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Or How to Apply Creative Commons Licences to 3D Printed Products in the Light of the Most Recent Developments of the European Court of Justice Case Law

Thomas Margoni¹

1 Introduction; 2 The EU legal framework: copyright and designs; 3 Creative Commons; 4 Open Design; 5 A proposal; 6 Conclusions

1 Introduction

The use of additive manufacturing machinery to print physical objects created digitally thanks to Computer-Aided Design (CAD) software has been common practice for decades in many fields ranging from aeronautics to home-furniture.² 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, know-how) and the diffusion of a culture based on access to and reuse of knowledge.³ This blend will be called Open Design.⁴

Many Open Design supporters argue that 3D printing technology and mass customization can be seen as the cornerstone of a third industrial revolution⁵, in the same way that the steam engine and the spinning mule were for the first, and mass production and standardization for the second.⁶

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2 See https://en.wikipedia.org/wiki/3D_printing.

3 Well-known examples are 'Free Libre Open Source Software' (FLOSS) and 'Open Content/Access'. These examples, under a legal point of view, are based on legal documents such as the GNU General Public Licence (GPL), or Creative Commons licences.

4 On Wikipedia, Open Design is described as the development of physical products, machines and systems through the 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. Goals and principles are comparable to those of the FOSS movement, but are directed to the development of physical products rather than software. A definition of Open Design has been developed in 2000 on www.opendesign.org, although the project seems not under development any longer. 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 et al. 2011; Perry 2003.

5 See Rifkin 2012, Markillie 2012.

6 From a legal point of view a better categorization could be represented by the concept of limited liability that has favoured the first industrial revolution at least as much as technological inventions. The second industrial revolution similarly witnessed the development of the basic concepts of labour law and eventually consumer protection law. It could be argued that for the third industrial revolution design rights, copyright, and the ability to share and participate in the technological process are among the legal driving factors. An interesting article in this regard 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

Whereas it is probably still too early to say whether 3D printing will be used in the future to refer to a major event in human history, or whether it will be relegated to a lonely Wikipedia entry similarly to ‘Betamax’ (copyright scholars are familiar with it for other reasons), it is certainly not too early to develop a legal analysis that will hopefully contribute to clarify how modern open designers can benefit from copyright protection and whether they can successfully rely on open licences to achieve their goals. With regard to the latter point, Creative Commons (CC) licences will be used in this study.

Nonetheless, it must be borne in mind that other rights and remedies may play an important role in the protection of works of industrial design and applied art, chiefly design rights, but also patents, models, trademarks and unfair competition. Design rights form part of a separate study and will be only touched on here for their relation with copyright protection (so called “cumulation” of protections),⁷ while patents, trade-marks and other possible forms of protection will be part of future work.⁸ As the title suggests, the analysis is based on EU law.

The structure of the chapter is as follows. After this short introduction (section 1) the relevant EU copyright law provisions, and in particular some recent case law of the European Court of Justice (ECJ), will be analysed (section 2), followed by an outline of the most relevant aspects of CC licences including a focus on their applicability to products of design (section 3). It will then be tested whether the resulting structure can lead to a working legal framework for Open Design (section 4). In the conclusions (section 5) it is argued that CC licences such as the CC Public Licence (CCPL) are copyright licences and design rights are not included in their scope. However, thanks to a specific tool offered by CC and called CC-Plus it is possible to “enhance” a CC licence in order to include design rights and possibly to create a legal framework for the development of Open Design projects under the name of CC-Plus-Design.

2 The EU legal framework: copyright and designs

Copyright plays a key role in the protection of applied art and industrial design, which are usually included in national and international instruments protecting copyright.⁹ Similarly, the EU legal framework in the field of design rights protection (i.e. the protection afforded to the outer appearance of a product¹⁰) establishes the principle of cumulation with copyright, but leaves the determination of the extent and conditions of such cumulation – especially the levels of originality required – to be determined by each Member State (Arts. 17 DD and 96 CDR).¹¹ This framework is

The Economist 1999.

7 See Margoni 2013.

8 See Weinberg 2010.

9 See e.g. Art. 2(1) Berne Convention for the Protection of Literary and Artistic Works of 9 September 1886 (Paris text).

10 Art. 3 CDR – definitions: “For the purposes of this Regulation: (a) “design” means the appearance of the whole or a part of a product resulting from the features of, in particular, the lines, contours, colours, shape, texture and/or materials of the product itself and/or its ornamentation; (b) “product” means any industrial or handicraft item, including inter alia parts intended to be assembled into a complex product, packaging, get-up, graphic symbols and typographic typefaces, but excluding computer programs;

11 See recital 32 and art. 96(2) of Council Regulation (EC) n° 6/2002 of 12 December 2001 on Community Designs [CDR]. See also Directive 98/71/EC of the European Parliament and of the Council of 13 October 1998 on the legal protection of designs [Design Directive, DD]. 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 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.*”

contained in two pieces of EU secondary legislation: the Design Directive of 1998 (DD) and the Community Design Regulation of 2001 (CDR).¹²

The provisions contained in Arts. 17 DD and 96 CDR, which represent the attempt to reconcile the variety of traditional national approaches in the field while maintaining a level of flexibility thanks to which Member States (MS) are able to choose between perfect and partial cumulation, has attracted criticisms as it allows the coexistence of different levels of originality in a market that aims to be, or become, common. The two provisions have nonetheless been successful in eliminating the solution whereby a product of applied art could be *either* protected by copyright *or* by industrial design (so called “non cumulability” or “separability”). It must be noted, however, that in the case of partial cumulation (allowed by the DD and CDR) if the level of originality chosen by the MS is particularly high (say “artistic value” as required in Italy) the resulting situation is much closer to a system where cumulation of protections is forbidden, rather than one where it is allowed. Accordingly, it can be said that the harmonising effects of the DD and CDR in terms of cumulability and originality standards are modest, only formally excluding the principle of “separability” from the possible choices available to MS.

