copyright, cannot obviously work when copyright does not exist. If applied, it would lead to some sort of “contractual public domain” status, as copyright is absent and design rights have been relinquished.

128 To solve the problem, an alternative approach is possible. It largely resembles the CC+Design solution seen above, but the “+” is in this case is not represented by a waiver, but by an additional grant that extends the scope of the license to include (registered and unregistered) design rights. In this way, design rights will not be waived, but licensed together with copyright and other related rights, and will therefore follow the conditions established by the CCPL. This solution allows licensors also in countries with a partial cumulation approach to allow the use and reuse of their designs under conditions such as attribution of paternity, use of the same or equivalent license for derivatives, and non-commercial uses.

F. Conclusions and future work

129 Throughout an analysis of the most relevant legal tools that affect the activities of designers dealing with new personal, digital, often open-source, 3D printing technologies, we tried to demonstrate a rather simple point. Design law, at least in the EU, does not offer a suitable system of protection and exploitation of rights to individual designers and small-

sized enterprises that use 3D printing technologies in novel ways, creating innovation and added value in technological, economic and social terms.

130 We proposed two possible solutions that similarly combine a contractual tool based on copyright, copyright law itself and design rights. It is undeniable that the proposed solutions exploit copyright law’s ability to control derivative works and try to annul as much as possible design law. In fact, in the CC+Design model, design rights will have to be waived to the greatest extent possible, or, if not possible, included in the scope of the license. Another solution would certainly be to employ licenses that specifically include design rights in their scope of protection. We think we have demonstrated that as long as our model proves effective in practice, such licenses will add very little. At the same time, they would suffer from the problems connected with possible registered IP rights, i.e. a process of registration and the correlated costs. More importantly, CC licenses have the unique capacity of being modular, i.e. to offer a set of license elements (BY, SA, ND, NC) that can be chosen by the licensor, an aspect particularly important to designers and not found in other open licenses.

131 As seen, designers based in partial cumulation legal systems – especially where the required level of originality is particularly high – should opt for the CC+Design expanding the scope of the license, not on the waiver, unless they pursue a public domain-like result. A possible obstacle could be present in the UK, where the creation of an article from a design plan enjoys a specific copyright defence. In such a case, the application of a CCPL to the relative blueprint will not be very effective, as a potential licensee could have a defence for not applying a specific license element (e.g. SA condition) to the resulting article. However, as seen, this scenario will only operate for quite limited number of subject matter.

132 Our preference for a waiver of design rights is based in our critical view of the current EU design law framework, which we already summarized in the final remarks to part I. It is however important to restate once more at least one aspect that could be, and to some extent has been already, fixed by courts. Registered community design rights offer protection against any type of infringing products, including independently developed ones. In this regard, it is extremely important that the tests for protection and for infringement operate on a different basis: Only products that cause a *clearly* different overall impression can be considered novel, but it is sufficient for a product to be *just* different from a protected one to avoid infringement. If courts were to interpret the two tests along these lines (set forth by the UK Court of Appeal), by way of interpretation one of the major flaws of EU design law would be partially corrected.

133 However, generally speaking, this would represent a rather modest improvement. It is quite clear that the EU design legal framework does not favour the creation of property rights around innovation. On the contrary, it stimulates the creation of a high number of bad quality monopoly rights around something that has not been tested for novelty or individual character. The very same idea that this process has low costs is simply wrong. The costs for innovation and competition are significant when the barrier to enter the relative markets is so high: property rights protecting something that may or may not be new since no check has been made. Especially for those with small or non-existent design portfolios, such a market is simply not attractive or accessible in the majority of situations.

134 In our opinion, modern, 21st-century, 3D printing, Fablab-based, individual or small-sized open designers will find a much better tool of protection in copyright. And this is bad news, as it is a clear demonstration that design law has failed, at least for this category, and that copyright is used for items that are closer to products than to works.

135 This brings us to a final consideration that will also represent our future work: How far does the concept of derivative work reach? This question – *i.e.* what are the boundaries of copyright protection in the case of modified works and products (2D to 3D and vice-versa) – is arguably the key point and the limit of the analysis we have proposed. In the case of use of the CCPL, this problem is tempered as the omission of the ND will generally grant the possibility to create derivative works. However, a clear indication of where to draw the line between an act of infringement (like a derivative work) and an act of inspiration is crucial. Copyright law, especially in the field of derivative works, is absolutely not harmonized at the EU or at the international level, and a comparative study in this field will complement the analysis developed in this article.

