

Combating Counterfeiting derived by 3D Printing: Consumer Products

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Abstract

There is a need for clarification and classification for products produced by the 3D printing process. For copyright, the decision in *Lucasfilm* is seen as an obstacle in the pursuit of obtaining copyright for authors of artistic works. The notion of ‘art’ and the creative aspect of commercial products lead the argument for intellectual property rights protection. The paper recognises the interlink and overlap between the manufacturing industry within the realm of 3D printed consumer goods, and questions whether the ambiguous legal position relating to 3D printing is inadvertently creating a divide and conflict between the manufacturing industry and the consumer market. The viewpoint is that art, when successful, will be counterfeited due to the relationship between public taste and merchandising, and that this lends itself well to the consideration of counterfeit products serving the public appetite for aesthetically pleasing branded goods. As 3D printing becomes more commonplace within the commercial market, the spotlight shall surely be on the courts with respect to defining legal provisions and the need to perhaps develop the law further to accommodate digital innovation; and it is this area which is currently holding much interest for legal academic researchers.

Keywords: 3D printing, Intellectual Property, Counterfeiting

Introduction

It is difficult to avoid the general rhetoric describing 3D printing as revolutionary. However, 3D printing is not a new concept, but one that has been in existence since 1976². This paper sets out to explore whether reforms within legal frameworks and provisions are required to reflect the growing requirement for the protection of intellectual property rights, specifically in copyright and trade Marks for creators of 3D printed products. The article discusses the notions of ‘function³’ and ‘artistic⁴’ in an attempt to highlight the need for clarification, in law, for these areas. The focus of this paper is 3D printing within the context of consumer products, from the perspective of UK jurisdiction.

Consumer products have been defined as “...items intended for consumers or likely to be used by consumers, even if not intended for them. Products provided in the framework of a service to consumers are also considered to be consumer products”⁵ and “An item that is used often bought for private consumption.”⁶ Items produced as consumer products include but are not exhaustive to household products,⁷ textile products,⁸ food⁹ and sports products.¹⁰

Intrinsic to the foundation of all 3D printing creations is the CAD-file¹¹ which holds the design of the product to be 3D printed¹² or alternatively an existing product may be scanned which makes a replica of the creation before it is placed within a 3D ‘modelling’ program¹³. Different types of 3D printing technologies incorporate different methods of production, although the one defining process pertinent to all is the ‘additive’ process whereby the product construction is achieved by the addition of successive layers.¹⁴

When considering 3D printing within the context of consumer products from a commercial viewpoint, the differing intellectual property implications must be outlined. These implications arise from the two limbs of 3D printing, the industrial manufacturing industry and the consumer market¹⁵ and furthermore, it is important to emphasise that 3D printing spans across many manufacturing industries and crosses into the consumer domain.

The manufacturing sector

3D printing within the manufacturing sector has advantages such as being cost-efficient,¹⁶ the supply chain can be reduced by the production of goods at several sites, and furthermore, locally to consumers.¹⁷ Due to these reasons, it has been suggested that the benefits extend to the ‘local economy and the environment’.¹⁸ In addition to these benefits, companies can offer consumers the opportunity to choose from a specified selection of design features, to personalise and customise the product they are buying¹⁹. It can be concluded that 3D printing within the industrial manufacturing market may be specifically vulnerable to copyright and trademark infringement due to the scanning process of an existing manufactured object (as described above) enabling the production of replicas.