As it will be argued, it would have been preferable that the EU legislature had either allowed MS to maintain their traditional categories (including separability), thereby granting a higher degree of discretion to MS, or required perfect cumulation between designs and copyright, sacrificing MS discretion for the sake of greater harmonisation. Instead, the chosen middle-way solution, as it will be seen, possesses the disadvantages of both alternatives, without really achieving the advantages of any.

It is hard to say whether the criticisms just reported are at the basis of the ECJ holding related to the harmonisation of the originality standard in the field of unregistered designs (see below). Certainly, a clearer level playing field would have subtracted the space of intervention to the ECJ and avoided a decision that is problematic under more than one point of view.

EU Copyright Directives: Scope of protection and protected rights

Traditionally, it can be observed that among EU countries the level of originality required for works of industrial design and applied art can differ – some times greatly – ranging from the same standard required for any other work (perfect cumulation approach)¹³, to much higher standards as, for instance, the requirement of “artistic value” (partial cumulation approach)¹⁴. One of the effects of the EU legislative interventions in the field of designs has certainly been the abandonment of approaches that did not allow cumulation or allowed it only under certain strict conditions (such as in the case of ‘*separability*’ in place in Italy before the entry into force of the DD).

A brief analysis of the relevant aspects of EU copyright law will help understand the relationship between the latter, design rights, and CC. As said, EU copyright law has been object of a plurality of legislative interventions, nonetheless the resulting legal framework is only partially harmonised. This can be attributed to the limited EU competences in the field of copyright. Since its creation, and until recently, the main basis for EU intervention in the field of copyright were Articles 26 and

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”.

12 Id.

13 An example of perfect cumulation is traditionally represented by France where on the basis of the theory 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 and Hugenholtz 2013, 214-216.

14 This is the approach that Italy has chosen after the DD, which mandated the abandonment of the previous approach based on 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 however not clear. See Franzosi 2009, 71-82, Montanari 2010, 7-25. Another example of partial cumulation has been until recently Germany; see Goldstein & Hugenholtz 2013, 215.

114 of the *Treaty on the Functioning of the European Union* (TFEU),¹⁵ which gave the EU the competence to respectively adopt measures with the aim of establishing or ensuring the functioning of the internal market and the approximation of the laws of Member States.¹⁶ This lack of direct attribution of powers to regulate copyright in a systematic way eventually led to the fragmentary and subject-matter specific approach taken by many EU copyright directives.¹⁷

For present purposes, the most relevant of the copyright directives is certainly *Directive 2001/29/EC on the harmonization of certain aspects of copyright and related rights in the information society (InfoSoc)*.¹⁸ The scope of the InfoSoc directive is to harmonise 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.¹⁹ It harmonises the type of rights that right-holders should be granted in the digital environment. Accordingly, Member States shall provide for the exclusive right of reproduction for authors and for right-holders of related rights²⁰, of communication and making available to the public by wire or wireless, and ‘on-demand’ for authors and other right-holders²¹, and of the right of distribution of works²². Art. 5 of the Directive provides for a list of possible exceptions and limitations to copyright (ELC) to the aforementioned rights. The article includes a closed list of non-mandatory ELCs (save for the case of temporary acts of reproductions²³) whose harmonisation effects have been already criticised in a number of publications²⁴. It suffices here to restate that if the objective is to harmonise 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 harmonisation.

That being said – and with the limits of a set of rules subject to 28 possible different combinations of ELCs – the aforementioned rights form a core of protected activities that are harmonised at the Member State level and that can therefore be considered as reserved to their copyright-holder across the EU territory in a more or less consistent way.

The InfoSoc directive does not address directly design rights or cumulation with copyright. A reference to design rights can be found in the final section of the Directive dealing with common provisions. Art. 9 titled ‘Continued application of other legal provisions’ states that “*this directive shall be without prejudice to provisions concerning in particular ... design rights*”.²⁵

15 There are other basis for EU legislative intervention in the Treaties, such as Arts. 53 (freedom of establishment), 167 (common cultural heritage), and 169 (consumer protection); nonetheless Art. 114 remains the single principal source of powers used to regulate copyright. See M. van Eechoud, B. Hugenholtz, S. van Gompel, L. Guibault, N. Helberger, 2009, at 1.2.2.

16 The Green Paper on Copyright and the Challenge of Technology – Copyright Issues requiring immediate action, COM(88) 172, June 1988. Other interventions in the field of intellectual property can be seen in Directive 89/104/EEC on the approximation of trade mark laws (now replaced by Directive 2008/95/EC), and Directive 87/54/EEC on the legal protection of topographies. Recently, Art. 118 was introduced by the Treaty of Lisbon of 2007 empowering the EU to create European intellectual property rights. It must be noted, however, that Art. 118 has enabled the creation of “uniform” intellectual property rights as opposed to “harmonising” the laws of Member States (MS). Accordingly, Art. 118 constitutes the legal basis for the creation of a unitary title, indicatively through a EU Regulation, which is directly applicable in all MS.

17 This can be observed in different documents of the EC. In the 1988 Green Paper, for example, it can be read that the “Commission concluded that a directive on the legal protection of computer programs is a necessary step for the completion of the internal market” and that “the creation of a European information services market, currently divided by juridical and linguistic barriers, is of prime importance”; See Green Paper 1988 at 5.4.1 and 6.2.1. See in general Ramalho 2014.

18 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.

19 See art. 1 InfoSoc.

20 See art. 2 InfoSoc.

21 See art. 3 InfoSoc.

22 See art. 4 InfoSoc.

23 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*”.