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1 A considerable improvement from the Design Directive where such needs are explicit only in Recitals 13 and 19. See Directive 98/71/EC of the European Parliament and of the Council of 13 October 1998 on the legal protection of designs, and Council Regulation (EC) n° 6/2002 of 12 December 2001 on Community Designs.

2 See *Green Paper on the legal protection of industrial design, of the Commission of the European Communities*, III/F/5131/91-EN, “Superior design is an important instrument for European industries in their competition with industries from third countries with lower production costs. It is the design, which in many cases, is decisive for the commercial success of products thus allowing European enterprises, investing heavily in development of designs to prosper”.

- 3** A particularly interesting example is represented by FabLabs, a project started by the Media Lab at the Massachusetts Institute of Technology, that has rapidly spread around the world, https://en.wikipedia.org/wiki/Fab_lab.
- 4** Well-known examples of this culture are Free Libre Open Source Software (FLOSS) and Open Content/Access. From a legal point of view, these examples are based on legal documents such as the GNU General Public License (GPL) or Creative Commons licenses.
- 5** For Wikipedia, Open Design is the development of physical products, machines and systems through use of publicly shared design information. Open design involves the making of both free and open-source software (FOSS) as well as open-source hardware. The process is generally facilitated by the Internet and often performed without monetary compensation. The goals and philosophy are identical to that of the open-source movement, but are implemented for the development of physical products rather than software. A real definition of Open Design was developed in 2000 at www.opendesign.org, although the project seems to no longer be under development. Currently the most active initiative in the Open Design field seems to be the Open Design project hosted by the Open Knowledge Foundation, which states, “We aim to use existing definitions for inspiration in this process, including the first Open Design definition drafted in 2000, the Open Design Manifesto, the Open Design page on Wikipedia and the Open Hardware definition”; see <http://design.okfn.org/current-projects/>. See Van Abel, Evers, Klaassen, Troxler, Open Design Now – Why design cannot remain exclusive, Amsterdam, 2011.
- 6** Among others, see Rifkin J, “The Third Industrial Revolution: How the Internet, Green Electricity, and 3-D Printing are Ushering in a Sustainable Era of Distributed Capitalism”, available at: <http://www.worldfinancialreview.com/?p=1547>; See also “A third industrial revolution”, *The Economist*, 21 April 2012, available at: <http://www.economist.com/node/21552901>.
- 7** From a lawyer’s point of view, a better categorization could be represented by the concept of limited liability that has favoured the first industrial revolution as much as technological inventions. Similarly, the second industrial revolution witnesses the development of the basic concepts of labour law, and paves the way for what will become consumer protection law. It is arguable that for the third industrial revolution, design rights, copyright and the ability to combine the relative subject matter are among the legal driving factors. Interesting in this regard is an article that appeared in a 1926 issue of *The Economist*, suggesting that “the nameless inventor of [limited liability] might earn a place of honour with Watt, Stephenson and other pioneers of the industrial revolution”; see *The Economist* 23 December 1999, available at: <http://www.economist.com/node/347323>.
- 8** See e.g. Wittbrodt et al., “Life-cycle economic analysis of distributed manufacturing with open-source 3-D printers”, in *Mechatronics*, Volume 23, Issue 6, September 2013, pp. 713–726.
- 9** See below, sec. 4.
- 10** See e.g. <<http://thingiverse.com>>, a project where designers can share their blueprints and where the suggested licenses are CCs.
- 11** Studies in this sector are blossoming; see e.g. for a US account on the relationship with patents: Weinberg, It will be awesome if they don’t screw it up: 3D printing, intellectual property, and the fight over the next great disruptive technology, Public Knowledge, 2010. For a UK perspective see: Mendis, The Clone Wars - Episode 1: The Rise of 3D Printing and its Implications for Intellectual Property Law - Learning Lessons from the Past?, in *European Intellectual Property Review*, 35 (3), 155-169. See also Desai & Magliocca, Patents, Meet Napster: 3D Printing and the Digitization of Things, in George-