The consumer market

A 3D printer can be bought for between £900 - £2000²⁰ and to support the earlier point made (above) regarding crossing over industries into the consumer domain, it is stated “*these machines are finding applications in direct part manufacture, effectively turning home consumer users into manufacturers and home factories*”.²¹ In relation to peer-to-peer file sharing,²² according to Silverman²³ “*It is already possible to download files free of charge to print non-designer objects including fashion accessories, jewellery and glasses.*”²⁴ Therefore, one may draw an inference and consider whether the consumer market, as it relates to 3D printing, may be fuelling a potential threat to intellectual property rights? In consideration of this question, could the possibility of infringement originating from the consumer sector be placing the manufacturing industry at risk and thus causing vulnerability towards intellectual property infringement for brands? It must be highlighted however that consumers have the right to create and use 3D printers for their own private enjoyment, but the problematic area within this domain derives from the unauthorised production of replicas. To support this and when considering the implications of consumer 3D printing, it has been suggested that it “*..could lead to an explosion of counterfeit and mislabelled products...*”²⁵ It is therefore

apparent that consumer behaviour may step into the territory of illegal industrial 3D printing (counterfeit branded goods being made and sold on the black market through the use of 3D printing technology) for the purposes of unlawful economic gain by individuals wishing to exploit the technology. An analysis of the intellectual property implications in copyright and trademarks is provided below.

Intellectual Property

Copyright

The more technical matters which UK copyright law raises and the potential impact on items produced by the 3D printing process are examined here. Whilst the CAD file is protected by s.3(1)(b) and s.3(1)(c) of the Copyright, Designs and Patents Act 1988, it is necessary to examine the copyright of the author. The “author”, in relation to a work, means the person who creates it.²⁶ It is crucial to ascertain how and whether s.9 of the Copyright, Designs and Patents Act²⁷ can support the ‘author’ of 3D printed works²⁸. The reason this is emphasised is mainly due to the ruling in *Lucasfilm v Ainsworth*²⁹. The Stormtrooper helmet at the centre of the contention was identified by the judge as “....a mixture of costume and prop,. But its primary function is utilitarian....part of character portrayal in the film....”³⁰ It was the definition of ‘utilitarian’ which was key to the final judgement as the judge stated “*It would not accord with the normal use of language to apply the term “sculpture” to a 20th century military helmet used in the making of a film, whether it was the real thing or replica made in different material, however great its contribution to the artistic effect of the finished film.....it was the Star Wars film that was the work of art that Mr Lucas and his companies created. The Helmet was utilitarian in the sense that it was an element in the process of production of the film.*”³¹ This ruling protects the artistic element of sculpture, however it does raise questions about the extent of which 3D printed products (for commercial purposes) are protected. In a historical context, the Court of Cassation decision in the early nineteenth century on commercial sculptures set out the principle of non-discrimination with the purpose of protecting works of sculpture against counterfeiting.³² Both the recent *Lucasfilm* decision and the early nineteenth century decision afford intellectual property rights protection to the author of the sculpture, however, it may be perceived that both decisions limit the intellectual property rights of ‘artists’ fostering creativity within a commercial sphere. A reflection on both the historical law³³ and the decision in *Lucasfilm*³⁴ portrays an almost identical view of sculpture, in law, throughout the nineteenth century until today, irrespective of the developing commercial, industrial, technological and creative advancements. Over the years, technology has been merged with creativity for the purposes of both artistic and commercial pursuits. More importantly is the issue of a product falling short of requirements to satisfy the criteria for copyright protection as in the *Lucasfilm*³⁵ case. Liu³⁶ takes an alternative view from the Judgement of the Supreme Court and expresses that “*What determines sculpture is the artist’s endowment of his creation with a visual appeal as his sole purpose or one of his purposes for the creation to be enjoyed for that purpose only.*”³⁷ He argues that “*the trial judge in Lucasfilm refused to recognise the helmet as a sculpture under English copyright law (as affirmed by the Supreme Court), whereas he explicitly held on the evidence available to him that under US copyright law the helmet is not utilitarian or functional and hence copyright subsists therein*”.³⁸ This is important to creators of consumer products, the reason for this is because whilst some consumer products may in fact only be utilitarian in nature such as household goods (utensils), one could argue that items such as fashion items or bespoke furniture produced by the 3D printed process could arguably be