24 Hugenholtz 2000, Guibault 2001.

25 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*

Similarly, other major international copyright instruments such as the Berne Convention (BC)²⁶, the WIPO Copyright Treaty (WCT)²⁷ and the TRIPs agreements²⁸ leave ample margins of discretion for the protection of industrial design and works of applied art. For this chapter's limited goal 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.²⁹ The BC, in art. 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.*”³⁰ Section 3 of article 2 indicates that “*Translations, 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.*”³¹ It is important to note that Sec. 7 of the same article contains a specific provision for 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.*”³² The latter provision played a key role in the EU debate that brought towards the adoption of the principle of cumulation, which is justified by the need to overcome the possible discrimination of protection on the basis of the country of origin and reciprocity rules.³³

Protected works and elaborations

Crucial to our analysis is to note how the InfoSoc directive does not define two concepts. The first undefined concept is that of ‘protected work’.³⁴ The second is the concept of ‘derivative work’ or ‘adaptation’.³⁵ These two aspects are left untouched by the InfoSoc and Member States were left free to offer protection to the subject matter (and derivatives) of their choice. In this regard it must be noted, however, that recent ECJ case law harmonised not only the concept of originality³⁶ but most likely also that of “work” assimilating it to that of the “author's own intellectual creation” and therefore suggesting that any other limitation (e.g. the closed list of protectable categories found in systems such as the UK) may not be compliant with EU law any longer.³⁷ Regarding adaptations, the ECJ clarified that this right is not harmonised by the InfoSoc directive, although it must be construed within the meaning of BC provisions. The Court, however, also stated that some adaptations are in fact forms of reproduction therefore falling within the – broadly defined – right of reproduction regulated by Art. 2 InfoSoc.³⁸

competition, trade secrets, security, confidentiality, data protection and privacy, access to public documents, the law of contract”. See also Recital 60.

26 See the Berne Convention for the protection of literary and artistic works of September 9th, 1886, as amended.

27 See the World Intellectual Property Organization (WIPO) Copyright Treaty adopted in Geneva on 20 December 1996.

28 See Agreements on Trade-Related aspects of Intellectual Property rights (TRIPs), WTO Agreement, Annex 1C, adopted in Marrakesh, 15 April 1994.

29 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.

30 See art. 2(1) BC.

31 See art. 2(3) BC.

32 See art. 2(7) BC.

33 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*”.

34 The reference is to a general and horizontal definition of “works”. Specific directives defines vertically subject matter such as software and databases.

35 Translations and adaptations are present in the Software and the Database directives.

36 The Court of Justice of the European Union has expanded the originality requirement of “*intellectual creation of its author*” beyond the field of software, photographs 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; Bently 2012; Griffiths 2013; Margoni 2014.

37 See Bently 2012; Bently & Sherman 2014; Handig 2013.

38 See *Case C-419/13*, of 22 January 2015 *Art & Allposters International BV v Stichting Pictoright*, (Allposters);

Cumulation? Only of the right kind

In the light of the above, it can be concluded that even limiting the scope of this paper to copyright and its relation to design rights the rules that may apply in different EU jurisdictions may be fairly heterogeneous. For instance, a product of industrial design protected by a Community Registered Design is likely protected also by copyright, unless the applicable law has provisions similar to *e.g.* the Italian one, in which case it should be ascertained whether the product is not only original but possesses an artistic value (and the debate on the meaning of such standard is far from being settled among Italian scholars).³⁹

As a matter of fact, the same product can be protected by copyright in country A (say Germany) and not in country B (say Italy) as some case law has demonstrated.⁴⁰ Country B designers, if interested in a long lasting form of protection, might find better protection by trying to argue that they have created a sculpture or engraving, rather than a work of applied art.

Indeed, in countries implementing a partial cumulation rule, especially where the work of applied art needs to meet particularly high levels of originality such as that of the ‘artistic value’, many types of works belonging to industrial design and applied art will hardly benefit from copyright protection, at least in cases of registered designs. This latter clarification is necessary due to the – not fully discernable – harmonising effects of the ECJ decision in the *Flos* case.⁴¹ In *Flos* the ECJ established, among many other things, that:

*“it is conceivable that copyright protection for works which may be unregistered designs could arise under other directives concerning copyright, in particular Directive 2001/29, if the conditions for that directive’s application are met, a matter which falls to be determined by the national court”.*⁴²

Accordingly, it may be inferred that in countries performing a partial cumulation between design rights and copyright (i.e. requiring a different, usually higher, level of originality for works of applied art and industrial design), this is in fact only allowed for registered designs (national and community based). On the contrary, in cases of unregistered designs *Flos* mandates a regime of perfect cumulation because if works which may be unregistered design are protected under the Infosoc Directive and the latter requires the now fully harmonised standard of the “author's own intellectual creation”, it follows that there is no space for a different originality threshold for unregistered designs. Nevertheless, this conclusion seems to contrast with the legislative history, and perhaps the plain meaning, of the Design Directive (DD) and the Community Design Regulation (CDR).⁴³

Indeed, a first critical aspect of this conclusion relates the identification of which works that may be unregistered designs are protectable under Infosoc. In *Flos* the ECJ only refers to the DD, therefore it should be excluded that unregistered designs based on the CDR (i.e. Unregistered Community Designs) are affected by the decision. But even assuming that the effects of the ruling extend to the CDR, the plain meaning of Arts. 1 and 96(2) and Recital 32 CDR should point in the direction that *Flos* cannot apply to Unregistered Community Designs. In fact, Art. 1 CDR establishes that the expression “community design” refers to both registered and unregistered community designs. Art. 96(2) and Recital 32, even though not explicitly referring to “Unregistered Designs”, reserve to MS the power to establish the level of originality for “community designs” a term that, as provided by Art. 1, embraces both to Registered and Unregistered Community Designs.

See Margoni T., 2014, at 23.

39 See above footnotes 9 and 10.

40 See for example the facts of the Donner case, *Case C 5/11*, 21 June 2012.

41 See *Case C-168/09 Flos v Semeraro*.

42 *Id.*, at 34.

43 See Bently, 2012, Griffiths 2013, Koenraad 2013, Derclaye 2014.

Consequently, there are two possible interpretations of paragraph 34 *Flos* decision: either it applies to unregistered designs other than Community Unregistered Designs (and it will be explained in a moment how conceptually difficult this is), or it overwrites – or forces an unlikely reading of – the explicit allocation of powers to MS operated by Art. 96(2) CDR.