- town Law Journal, 2013, forthcoming, available at: <<http://ssrn.com/abstract=2338067>>.
- 12 See Weinberg, *What's the deal with copyright and 3D printing?*, Public Knowledge 2013.
 - 13 See Directive 98/71/EC of the European Parliament and of the Council of 13 October 1998 on the legal protection of designs.
 - 14 See Council Regulation (EC) n° 6/2002 of 12 December 2001 on Community Designs. Another good document demonstrating EU attention and useful for understanding the historical underpinnings of such legislation is the Green Paper, cit. fn 2 above.
 - 15 Art. 96(1) CDR establishes that its provisions should be without prejudice to a number of Community or Member States' law, including unregistered designs. For the UK case, see Cornish, Llewelyn & Aplin, *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights* (7th ed., London, 2010), at 623 and ss; Bently, *Sherman, Intellectual Property Law* (Oxford, 3rd ed., 2009), at 667 and ss.
 - 16 With the exception of the Netherlands, Belgium and Luxembourg (the Benelux), where a centralized system of registration is in force in virtue of the Benelux Convention on Intellectual Property (trademarks and designs), signed in The Hague in 2005, as modified.
 - 17 See the Paris Convention for the Protection of Industrial Property, signed in Paris, France, on 20 March 1883.
 - 18 Art. 2 CDR identifies in the Office for Harmonization in the Internal Market (Trade Marks and Designs, OHIM), instituted by the Council Regulation (EC) No. 40/94 of 20 December 1993 on the Community trade mark, the office which shall carry out the tasks entrusted to it by the Regulation itself.
 - 19 See Art. 1(3) CDR.
 - 20 See Bently, at 686.
 - 21 Recital 9 CDR reads: "The substantive provisions of this Regulation on design law should be aligned with the respective provisions in Directive 98/71/EC".
 - 22 See Art. 3(a) CDR.
 - 23 See Art. 3(b) CDR.
 - 24 See Suthersanen, *Design Law: European Union and United States of America* (2nd ed., London, 2012), at 95.
 - 25 See Musker, "Community design regulation art. 3", in Gielen/Von Bomhard, *Concise trade mark and design law* (Karlsruhe – Amsterdam – London, 2011), at 364; from the same author, *Community design law – Principles and practice* (London, 2002), 10 – 15; for an illustrative, non-exhaustive list of OHIM practices, see also "The manual concerning proceedings before the office for harmonization in the internal market (trade marks and designs) – Examination of applications for registered community designs" [Manual], at 23 – 24, available at: <http://oami.europa.eu/ows/rw/pages/RCD/legalReferences/OHIMDesignManual.en.do>
 - 26 See Locarno Agreement Establishing an International Classification for Industrial Designs, signed at Locarno on 8 October 1968 as amended on 28 September 1979, available at: <http://www.wipo.int/classifications/nivilo/locarno/#>; see also Suthersanen, at 97-100, pointing out, inter alia, that the design of a portable house has been held protectable in *Mobile Home*, Hamburg DC, October 20, 2006.
 - 27 See Musker 2011, at 364; see also Manual, at 23 – 24.
 - 28 Id.
 - 29 See Suthersanen, *Design Law*, at 95.
 - 30 See, for example, Recitals 12 and 14 CDR.
 - 31 See EC Green Paper, at 8.9.
 - 32 See Bently, at 629.