considered as artistic works contrary to the *Lucasfilm* ruling. This issue also raises further matters in terms of categorising items produced by the 3D printing process. As mentioned earlier, consumer products may well include artistic works but also include utilitarian items and therefore this distinction is important when considering the allocation of copyright to 3D printed works and the type of protection which is afforded, if any, from the Copyright Designs and Patents Act 1988, should lawmakers wish to introduce reforms for the purposes of protecting 3D printed works in copyright. This paper perceives the judgement in *Lucasfilm* as disappointing because the Stormtrooper helmets were produced for artistic purposes in pursuit of creative expression in film. Therefore, the notion of ‘functional’ appears to be an obstacle in terms of copyright protection for items produced by the 3D printing process.

In comparison, the US case of *Star Athletica v Varsity Brands*³⁹ was concerned with the “legal test”⁴⁰ of distinguishing between aesthetic and utilitarian elements within a work. The Copyright Act of 1976 makes “pictorial, graphic, or sculptural features” of the “design of a useful article” eligible for copyright protection as artistic works if those features “can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article”.⁴¹ Ghosh⁴² explains the position that Ginsburg⁴³ has taken in respect to the case by contending the issue of separating function from aesthetics and by asking “*whether the cheerleader costumes are in fact useful articles*”⁴⁴ as they “*convey information*”⁴⁵. Ghosh differs in opinion with this as Ginsburg “*only addresses the design of the costumes, but not other features such as the cut*”⁴⁶ One would agree with Ghosh in the view that Ginsburg does not resolve the issue of disconnecting function from aesthetics. Furthermore, Liu⁴⁷ identifies the presence of the conflict as “*the tension between law and art exists because aesthetic merit, an important element in art, is taken out of the equation for copyright purpose.*”⁴⁸ Could therefore perception of a product be key to how copyright laws are extended for the purposes of protection for items produced by the 3D printing process in the future? For example, one might view a work of art as aesthetic, however another person may view it as a functional object, for example, ‘functional’ for the purposes of decoration for the home. Therefore, one would argue that in relation to consumer products, we may have a difficult task on our hands if we wish to apply the notion of ‘separability’⁴⁹ from the case of *Star Athletica v Varsity Brands*.⁵⁰ In consideration of the above discussion, it is therefore necessary to obtain clarification to determine where ‘functional’ stops and ‘artistic’ begins for the purposes of acquiring copyright protection for authors⁵¹ of 3D printed articles.

Trademarks

Trademark owners and manufacturers are worried about the impact 3D printing will have on the supply of counterfeit and mis-branded products and spare-parts.⁵² However, it is important to be mindful of the positive attributes of 3D printing such as the contribution it makes to support innovation within the creative process⁵³, and additionally, it has been recommended that regulatory and policy frameworks should be reconsidered to strike a balance between openness and the obligations of intellectual property rights.⁵⁴

Commercial brands rely on the protection of their trademark and therefore the seizure of counterfeit products and the penalties imposed on individuals who trade in such goods are imperative measures to support commercial interests. In *R. v S*,⁵⁵ a trader of clothing, sportswear and footwear claimed to believe the products were genuine. However, the trial judge dismissed the appeal and stated that the provisions of s.92(5) of the Trademarks Act 1994⁵⁶ existed to protect proprietors and consumers. Equally, a very similar set of circumstances appeared in *R. v McCrudden*⁵⁷ whereby a market trader claimed not to know

what a registered trademark was, and therefore believed the goods were genuine, although the products were in fact counterfeit. The trader was unable to rely on the defence provided by s.92(5) of the Trade Marks Act 1994.⁵⁸ These two cases illustrate how easily counterfeit products can infiltrate the market into consumer hands, and thus, it has been acknowledged that counterfeiting is detrimental to consumer interests.⁵⁹ Whilst 3D printing is developing to the extent that it will affect businesses and the consumer,⁶⁰ it is essential to consider the influencing factors of counterfeiting within a commercial setting.