The first of the two proposed interpretations brings to a paradoxical situation, since both the Directive and the Regulation have been drafted on the basis of very similar considerations and definitions.⁴⁴ In particular, it will not be easy to establish which works that “may be unregistered designs” can exist that are not simultaneously Unregistered Community Designs. It could be opined that there are forms of national unregistered design protection which do not correspond entirely to Unregistered Community Designs. However, on the one side *Flos* does not refer to “national unregistered designs”, but to “unregistered designs” in general, and on the other side such a form of protection seems to be currently available only in one country.⁴⁵ Accordingly, the Court in *Flos* most likely intended to harmonise originality for any form of unregistered designs (“*works which may be unregistered designs*”) including works that can be protected as Community Unregistered Designs, a conclusion which corresponds to the second of the suggested interpretations.

Nonetheless, this second interpretation of *Flos* is troublesome. Given that a *Flos* unregistered design is virtually always also an Unregistered Community Design, it should be concluded that *Flos* harmonising effects of the originality standard apply to the Design Regulation even though the latter is not mentioned anywhere in the *Flos* decision, nor in the questions referred by the national Court. More importantly, it logically follows that the ECJ in *Flos* proposed an interpretation that disregards what seems to be the plain meaning of Art. 96(2) CDR, i.e. an act of EU secondary legislation reserving specific powers to MS.

Whereas it could be argued that the latter interpretation should nonetheless be accepted in order to avoid the absurdity of the requirement of different originality standards for almost perfectly overlapping legal categories, there is yet another aspect that may cause institutional discomfort.⁴⁶ The expansion of *Flos* harmonising effects of the originality standard can only apply to non registered designs, as explicitly indicated by the same Court in *Flos* at 34 (and in Arts. 17 DD and 96(2) CDR). This provision is clear and explicit and there seems to be no space for ambiguity or creative interpretation.

It follows that in countries implementing a partial cumulation approach a non registered design can be protected by copyright if it reaches the (usually lower) level of the author's own intellectual creation. However, if the same design is successively registered – during the 1 year grace period for example – it will most likely not qualify for copyright protection any longer, since the new (usually higher) standard, for instance “artistic value”, needs to be met and only very few works of applied art will be able to reach it.

Whereas the latter aspect could be seen with some favour by critics of the possibility to protect industrial design cumulatively by design rights *and* copyright, the general legal uncertainty introduced by the ECJ decision cannot be easily explained. In particular, it seems hard to imagine that the Court did not anticipate the above described situation and the consequent legal effects. Unless, of course, one sees in the ECJ pronouncement a “message” to those Member States that are still taking advantage of the possibility offered by Arts. 17 DD and 96 CDR (the questions referred by the national court in *Flos* did not ask to address the standard of originality in design rights but related to a moratorium in the protection of industrial design that the Italian government insistently

44 See Margoni 2013.

45 See Bently 2012, Bently & Sherman 2014, Margoni 2013.

46 However this interpretation would contrast with the plain meaning of the Design Regulation, especially Art. 96(2) which reads “A design protected by a Community design shall also be eligible for protection under the law of copyright of Member States as from the date on which the design was created or fixed in any form. The extent to which, and the conditions under which, such a protection is conferred, including the level of originality required, shall be determined by each Member State”. This provision, in fact, seems to apply to both Community Registered and Unregistered Designs and therefore MS should be free to determine the level of originality for Community Unregistered Designs. Since the protection of UCD is automatic upon creation this situation is in apparent logical contradiction with the statement of the ECJ at paragraph 34 of *Flos*.

tried to maintain). The message that the ECJ may hypothetically have tried to convey is to abandon the possibility of different levels of originality for applied art (*sic*, registered designs) – something that the same ECJ knows cannot be obtained by interpretative harmonisation given the plain meaning of Arts. 17 DD and 96 CDR – and to adjust to the now pervasive standard of the “author's own intellectual creation”. In this way, not only the originality standard for copyright would achieve absolute harmonisation at the EU level (i.e. including registered designs), but also the aspect of partial/perfect cumulation of protections will be solved by implementing the same standard across the common market.

It is interesting to note that this seems the direction spontaneously taken by e.g. the German Supreme Court, which has recently abandoned its previous doctrine on the basis of which products of industrial design required a higher threshold of originality.⁴⁷ It will be interesting to see what the reactions of other Supreme Courts and national legislatures will be.

If the proposed hypothetical reading of *Flos* will be confirmed, it shall be acknowledged that the ECJ has taken yet another approach in the harmonisation of EU copyright law. In the past, ECJ decisions formed the legal basis for subsequent legislative interventions by the EU legislature, in what could be figuratively seen as institutional collaboration in the legislative process.⁴⁸ More recently, the ECJ directly intervened (by stealth and substituting itself to the legislature as it has been sharply pointed out⁴⁹) in the harmonisation of EU copyright law by interpretatively expending a number of EU copyright concepts.⁵⁰ With this last intervention, the ECJ might have gone a step further and openly indicated to MS how to implement secondary legislation which explicitly allowed MS to choose among different possibilities, thereby intervening on a power that the EU legislature had explicitly reserved to MS.

3 Creative Commons

Creative Commons (CC) is a non-profit organisation that endorses a modern view of copyright – the famous *some rights reserved* principle – and offers licences and other tools for free public use. The most popular of the offered instruments is the CC Public Licence (CCPL), which comes with different licence elements (clauses) depending on the selection that users can operate in the on-line chooser web module.⁵¹ Another interesting tool is CC0 (CC zero), which is a waiver particularly popular in the field of data. There is a fair amount of available information, mostly online, on CC operations and licences.⁵² In this paper, only a few features which possess particular relevance for the case of works applied art and industrial design will be outlined.⁵³

In the second half of 2012 a deep revision of the CCPL (at that time version 3, CCPLv3) was initiated with the objective to release a new version 4 (CCPLv4) by 2013, a result achieved on November 25th of that year. In this article both version 3 and version 4 will be taken into consideration.

The Creative Commons Public Licence (CCPL)

The Creative Commons Public Licence (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.