 - 33 But of course, if the process or service leads to the creation of a product, this would be protectable.
 - 34 See Massa & Strowel, "Community Design: Cinderella Revamped", *EIPR*, 2003, 25(2), 68 – 78, at 72.
 - 35 See case C-393/09 [EUCJ] *BeSoft v. Softwarova*.
 - 36 Regarding the protection of GUI and computer icons, see in general Kurr, "Protection of graphical user interfaces under European design legislation", *IIC* 2003, 34(1), 50-62.
 - 37 No reference to any industrial character is present in the CDR, confirming that CDR is meant to protect products belonging to fine arts, applied arts and industrial design, with no differentiation; see Suthersanen, *Design Law*, at 96.
 - 38 See Bently, at 645.
 - 39 See Art. 5(2) CDR.
 - 40 This requirement is clearly closer to the novelty requirement in patent law, rather than to the originality requirement found in copyright law.
 - 41 See *Grupo Promer Mon Graphic SA v. OHIM – PepsiCo Inc.*, T-9/07 (General Court, GC) of 18 March 2010, at 62, as upheld (denying appeal on this point) by the European Union Court of Justice (EUCJ).
 - 42 See Art. 56 of the Convention on the Grant of European Patents (EPC) of 5 October 1973, as revised; see *Procter & Gamble Co v. Reckitt Benckiser (UK) Ltd* [2007] *EWCA Civ* 936, at 16.
 - 43 See *PepsiCo, Inc. – Grupo Promer Mon Graphic SA*, C-281/10 P (EUCJ), of 20 October 2011, at 53 and 54.
 - 44 See Art. 4 (2) and (3).
 - 45 In this sense, see also Musker, cit., at 368.
 - 46 See Art. 10(2) CDR, corresponding to Art. 9(2) DD.
 - 47 Recital 14 CDR: "The assessment as to whether a design has individual character should be based on whether the overall impression produced on an informed user viewing the design clearly differs from that produced on him by the existing design corpus, taking into consideration the nature of the product to which the design is applied or in which it is incorporated, and in particular the industrial sector to which it belongs and the degree of freedom of the designer in developing the design."
 - 48 In this sense, see *Procter & Gamble Co v. Reckitt Benckiser (UK) Ltd* [2007] *EWCA Civ* 936, at 16 – 18.
 - 49 See *Procter and Gamble Co v. Reckitt Benckiser (UK) Ltd* [2007] *EWCA Civ* 936, at 16 – 18.
 - 50 See Art. 7(1) CDR.
 - 51 See Art. 22 CDR; Musker at 394.
 - 52 See Art. 43 CDR.
 - 53 See Bently, at 630 – 631; Musker at 372.
 - 54 See *Lindner Recyclingtech GmbH v. Franssons Verkstäder*, Board of Appeal of 22 October 2009, R 690/2007-3 – *Chaff cutters*, at 28; and Bently at 634.
 - 55 See Art. 36(6) CDR; see also Musker, cit., 376.
 - 56 In this sense, see Case C-281/10 P, *Pepsi Co. v. Grupo Promor & OHIM*, of 20 October 2011.
 - 57 See Suthersanen, at 133.
 - 58 In this sense, see *Procter & Gamble Co v. Reckitt Benckiser (UK) Ltd* [2007] *EWCA Civ* 936, at 19.
 - 59 Id.
 - 60 Sceptical in this regard is Suthersanen at 131; Bently seems to leave a door open to a higher standard for individual character than for infringement, but notes that the Official Commentary on the Regulation suggests that the difference need not be significant; see Bently, at 649. Cornish, however, seems to accept that "clearly different" is the test to be employed; see Cornish, at 610.
 - 61 See Art. 85(2) CDR.
 - 62 See Art. 19(1).