Article 5 of the *Trademark Directive 2008/95*⁶¹ provides for a trademark being used within the course of trade. This is an important provision for a brand to rely upon as it safeguards the brand from illegal commercial activity using the brand's badge of identity. When applied to 3D printing, this provision implies that 3D printed products cannot be commercially exploited without the authorisation of the brand owner. Any products which do leak onto the market with unauthorised trademarks will therefore be counterfeit and s.10 of the Trade Marks Act 1994 outlines the infringement of a registered mark.⁶² Article 8 of the Paris Convention⁶³ provides that a trade name is protected "*within all countries of the union*".⁶⁴ This provision is important because it does afford a large amount of protection to a trademark (trade name) in 177 countries.⁶⁵ This therefore safeguards well established commercial brands trading in 3D printed goods.

The *Trademark Directive 2015/2436*⁶⁶ is due for implementation by 15 January 2019. Under Article 5 (1) (b), it states, "*because of its identity with, or similarity to, the earlier trade mark and the identity or similarity of the goods or services covered by the trademarks, there exists a likelihood of confusion on the part of the public; the likelihood of confusion includes the likelihood of association with the earlier trademark.*"⁶⁷ Therefore, a trademark exhibiting such characteristics shall be refused on grounds of invalidity.⁶⁸ This provision has implications in relation to 3D printing because the threat of counterfeit products bearing a trade mark is a potential risk to items produced by the 3D printed process; as mentioned above a product may be scanned and a replica produced, possibly bearing a trade mark. One of the methods used to assess customer confusion is expert survey evidence, Lambert⁶⁹ expresses "*as technology increases in complexity and depth (while aiming to be user-friendly) and as technologies increase at break-neck speed, there may ultimately be a need for an increasing range of expertise (and experts) to assist parties and courts.*" This statement addresses the notion of the race against technology in terms of the adequacy of legal provisions in the face of changing and developing technological innovative techniques, which set to threaten trade mark rights for authors.

The implementation of Art 20⁷⁰ of the Directive⁷¹ by 15 January 2019 has implications for 3D printing due to the 'generic'⁷² element. In relation to Art 20(b), 3D printed products have the advantage of being produced 'locally to consumers'⁷³ and therefore items produced by this process must ensure that the 'geographical origin' is clear.

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Article 46 of the *TRIPS*⁷⁷ agreement provides that it is not sufficient for the trademark to be simply removed from the counterfeit products and that the judicial authorities may demand that materials used to create the infringing goods be disposed of without providing

compensation. The provision stipulates the requirement for a degree of measured consideration for proportionality between the seriousness of the infringement against the remedies and considerations afforded to third parties. Whilst due to the very nature of the 3D printing process it is highly unlikely that it will be possible to remove the trademark from items, this provision does provide reassurance that alternative and additional penalties shall be brought against infringing individuals.

It is necessary to consider the wider implications of counterfeit 3D printed consumer goods in terms of public policy and consumer attitudes as to why and how counterfeit goods may infiltrate the market; and the legal implications which ensue. This is discussed below.

Public Policy Considerations

A recent study documented that consumers show only small amounts of regret in relation to buying counterfeit goods.⁷⁸ This finding would indicate that consumers knowingly buy counterfeit products. However, it is relevant and important to consider the consumers who purchase counterfeit products unknowingly, as this is a significant possibility with 3D printed items and, in addition, it has been reported that “28 consumers unknowingly buy lower-cost counterfeit goods online for every one that does so intentionally”⁷⁹ Comprehensible is the idea that counterfeit products produced by the 3D printing process could imitate major brands exceptionally well, causing confusion to consumers.