47 See German Supreme Court (BGH) decision of 13 November 2013, n. I ZR 143/12 (*Geburtstagszug*).

48 As it is known case C-158/86 (Warner) led to the Rental and Lending Right Directive of 1992, case C-341/87 (EMI Electrola) led to the Term Directive of 1993 and case C-62/79 (Coditel) led to the Satellite and Cable Directive of 1993.

49 See Bently 2012.

50 See generally Bently & Sherman 2014.

51 See <http://creativecommons.org/choose/>.

52 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.

53 Jasserand 2011.

Licensors can further choose among the following optional “licence elements”:

- BY – Attribution. Attribution must be given to the licensor in the modalities indicated in the licence. Attribution was originally devised as a licence element, but was included in the main licence text by default since version 2.0 and therefore is now a permanent element of both CCPL 3.0 and 4.0.
- NC – Non Commercial. Licensors offer the rights identified above only for purposes that are not primarily intended for, or directed towards, commercial advantage or (private) monetary compensation.⁵⁴
- ND – Non Derivatives. The licensor reserves the right to create derivative works.
- SA – Share Alike. Licensors allow the creation of derivative works only under the condition that these are licensed under the same – or an equivalent – licence.

The main question that this chapter attempts to answer is whether the CCPL can be applied to works of industrial design and applied art, which could be protected by both copyright and design rights. In case of a positive answer, the next question becomes whether the resulting model can represent a solid basis on which to develop a legal theoretical framework fit for an Open Design model. In order to answer these questions CCPL’s scope and grant need to be analysed.

CCPL’s scope and licensed rights

The licence grant is contained in Sec. 3 of the CCPLv3⁵⁵ and provides that by using such licence a licensor grants:

“a worldwide, royalty-free, non-exclusive, perpetual (for the duration of the applicable copyright) licence 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”

In the new version 4 (CCPL 4.0) the structure of the licences has received major restructuring, and content-wise the licence grant has been expanded substantially. Not only neighbouring rights, such as the *database sui generis right*, are explicitly included in the scope of the licence, but the reservation clause typical of CCPL3.0 has been removed.⁵⁶ Nevertheless, the now open ended list of rights that are included in the scope of the licence, is likely still not apt, nor arguably intended, to capture design rights.

In the new version 4.0 there is a new definition in Sec. 1, ‘Share’, which includes most of the activities listed in Sec. 3 of the previous version.⁵⁷ The licence grant is now under Sec. 2 and reads along the lines of previous version 3 definition, save for employing the term *share* as defined in Sec. 1.

⁵⁴ The requirement of the compensation be *private* has been removed from version 4.

⁵⁵ In this article we use CCPL BY-SA unported as a reference model for version 3.0 unless otherwise noted.

⁵⁶ 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*”.

⁵⁷ Currently, the definition of ‘Share’ reads: “... *to provide material to the public by any means or process that requires permission under the Licensed Rights, such as reproduction, public display, public performance, distribution, dissemination, communication, or importation, and to make material available to the public including in ways that members of the public may access the material from a place and at a time individually chosen by them*”.

In the CCPL version 3 ‘Work’ is defined by Sec. 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”.

Version 4.0 has substituted the definition of work with that of ‘licensed material’, which is defined as:

“means the artistic or literary work, database, or other material to which the Licensor applied this Public License.”

while copyright and similar rights are defined as:

“means 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 labeled or categorized...”

Noteworthy is the similarity in the terminology between version 3 and the BC definition, and the fact that works of applied art are expressly included in the definition of ‘work’. Version 4.0 is much more concise in its definition of licensed material and copyright, however 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 new version 4 cover in their scope works of applied art and industrial design, as long as copyright protection is concerned.

At the same time, however, it seems irrefutable that the CCPL (both version 3 and 4) is a copyright licence which regulates copyright and other rights closely related to it, but which does not affect rights that are different in nature, scope and structure. Design rights, as defined by the DD and CDR are not only absent from the licence’s enumeration, but their nature, scope and structure make them a completely different type of rights from copyright and related rights. This is confirmed, e.g. by the fact that no sign of them is present in the BC, the Rome Convention nor in any EU copyright Directives.⁵⁸ Design rights, under a number of aspects (function, registration, subject matter, requirements, duration, competent offices, tests⁵⁹) seem much closer to trade-marks and patents, a set of rights that are explicitly excluded from the scope of the CCPL⁶⁰.

Accordingly, a CCPL applied to a work of applied art or industrial design will only govern the copyright in the work, but 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 the same, or very similar, acts on the basis of the – non licensed – design rights.⁶¹

CC0

Another CC tool that deserves some attention is the CC0, a waiver rather than a licence, particularly

⁵⁸ The Rome International Convention for the Protection of Performers, Producer of Phonograms, and Broadcasting Organizations, done at Rome on October 26, 1961, which is commonly regarded as the first international source for neighbouring rights protection. Likewise, see WIPO Performances and Phonograms Treaty (WPPT) adopted in Geneva on December 20, 1996.

⁵⁹ For a detailed analysis of design rights and CC licences see Margoni 2013.

⁶⁰ “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>.

⁶¹ Again, we will not consider here aspects such as bona fide obligations, estoppel, or other legal defences, actions or doctrines preventing to dispose of a right *contra factum proprium*. Such aspects are not covered by the type of analysis here conducted 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.

popular in the field of data and databases. CC0 is interesting for our analysis for two main reasons: a) its scope; and b) what it does with the rights included in it.

The scope of the CC0 is much broader than the CCPL's. 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 might suggest that in such a broad and open ended scope of protection there is space for inclusion of design rights.

The answer will most likely be negative for the case of registered design rights (as the specific exclusion of patents and trade-marks may suggest),⁶² but a positive answer might be plausible in the case of unregistered community design or other national unregistered design forms of protections, given the nature of such unregistered rights which can be seen closer to copyright under more than one aspect (absence of registration, nature of protection and infringement, rights granted). 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.