- 63 See Art. 19(2).
- 64 Id.
- 65 See Musker, 389.
- 66 The type of rights conferred by CD is very close to those conferred by Community Patent.
- 67 In this sense, see Bently, at 665. Musker, however, is doubtful: "It is unclear whether use of a design must mean use as a design; in other words, in application to the appearance of a product of some kind or its ornamentation"; see Musker 2011, at 388.
- 68 See Bently, at 667.
- 69 See Bently, 667, at fn 65.
- 70 See The Manual at 3.1.3; see also Musker at 364. See the Locarno Agreement Establishing an International Classification for Industrial Design, signed at Locarno on 8 October 1968, as amended on 28 September 1979. Note that Art. 2(1) of the Locarno Agreement states that the system of classification it establishes has a purely administrative character.
- 71 See Examination Guidelines Community Design, at 5.1; available at: <http://oami.europa.eu/ows/rw/pages/RCD/legalReferences/guidelines.en.do>.
- 72 Art. 36(1) reads: "1. An application for a registered Community design shall contain: (c) a representation of the design suitable for reproduction. However, if the object of the application is a two-dimensional design and the application contains a request for deferment of publication in accordance with Article 50, the representation of the design may be replaced by a specimen."
- 73 See Musker, 371, 378.
- 74 See Art. 20(1) CDR.
- 75 A similar wording is found in Directive Council Directive 87/54/EEC of 16 December 1986 on the legal protection of topographies of semiconductor products, Art. 5(2).
- 76 TRIPs agreements only require protection against acts of commercial purposes; see Art. 26.
- 77 On the meaning of communication to the public, see Case C-135/10, *Società Consortile Fonografici (SCF) v. Marco Del Corso*, 81 – 90, available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:62010CJ0135:EN:HTML>.
- 78 See Directive Council Directive 87/54/EEC of 16 December 1986 on the legal protection of topographies of semiconductor products, Art. 5(3).
- 79 See Bently, at 672. Musker seems to arrive at a different conclusion, though he recognizes that the issue is not clear; see Musker 2009, at 391.
- 80 See Bently, at 672.
- 81 See Bently, at 672 – 673.
- 82 See Bently, 673.
- 83 Id.
- 84 Id.
- 85 See Musker, 390.
- 86 See Musker 2011, at 383.
- 87 See Musker 2011, at 382.
- 88 Id.
- 89 See Heller, "The Tragedy of the Anticommons", in 111 *Harvard Law Review* 621 (1998), and *The Gridlock Economy: How Too Much Ownership Wrecks Markets, Stops Innovation, and Costs Lives*, New York, 2008.
- 90 See Recital 32 and Art. 96(2) CDR. For an explanation of the reasons, see Explanatory Memorandum to the Regulation, COM(93) 342 final-COD 463 Brussels, 3 December 1993, and in particular: "The smooth functioning of the internal market for products embodying design is going to be fully achieved only if the Community Design system is supplemented by harmonized national rules of copyright law relating to the protection of design. This is, however, a formidable task which needs intense preparation, further comparative studies and contacts with national authorities and interested or academic circles. If the introduction of the Community Design should be subordinated to the achievement of such a harmonization, the urgent need of giving to design industry an efficient tool for the internal market could not be satisfied within a reasonably short period. It is, however, important that the Member States be aware of the Commission's intention to proceed in the direction indicated: acceptance of the principle of 'cumulation' of protection, as defined in this paragraph would constitute their first contribution in this direction. It should also be stressed that it would be difficult to require Member States which traditionally attach the utmost importance to protection of design by copyright, like France or the Benelux States, to accept the "market oriented approach" of this Regulation, if they were not sufficiently satisfied that harmonized rules of copyright law will be laid down at Community level in order to protect the creativity aspect of the activity of design. Accepting the principle of 'cumulation' should not, however, prevent the Member States who already apply such a principle under restrictive conditions (Germany, Spain, Portugal, Denmark, Ireland) from continuing to do so. For the time being, the extent and the conditions of protection, including the level of originality required, would continue to be autonomously determined by each Member State. The introduction in the Regulation of the principle of 'cumulation' would, on the contrary, have an immediate impact for Italy, where the principle of 'cumulation' is excluded by the existing legislation".
- 91 An example of perfect cumulation is traditionally represented by France, where on the basis of the principle of unity of art, every work of the mind is protected regardless of the form of expression, merit or purpose. As Goldstein & Hugenholtz observe, however, if the design is strictly functional, copyright protection might be denied; see Goldstein & Hugenholtz, *International Copyright – Principles, Law, and Practice* (3rd ed., 2013), at 214 – 216.
- 92 This is the approach Italy chose after the DD, which obliged an abandonment of the previous approach based on the principle of "scindibilità". The current Italian Copyright Act requires artistic value in order to offer protection to products of industrial design and applied art. The precise meaning of artistic value is not clear, however; see Franzosi, *Design italiano e diritto italiano del design: una lezione per l'Europa?*, in *Rivista di Diritto Industriale* – 2009 – Parte I – 71 – 82; *Montantari, L'Industrial Design tra modelli, marchi di forma e diritto d'autore*, in *Rivista di Diritto Industriale*, 2010, Parte I, 7 – 25. Another example of partial cumulation, with an originality requirement that is higher than the standard for other copyright works but does not achieve the extreme of artistic value, is Germany; see Goldstein & Hugenholtz, 215.
- 93 Art. 9 reads "This Directive shall be without prejudice to provisions concerning in particular patent rights, trade marks, design rights, utility models, topographies of semi-conductor products, type faces, conditional access, access to cable of broadcasting services, protection of national treasures, legal deposit requirements, laws on restrictive practices and unfair competition, trade secrets, security, confidentiality, data protection and privacy, access to public documents, the law of contract". See also Recital 60.
- 94 See Art. 2(7) Berne Convention and Art. 25 TRIPs Agreements.
- 95 Such as the Software or Database Directives for an example of limited subject matter, or the Rental Directive for an example where the directive concentrated on specific rights.
- 96 Such as the InfoSoc Directive.
- 97 See Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain

aspects of copyright and related rights in the information society.

- 98 See Art. 1 InfoSoc.
- 99 See Art. 2 InfoSoc.
- 100 See Art. 3 InfoSoc.
- 101 See Art. 4 InfoSoc.
- 102 Art. 5(1) reads: "Temporary acts of reproduction referred to in Article 2, which are transient or incidental [and] an integral and essential part of a technological process and whose sole purpose is to enable: (a) a transmission in a network between third parties by an intermediary, or (b) a lawful use of a work or other subject-matter to be made, and which have no independent economic significance, shall be exempted from the reproduction right provided for in Article 2".
- 103 See Hugenholtz, "Why the Copyright Directive is unimportant, and possibly invalid", EIPR, 2000-11, 499 – 505; Guibault, "Why Cherry Picking Never Leads to Harmonisation: The Case of the Limitations on Copyright under Directive 2001/29/EC", JIPITEC, 2010-2, 55-66.
- 104 The Court of Justice of the European Union has expanded the originality requirement of "intellectual creation of its author" beyond the field of software and databases, where it was confined by the relevant directives. It can be said that nowadays the originality requirement in EU copyright law is the author's own intellectual creation; see, inter alia, Case C-5/08, Infopaq International A/S v. Danske Dagblades Forening, of 16 July 2009.
- 105 See the Berne Convention for the protection of literary and artistic works of 9 September 1886, as amended.
- 106 See the World Intellectual Property Organization (WIPO) Copyright Treaty adopted in Geneva on 20 December 1996.
- 107 See Agreements on Trade-Related aspects of Intellectual Property rights (TRIPs), WTO Agreement, Annex 1C, adopted in Marrakesh, 15 April 1994.
- 108 Art. 2 WCT identifies itself as a Special Agreement within the meaning of Art. 20 BC, and specifically indicates that contracting parties are bound by Arts. 1 – 21 BC. A similar provision is found in Art. 9 TRIPs.
- 109 See Art. 2(1) BC.
- 110 See Art. 2(3) BC.
- 111 See Explanatory Memorandum; see also Case C-28/04 Tod's SpA and Tod's France SARL v. Heyraud SA establishing that "Article 12 EC, which lays down the general principle of non-discrimination on grounds of nationality, must be interpreted as meaning that the right of an author to claim in a Member State the copyright protection afforded by the law of that State may not be subject to a distinguishing criterion based on the country of origin of the work".
- 112 See Art. 10 Copyright Act (Auteurswet) 1912.
- 113 See the Benelux Convention on Intellectual Property (Trade-marks and Designs) of 25 February 2005. The convention creates a uniform body of laws for the Benelux territory in the field of Trade-marks and Designs.
- 114 See fn 86 above.
- 115 See Art. 21 of the Benelux Uniform Law on designs and models Act of 1975.
- 116 See Benelux Court of Justice, case A 85/3, Screenoprints Limited v. Citroen Nedelrland.
- 117 See Law 22 of April 1941, n. 633 "Protezione del diritto d'autore e altri diritti connessi al suo esercizio", as amended.
- 118 See Art. 2(10) Italian Copyright Act. Sec. 10 was introduced by Legislative Decree 2 February 2001, n. 95, implementing the Design Directive. The decree also repealed part of sec. 4, which still protects works of sculpture, painting, drawing, engraving, figurative arts, and similar, including scenography, "even if applied to industry, as long as their artistic value is distinguishable from the industrial character of the product to which they are associated".