Public policy considerations may be regarded as a deterrence to infringement activity, by strict application and penalties for torts or criminal activities derived by the 3D printing process. Such public policy concerns may be within the area of health and safety with respect to product liability and claims could potentially be brought under the Consumer Protection Act 1987⁸⁰, customs control over illegal imports and exports⁸¹ of goods and tax evasion⁸². Could therefore public policy considerations be regarded as a superior and more significant concern in comparison to intellectual property rights by the courts? It has been documented that intellectual property rights “are in demise” regarding 3D Printing.⁸³ This issue is of paramount importance when considering both the changing technological landscape and legal developments with respect to affording legal protection to either individuals or mass corporations in matters concerning 3D printed products.

Consequently, would the leaning towards pursuing either secondary infringers (as seen in *Gucci America Incorporated v Frontline Processing*) or tortious claims related to public policy (such as health and safety) be a crucial indication that intellectual property laws are proving to be inadequate with respect to protecting the rights of authors of creative works? If so, what would the consequences be for the future of ‘creators’ if public policy issues take centre stage within the legal arena for disputes within 3D printing? Would a legal shift in focus from intellectual property rights to public policy considerations therefore stifle or encourage creativity?

Whilst public policy matters are of paramount importance, it is equally important to acknowledge the role that intellectual property rights law plays, and instead of looking for alternative remedies in various legal areas, could the answer lie in developing intellectual property rights in conjunction with the changing requirements that the technology is creating? Whilst there is no denying that legal frameworks and provisions cannot be changed as swiftly

as the development of technological innovation, the risk of letting the gap widen between the law and available remedies for legal problems that may arise seems a realistic possibility.

Global Trade Issues and Jurisdiction

This paper is concerned with the UK jurisdiction, although it shall herein consider implications of international commerce of products produced by the 3D printing process. Due to the global nature of trade and the means by which 3D printing CAD files can be accessed, it would be prudent to examine the role of international provisions with respect to protecting intellectual property rights. It is worth being mindful that whilst European Union legislation is currently in force within the United Kingdom, the position of the legal frameworks after the United Kingdom exits from the European Union single market is currently unclear. It is equally imperative that we recognise that infringements are not limited to being within the parameters of the European Union but occur worldwide. As 3D printing is accessed on a global scale, challenges may arise as to where a case will be heard for legally contentious issues.

When considering global matters regarding counterfeiting with the use of advanced technological methods generally, it has been documented that a large problem of counterfeiting exists worldwide. International Trade Agreements such as the North American Free Trade Agreement (NAFTA), Central American Free Trade Agreement (CAFTA) and the Trans-Pacific Partnership (TPP) exist and these trade agreements may be perceived as wholly opportune for commercial establishments considering and taking part in international trade. Whilst trade is thus easily facilitated, it is important to consider whether counterfeit products may be accounting for a portion of that trade. In relation to matters of international trade and the protection of Intellectual Property Rights, it is essential to mention the Anti-Counterfeiting Trade Agreement which was signed in 2011 by Australia, Canada, Japan, Morocco, New Zealand, Singapore, South Korea and the United States.⁸⁴ However, the European Court of Justice rejected ACTA in 2012 as it was established by a European Parliament vote that ACTA was incompatible with European Union Treaties and the fundamental rights of the European Union.⁸⁵ European Union provisions are discussed further below.

The hypothetical scenario of counterfeit 3D printed goods seized during international transit can be jointly considered along with the principles outlined in the following cases. In the case of *Blomqvist v Rolex SA*⁸⁶, it was established that it was not a requirement for goods be offered for sale or advertised within the country of seizure. Here the European Court of Justice held that a customs authority of a member state was allowed to seize the products by obtaining them through an online website⁸⁷ after considering a preliminary ruling pertaining to the interpretation of Directive 2001/29, Directive 2008/95, Regulation 207/2009 and Regulation 1383/2003⁸⁸. In *Montres Rolex SA, Re (C-60/02)*⁸⁹ citing *Polo Ralph Lauren*⁹⁰ the question of whether Council regulation 3295/94⁹¹ applied in circumstances whereby goods which were imported from a non-member State were temporarily held in a Member State at the request of the party asserting the infringement, was held to be viable in application. The significance of the *Ralph Lauren* case⁹² is the fact that the regulation applied because it was held to be irrelevant whether the company possessing rights in the products had a registered office within the European Union, as the “*transit*”⁹³ of those products would affect the “*internal market*”.⁹⁴ The decisions established by the Court in each case illustrate the efficiency and assurance that sanctions will be brought against individuals caught trading in counterfeit