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, which include, in the hypothesis that unregistered design protection fits within the scope, any claims against acts of copying. Therefore, although this seems to be a case of very limited practical relevance, it could be argued that the application of a CC0 to a product of design is indeed possible and would have the consequence that the right-holder not only surrenders any copyright, but also any claim based on unregistered design rights. Of course the right-holder would still be entitled to file for a registration for a national or community registered design within a period of 12 months from the date of the first disclosure of the product, but after such grace period, anybody could expect to legitimately reproduce the design.⁶³

In the light of the fact that a CC0 by itself would probably not solve the issue connected with the relinquishment of the right to file for a registered national or community design and the resulting rights, coupled with the fact that the applicability to unregistered design rights is based more on interpretation than on actual wording or known case law, such solution remains highly hypothetical, and should not attract, at least in absence of deeper analysis, the attention of those interested in anything more than purely academic speculation. In any case, it must be borne in mind that CC0, even if applicable, constitutes a waiver, therefore it will not be possible for the right holder to control the type of use (commercial or non commercial), and the possibility to create derivatives. Paternity would also be recognised only within the limits of non waivable moral rights.

4 Open Design

In the dynamics of what could be called an Open Design work flow⁶⁴ it has been observed that a common practice among 'open designers' is that of sharing their blueprints online in order to allow everybody to benefit from their creation⁶⁵. Designers may be 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 licences with few restrictions, among which usually 'copyleft'

62 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".

63 Also in this case we are not looking into the area of *bona fide*, estoppel, and acts *contra factum proprium*.

64 We intentionally avoid to precisely define Open Design. There are a number of Open Design definitions that partially catch the complexities of the phenomenon, while the debate is still ongoing attempting to reach a more generalized and bottom-up definition able to represent all the singularities involved; see fn 4 above.

65 See in this regard, for example, the operations of *FabLabs*, see above footnote 4.

clauses.⁶⁶ Others contrast such 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.

In the light of this observation, the proposed analysis requires a slight shift in angle: given the centrality of the blueprint, it is precisely from this element that one 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, although in some countries is present a specific neighbouring right protecting projects of engineering from being executed in absence of the project drafter's consent.⁶⁷ Blueprints, however, when disclosing the outer appearance of a product, could also be considered as the product of design themselves, and accordingly attract the protection offered by design law.

Given the plurality of roles played by a blueprint, it may be helpful to resort to a simple example: a designer creates a blueprint and makes it available online under a CC licence that allows derivative works under a Share Alike (SA) provision (therefore employing a CCPL BY-SA). For the sake of clarity it will be separately analysed what can be done with the blueprint as a work of authorship and what can be done with the resulting product.

The blueprint

The blueprint represents an easier case which follows usual copyright rules, if any. Blueprints can be of pure technical nature and lack copyright protection, even though this is an unlikely scenario considering the not particularly high threshold of originality required under EU copyright law. However, especially in the most technical environments, this remains a possibility that cannot be excluded *a priori*. A technical drawing of a sphere with some basic indication of materials and dimensions, can indeed be considered too technical and to lack those free and creative choices bearing the author's personal stamp that nowadays constitute the originality standard under EU copyright law.⁶⁸

In the latter case the blueprint is not protected by copyright nor, usually, by any other neighbouring right.⁶⁹ The blueprint is said to be in the public domain, a legal status that allows everybody, for copyright purposes, to use and reuse such material. The application of a CC licence to a public domain blueprint should be harmless (and pointless) since CC licences are only activated by uses that require authorisation on the basis of the licensed rights. In the absence of any copyright no term of the CC licence should be considered enforceable.⁷⁰

In the opposite case, where the blueprint meets copyright standards, the licence is triggered and the creation of any other work covered by its scope should conform to the conditions established in the licence. Therefore, if a licensee decides to modify the blueprint in order to, for example, change the background colour, or add a new creative element to the blueprint, this will be possible in the present case (use of a CCPL BY-SA) under the condition that the licensee applies the same, or an equivalent, licence to the resulting blueprint.⁷¹ But what about the possibility to manufacture a product based on the blueprint?

⁶⁶ Copyleft, under a purely legal perspective, refers to the condition that allows the creation and further distribution of derivatives under the obligation to use the same – or some time an equivalent – licence. Given this definition, clauses such as the Share Alike (SA) of CC are a copyleft clause.

⁶⁷ See art. 99 Italian Copyright Act; Fabiani 2007.

⁶⁸ See Margoni, 2014.

⁶⁹ See, however, art. 99 of Italian Copyright Act cited.

⁷⁰ See sec. 2 CCPL 3.0 unported. Similarly, CCPL 4.0 Sec. 1.

⁷¹ As established by sec. 1(c) CCPL 3.0 BY-SA: 'Creative Commons Compatible License' means a license that is listed at <http://creativecommons.org/compatiblelicenses> that has been approved by Creative Commons as being essentially equivalent to this License, including, at a minimum, because that license: (i) contains terms that have the same purpose, meaning and effect as the License Elements of this License; and, (ii) explicitly permits the relicensing of adaptations of works made available under that license under this License or a Creative Commons jurisdiction license with the same License Elements as this License.

The blueprint – product relationship

The main question relates to the necessity of authorisation to manufacture a product based on a blueprint. The need of authorisation rests on the assumption that the blueprint is copyright protected, otherwise no authorisation would be necessary.⁷² The rights at stake are two and depend on the relationship of the printed product with the blueprint.

If the printed product is a perfect copy of the blueprint it can be safely assumed that the object is a reproduction of the blueprint and accordingly is at the right regulated in Art. 2 InfoSoc directive (right of reproduction) that must be looked at.

Conversely, if the printed product is not a reproduction, but a modification or alteration of the blueprint (i.e. a derivative work), it is at the right of adaptation that attention should be paid to. However, as briefly analysed above, the right of adaptation has not been object of direct harmonisation at the EU level, therefore it becomes decisive to look at the legislation of each MS in order to formulate a proper assessment.

As a matter of fact, there is a third possibility. The printed product is not a copy nor an adaptation of a blueprint, but it is merely inspired by the idea contained in the blueprint. In this latter case the manufacture of the product can be considered licit even in absence of the blueprint author's authorisation.