- 119 See Tribunale di Milano (Court of first instance of Milan) ordinanza 29 Dicembre 2006, n. R.G.74660-1/06.
- 120 See Legge 24.02.2012 n° 14, Conversione in legge, con modificazioni, del DL 29 dicembre 2011, n. 216.
- 121 See Art. 123 Decreto legislativo 13.08.2010 n° 131, Modifiche al decreto legislativo 10 febbraio 2005, n. 30, recante il codice della proprietà industriale, ai sensi dell'articolo 19 della legge 23 luglio 2009, n. 99.
- 122 This was the original excused period contained in the first version of Decreto legislativo 10.02.2005 n° 30, Codice della proprietà industriale.
- 123 The Design Directive should be interpreted as "precluding legislation of a Member State which – either for a substantial period of 10 years or completely – excludes from copyright protection designs which, although they meet all the requirements to be eligible for copyright protection, entered the public domain before the date of entry into force of that legislation, that being the case with regard to any third party who has manufactured or marketed products based on such designs in that State – irrespective of the date on which those acts were performed"; see Case C-168/09 Flos SpA v. Semeraro Casa e Famiglia SpA, at 65.
- 124 See for example Flos S.p.a. contro Semeraro Casa e Famiglia S.p.a., n. 9906/12 of 12 settembre 2012; and Vitra Patente AG contro High Tech s.r.l., n. 09173/2012, of 3 May 2012.
- 125 See Copyright, Designs and Patents Act 1988 [CDPA].
- 126 See Id. Chapter 48. It must be recalled that the list of subject matter in the UK copyright Act is exhaustive and mandatory and that a work has to conform to listed subject matter to be eligible for protection.
- 127 See sec. 51 CDPA; see Bently, 679.
- 128 A "design document" is defined as any record of a design, whether in the form of a drawing, a written description, a photograph, data stored in a computer or otherwise; see CDPA, sec. 51(3).
- 129 Bently at 681.
- 130 Section 236 CDPA reads: "Where copyright subsists in a work which consists of or includes a design in which design right subsists, it is not an infringement of design right in the design to do anything which is an infringement of the copyright in that work". See Mark Wilkinson Furniture v. Woodcraft Design [1998] FSR 63, 65; see also Bently at 682 and footnotes 19 and 20.
- 131 In this sense, Bently, 683.
- 132 See section 52 UK Copyright Act and sec. 2 and 3 of the Copyright (Industrial Process and Excluded Articles) (No. 2) Order 1989; Bently 684.
- 133 See sec. 3 of the Copyright (Industrial Process and Excluded Articles) (No. 2) Order 1989.
- 134 For a detailed and critical account, see Bently L, "The Return of Industrial Copyright?", in European Intellectual Property Review, Vol. 10, September 2012.
- 135 See for example the facts of the Donner case, Case C-5/11, 21 June 2012.
- 136 See <http://creativecommons.org/choose/>.
- 137 A good starting point is www.creativecommons.org. The top-level domain name can be changed to the desired country code in order to find specific localized information.
- 138 See Jasserand C., "Creative Commons licences and design: Are the two compatible?", JIPITEC, 2011-2, pp. 131-142.
- 139 We will make reference to the last CCPLv4 drafts available online for public consultation. The draft version used for this pa-