items. Contrariwise, an advantage has been suggested in relation to counterfeits, as they could be produced “*instantly*”⁹⁵, it is therefore less likely that those engaged in counterfeit activity will be moving between countries, “*enabling right holders to take action*”.⁹⁶

Regulation 44/2001 states that “*Mutual trust in the administration of justice in the Community justifies judgments given in a Member State being recognised automatically without the need for any procedure except in cases of dispute.*”⁹⁷ Therefore, commercial arrangements and agreements are based upon trust between the parties with reliance on the trust between EU member states being fundamentally established within the provisions of the Regulation.⁹⁸ The preliminary ruling of *Regulation 44/2001*⁹⁹ provides that a dispute will be heard in the court for which the defendant is domiciled, although in some circumstances a defendant could be sued in the member state (other than which the defendant is resident) where the harmful infringing event occurred.¹⁰⁰

Whilst clarification of jurisdiction and provisions for hearings exist due to *Regulation 44/200* within the boundaries of the European Union, more complex issues persist with the pending exit of the United Kingdom from the European Union. In terms of trademarks, it has been suggested that the defence under section 11(2)(a) of the Trademarks Act 1994¹⁰¹ will continue to be obtainable in the event that the UK does not implement the new EU *Trademark Directive*¹⁰² by the deadline.¹⁰³

In relation to copyright, it has been suggested that section 52 of the Copyright Designs and Patents Act could be re-established¹⁰⁴, this is particularly significant to consumer products as it limits the protection duration to 25 years, if over 50 copies are made.¹⁰⁵ In relation to 3D printed consumer products, this could be a potential obstacle in terms of copyright protection for authors, if more than 50 copies are to be produced of a particular item, for e.g. a garden sculpture. In addition it has been suggested that a detailed “overhaul”¹⁰⁶ of the CDPA 1988¹⁰⁷ is necessary if it “wishes to “*take back control*” of its copyright law”¹⁰⁸ after Brexit and therefore, a welcome development would be an extension and inclusion of rights and clarification for items produced by 3D printing technology.

Conclusion

The paper has identified a need for clarification and classification for products produced by the 3D printing process due to the many items which contribute to consumer products, but more pertinent to the discussion is the distinction between ‘artistic’ works and ‘functional’ items. In terms of copyright, the decision in *Lucasfilm* is seen as an obstacle in the pursuit of obtaining copyright for authors of artistic works. Upon reflection on both *Lucasfilm* and *Star Athletica v Varsity Brands*, the paper identifies that the notion ‘function’ and ‘artistic’ is a matter of opinion.

However, it is the notion of ‘art’ and the creative aspect of commercial products which lead the argument for intellectual property rights protection for the ‘author’,¹⁰⁹ whereby the products are seen as an expression of creative ideas. In terms of implications for trademark law, Art.20 of the new *Trademark Directive*¹¹⁰ is central to the protection of the trademark in relation to 3D printed products as discussed earlier.

The paper recognises the interlink and overlap between the manufacturing industry within the realm of 3D printed consumer goods and would seriously question whether the ambiguous

legal position relating to 3D printing is inadvertently creating a divide and conflict between the manufacturing industry and the consumer market.