The product

Whether the printed product is protected by copyright depends on the applicable law, as anticipated above. In countries implementing a perfect cumulation of protection, i.e. where the same standard of originality is required for any type of work including industrial design or applied art, the answer has more chances to be positive than in countries requiring higher levels of originality. Nonetheless, even in countries featuring perfect cumulation of protection the object shall constitute the author's own intellectual creation in order to attract copyright protection.⁷³

In countries implementing a partial cumulation principle, especially where works of applied art need to meet particularly high level of originality such as that of the 'artistic value', those types of works will hardly benefit from copyright protection. As explained above, however, under current EU copyright and design law, it seems that partial cumulation of protection is only available for registered designs, while in the case of unregistered designs the originality standard has been fully harmonised.

In the case in which the product is not protected by copyright (implying that it does not constitute a reproduction of a protected blueprint), acts such as its reproduction, distribution and adaptation do not require any form of authorisation from a copyright point of view. It must be kept in mind, however, that the product could be protected by registered or unregistered, national or community design rights if the object is novel, possesses individual character, the term of protection has not expired and the other requirements of design law are met.

In the case in which the printed product is protected by copyright, it then needs to be ascertained to whom the copyright in the work of applied art belongs. Indeed, it could vest in the blueprint's author or in the product's manufacturer.

A first possibility is characterised by the 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 discloses the outer appearance of the product, to use design law wording) as

⁷² As already pointed out the present analysis focuses on copyright law protection, and does not consider other forms of protection on the basis of which authorisation may be needed.

⁷³ See Case C 5/08 *Infopaq International* [2009] (Infopaq); Case C 393/09 *Bezpečnostní softwarová asociace* [2010] (BSA); Joined Cases C 403/08 and C 429/08 *Football Association Premier League and Others* [2011] (FAPL); Case C 145/10 *Painer* [2011] (Painer); and Case C 604/10 *Football Dataco v Yahoo* [2012] (Football Dataco v Yahoo); Case C-168/09 *Flos v Semeraro* [2011] (Flos) and Case C 406/10 *SAS Institute v World Programming* [2012] (SAS).

to leave no discretion to the manufacturer as to how to manufacture the product. 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 file⁷⁴) 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 the 'clean-up' of the CAD file from programming errors or redundancies, the conversion of the CAD file in an executable code to be sent to the printer⁷⁵, and the specific regulations and parameters of the printing machinery, such as the type of "ink".

Accordingly, printing the product (the 3D item) most likely constitutes a reproduction of the blueprint to a different media or format not much differently from what the printing of a digital journal article on a regular 2D printer would be. Also in the 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 these activities are not original and will not be deemed sufficient to create a new independent or derivative work under copyright law. In a case of identity between the (3D) digital blueprint and the (3D) printed 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, and accordingly the author of the copyrighted item is the author of the copyrighted blueprint. There is only one copyright at stake here, one that is reproduced and – save for authorised or free uses and other relevant exceptions and limitation to copyright – infringed by the act of reproducing it.

In the current example (blueprint under CCPL BY-SA) the licence allows to print (reproduce) as many products as desired, to copy them further, to distribute them, show them in public or communicate them to the public, with the only limitation to apply the same licence in cases of acts of redistribution of verbatim or derivative works and of mention of the original author in the indicated form. As long as the printing corresponds to an act of reproduction, also blueprints distributed under a CCPL with the Non Derivatives clause can be legitimately printed.⁷⁶ It is important to restate that any possible ELC available under applicable copyright laws are explicitly affirmed by the licence.⁷⁷

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 just a drawing or image, maybe only in 2D, rather than in the complete final CAD file), or because the second designer/printer decides to modify, enhance or anyway creatively adapt the blueprint. Under such circumstances it must be established whether the author's 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, the product is merely inspired by the blueprint but does not reproduce the original creation in a way prohibited by copyright law.⁷⁸

In the former situation, the manufacturer who creatively modifies the blueprint will be the copyright holder of the derivative work so long as his modifications amount to the level of originality required. This is of course without prejudice to the copyright in the original work. In the present

⁷⁴ The file format created by the software used for computer-aided design; see http://en.wikipedia.org/wiki/Computer-aided_design.

⁷⁵ Such as STL file format, see [http://en.wikipedia.org/wiki/STL_\(file_format\)](http://en.wikipedia.org/wiki/STL_(file_format)).

⁷⁶ See Sec. 3 last sentence CCPL-BY-SA version 3, and almost equivalent wording on version 4, read: "*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, also the ND provision is in line with the 3D printing of a work.

⁷⁷ Therefore, no part of the licence can be interpreted as limiting any exception or limitation to copyright.

⁷⁸ See the *Infopaq* decision where the ECJ clarifies that the infringement test should be focused on whether the author's intellectual creation has been reproduced.

example the creation of a derivative work (the modified printed product) does not amount to an infringement, as it is specifically allowed by the Share-Alike clause of the Creative Commons licence governing the blueprint. Therefore, the second creative designer will be the author and copyright holder of the printed item which constitutes a derivative work of the blueprint. He is nonetheless obliged to apply to the work the same – or an equivalent – licence 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 lead to liability for copyright infringement, save for the possible operation of ELCs. In this last respect, it must be observed that ELCs for the right of adaptation are not in principle limited by the closed list of Art. 5 InfoSoc directive, since, as seen, the latter does not harmonise the right of adaptation. Accordingly, a MS that implemented specific exceptions – not listed in Art. 5 – for the case of adaptations would comply with EU law.⁷⁹ It must be stated, however, that the relationship between the unharmonised right of adaptation and the harmonised and broadly defined right of reproduction is object of lively debate among scholars, policy makers and the courts.⁸⁰

Conversely, in the situation where the product is merely inspired but not copied, not even partially, from the blueprint, the product does not infringe the copyright in the blueprint as long as the former represents an independent intellectual creation. This general principle, however, in order to find precise application in real cases, needs to consider the idiosyncrasies of the legal system where protection is sought. Accordingly, the degree of differences 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 works should be undertaken for any relevant country.