- per is 4, available for public consultation at <http://wiki.creativecommons.org/4.0/Drafts#Draft_4_Details>.
- 140 The requirement that the compensation be private has been removed from version 4.
 - 141 In this article we use CCPL BY-SA version 3 unported as a reference model unless otherwise noted.
 - 142 Sec. 3 last paragraph, last sentence CCPL3.0 BY-SA reads: "Subject to Section 8(f), all rights not expressly granted by Licensor are hereby reserved".
 - 143 Currently, the definition of "Share" reads: "Share means to distribute material to the public by any means or process such as public display, performance, dissemination or communication, and to make material available to the public including in such a way that members of the public may access the material from a place and at a time individually chosen by them".
 - 144 See Rome international convention for the protection of performers, producer of phonograms, and broadcasting organizations, done at Rome on 26 October 1961, which is commonly regarded as the international source for neighbouring rights.
 - 145 "CC licenses do not directly affect rights other than copyright, such as the trademark or patent rights or the publicity and privacy rights of third parties; however, our licenses do not expressly reserve those rights and as between licensor and the public implied licenses may exist. These and other rights may require clearance (i.e. permission) in order to use the work as you would like"; available at <<http://wiki.creativecommons.org/FAQ>>.
 - 146 Again, we will not consider here aspects such as bona fide obligations, estoppel, or other legal defences, actions or theories preventing to dispose of a right contra factum proprium. Such aspects are not covered by the type of analysis conducted here (copyright, design rights, CC), and will certainly represent a suitable resort in some situations. The objective of this study, however, is to find a possible synthesis on the substantive legal level, which will offer a solution in the generality of situations.
 - 147 See sec. 4 Limitations and Disclaimers: No trademark or patent rights held by Affirmer are waived, abandoned, surrendered, licensed or otherwise affected by this document.
 - 148 Also in this case we are not looking into the area of bona fide, estoppel, and acts contra factum proprium.
 - 149 We intentionally avoid offering a precise definition of Open Design. There are a number of Open Design definitions that partially catch the complexities of the phenomenon, and a debate is ongoing regarding a more generalized and bottom-up definition able to represent all the different aspects involved. That is probably the best place for a definition to emerge.
 - 150 For examples, see in this regard the operations of the FabLabs, see supra fn 3, or websites such as <<http://thingiverse.com>>.
 - 151 From a legal perspective, "copyleft" means the condition that allows the creation and further distribution of derivatives under the obligation to use the same – or sometimes an equivalent – license. Given this definition, clauses such as the Share Alike (SA) of CC are a copyleft clause.
 - 152 See Art. 99 Italian Copyright Act. It must be noted that it consists of a right to compensation limited to a maximum amount; see M. Fabiani, *La protezione dei lavori di ingegneria, in Il diritto d'autore*, 2007/4, 560 – 566.
 - 153 If it is still possible to speak of a standard different than that of intellectual creation of the author, as repeatedly established by the EUCJ; see Infopaq cited.
 - 154 See, however, Art. 99 of Italian Copyright Act cited.
 - 155 See sec. 2 CCPL version 3 unported. It is debatable whether those provisions not connected to copyright or a related right could survive, such as warranties and limitations liabilities, for example.
 - 156 As established by section 4.b CCPL 3.0 BY-SA
 - 157 The file format created by the software used for computer-aided design; see http://en.wikipedia.org/wiki/Computer-aided_design.
 - 158 Usually CAD files are automatically converted into STL files; see <[http://en.wikipedia.org/wiki/STL_\(file_format\)](http://en.wikipedia.org/wiki/STL_(file_format))>.
 - 159 To the extent and in the jurisdictions where these two rights are conceptually separate.
 - 160 We have already pointed out the problems connected with the fact that the thresholds of copyright protection for applied art and industrial design can vary significantly from jurisdiction to jurisdiction in section 3.
 - 161 See sec. 3 last sentence CCPL-BY-SA version 3, and the almost equivalent wording on version 4d3: "The above rights may be exercised in all media and formats whether now known or hereafter devised. The above rights include the right to make such modifications as are technically necessary to exercise the rights in other media and formats" (emphasis added). Therefore, as long as the passage from the digital to the physical format does not amount to a derivative work, but is only a technical modification, the ND provision is also in line with the 3D printing of a work.
 - 162 Therefore, no part of the license can be interpreted as limiting any exception or limitation to copyright under national law. Exceptions such as that of private copy can play an important role in cases of printing of objects for private uses.
 - 163 In such a case it could be argued if we are in presence of a blueprint, or of a different copyright subject matter.
 - 164 Such an act will simultaneously trigger a 12-month grace period, and a 36-month UCD protection for the benefit of the designer.
 - 165 See above, sec. 2.
 - 166 See above, sec. 2.
 - 167 See Art. 25(1)(f) CDR.
 - 168 We have seen that copyright and design rights first ownership might follow different rules.
 - 169 "It is NOT a new or different license or any license at all, but a facilitation of more permissions beyond ANY standard CC licenses. Worth emphasizing is that CC+ (and use of that mark) requires that the work be licensed under a standard CC license that provides a baseline set of permissions that have not been modified or customized. The plus (+) signifies that all of those same permissions are granted, plus more!"; see <http://wiki.creativecommons.org/CCPlus>.