The viewpoint that art, when successful, will be counterfeited due to the relationship between public taste and merchandising¹¹¹ lends itself well to the consideration of counterfeit products serving the public appetite for aesthetically pleasing branded goods. Moreover, as 3D printing becomes more commonplace within the commercial market, the spotlight shall surely be on the courts with respect to defining legal provisions and the need to perhaps develop the law further to accommodate digital innovation; and it is this area which is currently holding much interest for legal academic researchers.

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⁷³ Phil Reeves and Dinusha Mendis, *The Current Status and Impact of 3D Printing Within the Industrial Sector: An Analysis of Six Case Studies, Study II*, Intellectual Property Office, March 2015

⁷⁴ Paris Convention for the Protection of Industrial Property as amended 28 September, 1979.

⁷⁵ Article 8, Paris Convention for the Protection of Industrial Property as amended 28 September, 1979.

⁷⁶ World Intellectual Property Organisation, 'WIPO-Administered Treaties' (WIPO, 00) <http://www.wipo.int/treaties/en/ShowResults.jsp?treaty_id=2> accessed 11 March 2017

⁷⁷ Article 46 TRIPS - Enforcement of Intellectual Property Rights [1994]

⁷⁸ ICC, 'Study shows most consumers buy counterfeit goods with little remorse' (International Chamber of Commerce, 29/03/2013) <<https://iccwbo.org/media-wall/news-speeches/study-shows-most-consumers-buy-counterfeit-goods-with-little-remorse/>> accessed 11 March 2017

⁷⁹ Netnames, 'Counting the cost of counterfeiting' [October 2015] A Netnames Report (<https://www.netnames.com/assets/shared/whitepaper/pdf/NetNames-Counterfeiting-Report-A4-2015.pdf>)

⁸⁰ Consumer Protection Act 1987

⁸¹ Regulation (EU) No 608/2013 of the European Parliament and of the Council of 12 June 2013 concerning customs enforcement of intellectual property rights and repealing Council Regulation (EC) No 1383/2003

⁸² See Criminal Proceedings against Goodwin EU:C:1998:263 with regard to tax evasion penalties for trading in counterfeit products and infringement of intellectual property rights.

⁸³ John Hornick, Partner, Finnegan, Henderson, Farabow, Garret and Dunner, LLP, 3rd November, 2013 <https://www.youtube.com/watch?v=JoIjUKlwFkA> – last accessed 5th March 2017.

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⁸⁶ *Blomqvist v Rolex SA*, EU:C:2014:55

⁸⁷ *Ibid*

⁸⁸ *Ibid*

⁸⁹ *Montres Rolex SA, Re* (C-60/02), EU:C:2004:10.

⁹⁰ *Polo/Lauren Co LP v PT Dwidua Langgeng Pratama International Freight Forwarders* (C-383/98), EU:C:2000:193

⁹¹ Council Regulation (EC) No 3295/94 of 22 December 1994 laying down measures to prohibit the release for free circulation, export, re-export or entry for a suspensive procedure of counterfeit and pirated goods [1994] OJ 2 341

⁹² *Polo/Lauren Co LP v PT Dwidua Langgeng Pratama International Freight Forwarders* (C-383/98), EU:C:2000:193

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⁹⁴ *Ibid*

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⁹⁶ *Ibid*

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⁹⁸ *Ibid*

⁹⁹ *Ibid*

¹⁰⁰ *Ibid* at 15

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¹⁰² Directive (EU) 2015/2436

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¹⁰⁵ S.52 Copyright Designs and Patents Act 1988 repealed

¹⁰⁶ *Ibid*

¹⁰⁷ Copyright Designs and Patents Act 1988

¹⁰⁸ Richard Arnold et al , 'The Legal Consequences of Brexit Through the Lens of IP Law' [2017] [University of Cambridge Faculty of Law Research Paper No. 21/2017](#)

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¹⁰⁹ As per definition of S.9 Copyright, Designs and Patents Act 1988

¹¹⁰ Art.20 Directive (EU) 2015/2436

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