The licensee's perspective

So far, the analysis has focused on the licensor in order to secure that he or she can rely on the expected legal effects that the application of a CCPL to a work of applied art or industrial design may suggest. Given the likely double layer of protection for works of applied art and industrial design, it seems that the licensor can reasonably achieve those legal effects. At least on the basis of one of said layers: copyright law. In fact, the use of a CCPL has no consequences on the rights stemming from national or EU design law because, as demonstrated, these are most likely outside the scope of the licence. Therefore, a licensor will always have at his disposal the power to enforce the design rights on the product of design even in contradiction with his own determinations when licensing the copyright in the same product/work (with the obvious and already mentioned limitations regarding acts *contra factum proprium*). This can certainly be seen as an unlikely scenario since it would imply an irrational or at least contradictory behaviour of the licensor. However, such eventuality cannot be excluded, as cannot be excluded the possibility that, given the transferable nature of the rights at stake and the likelihood of collaborative enterprises, different rights vest, individually or jointly, in different right-holders who could act in potentially uncoordinated or contradictory ways.

Accordingly, the last issue that needs to be addressed for a complete analysis concerns the conditions under which the licensee can reasonably expect that the acts undertaken on the basis of a CCPL licensed work of applied art or industrial design will not infringe the licensor's design rights. As pointed out, in all those circumstances where the blueprint discloses the outer appearance of a product, it can well happen that the blueprint's author is entitled to national or community design protection (registered or unregistered), provided that the other requirement of this form of protection are met.

Upon disclosure of the appearance of the product the designer enjoys the protection granted by

⁷⁹ See the ECJ in the *Allposters* case cited above; See Margoni 2014.

⁸⁰ See Margoni 2014 and sources therein cited.

unregistered community design for a period of three years, together with a 12-month grace period to register the design.⁸¹ In these cases, potential licensees could feel extremely frustrated by the lack of legal certainty in relation to their use of the product, which being based on the CCPL 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 provided by design law would not find application.

5 A proposal

In order to overcome the situation of legal uncertainty caused by the use of a CCPL for works of applied art and industrial design, that is to say, of an agreement that licenses the copyright but not the design rights in a way that could lead many licensees in error, it is here proposed to combine the CCPL with another CC tool.

As briefly mentioned, in addition to the CCPL, Creative Commons offers other 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 licence, but a ‘protocol’ composed by a standard CCPL licence *plus* an additional agreement that allows licensors to offer additional permissions and more rights above and beyond those granted by the standard CCPL.⁸²

In the present proposal, the ‘+’ would be represented by an additional clause dedicated to design rights. This additional clause could take two forms.

The first option is that the additional clause (the “plus” in CC+) takes a form similar to current Section 1-d. of the CCPL 4.0 dedicated to “copyright and similar rights”. The proposed new section would be called “design rights and similar rights” and would include national registered and unregistered as well as community registered and unregistered design rights and other equivalent forms of protection. A specific reference to the right to file for a registered design should likewise be present and require that, if the designer did not file for a registered design yet, he relinquishes that right. This should avoid, if possible, the situation in which the right to file for a registration is allocated or entrusted to a different subject. Current Section 1-i. (“Licensed Rights”) of the CCPL 4.0 would then need to refer to both “copyright and similar rights” and to the newly added “design and similar rights”. In this way the scope of the CCPL would be expanded to include design rights, which would follow the same licence conditions as copyright and similar rights.

The second option is that the “plus” instead of taking the form of an additional grant of rights, takes the form of a waiver, similar to the CC0. In this configuration the affirmer would relinquish every possible right or interest stemming from national or EU community design. The specific wording should mirror, to the extent applicable, the one found in 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 months period from disclosure) to file for a registration. In the 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, relinquished and will never be enforced. The affirmer should also explicitly abandon, waive, and promise not to assert the relative unregistered design rights which will endure for a period of three years from disclosure regardless of any affirmative step taken by the designer.

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 licence allowing to perform all the acts that the waiver would have covered. The waiver should be preceded

81 Margoni 2013.

82 “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>.

by a preamble clarifying what are the intentions and motives of the licensor, in order to guide courts called upon to interpret this novel contractual structure in case of uncertainty. Again, the specific wording of the CC0 would represent a perfect *blueprint*.

6 Conclusions

Within the framework of the CC+ protocol it has been demonstrated the possibility to add to a standard CCPL the aforementioned two extra options: either an expansion of the licence grant to include design rights or a waiver of said rights. In this way 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* condition, and the possibility to reserve the rights of commercial exploitation, an aspect particularly popular among those interested in experimenting with new business models.

As probably already identified by readers, the waiver proposal suffers of a major limitation: jurisdictions where copyright subsists in applied art and industrial design only if such items reach particularly high thresholds as it is that of an 'artistic value'. In these jurisdictions, in most of the cases the item will not be protected by copyright once registered, and the use of the waiver will relinquish any associated design rights. The outcome will be that, once a design right registration has been obtained, the item enters in a sort of *sui generis* 'contractual' public domain, and its reuse will be legitimate without need to acknowledge paternity, to share alike, or to limit to non commercial activities. At the same time, the item will not be registrable by anyone else given the effects of disclosure.⁸³ In such cases, designers may want to opt for the first option expanding the scope of the grant and licensing the design rights.⁸⁴ Failing to do so will result in a sort of public domain dedication of their design.

Regarding future work, a first line of enquiry will be represented by the harmonisation of the originality standard for unregistered designs and in particular by the correct reading of the *Flos* decision. Only future ECJ decisions or initiatives at the MS level will confirm or refute the possible interpretations here proposed.

Another line of research would be to expand the analysis developed in this article beyond EU borders in order to develop a model applicable irrespective of the jurisdiction.

A third line of future research focuses on the right of adaptation. This issue, which relates to 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 herein developed. In the case of use of the CCPL such problem is tempered by the omission of the ND clause which will generally grant the possibility to create derivative works. However, to determine where to draw the line between an act of infringement (as a derivative work is) and an act of inspiration is crucial.

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⁸³ See Margoni 2013.

⁸⁴ See art. 2 n. 4 and 5 of Italian Copyright Act.

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