

3D PRINTING: THE NOTION OF USE IN TRADE MARK LAW UNDER PRESSURE

OUTSTANDING
LLM DISSERTATIONS

CREATe Working Paper 2021/13

ELEONORA MARONI



CREATe

Editorial note

In 2021, CREATE opened a new opportunity for authors of excellent postgraduate research to publish their dissertations in the CREATE Working Papers series.

CREATE leads the LLM in Intellectual Property & Digital Economy offered by the Law School at the University of Glasgow.* The programme provides students with a unique opportunity to explore the rapidly developing digital environment through the lens of intellectual property, and to engage with the current policy discussions in which CREATE remains an active participant. All IP LLM students are required to submit a master dissertation on the topic of their choosing. The dissertation is a result of student's independent research, guided, in a limited way, by a supervisor.

In Autumn 2021, we asked IP LLM supervisors to nominate dissertations submitted in the 2020/21 academic year, which they have found excellent. Following the nominations, the CREATE teaching team has selected three dissertations to be published in the Working Papers series, which we are happy to present to you now as the "Outstanding LLM Dissertations 2021".

By publishing outstanding LLM dissertations we would like to showcase some of the best work of our LLM students, reward their efforts, and inspire our new students when preparing their own dissertations in the future.

We are looking forward to outstanding dissertations becoming an integral part of the CREATE Working Papers series in the coming years.

Ula Furgat

Managing editor, CREATE Working Papers

* More information on the programme available at: <https://www.gla.ac.uk/postgraduate/taught/intellectualproperty/>

3D printing: the notion of use in trade mark law under pressure

Eleonora Maroni*

Outstanding LLM Dissertations 2021

Abstract

The new frontier of manufacturing, 3D printing, makes it easy to fabricate objects of any kind with the sole help of a 3D printer and CAD files. This may prove attractive for consumers who may be willing to engage in the home-production of objects. At first glance, this may not seem problematic for trade mark law: in its innocuous version, 3D printing simply enables consumers to customise their goods and to escape the standardisation of products provoked by the current prevailing business model.

However, home-3D printing also has a dark side as it may enable consumers to easily replicate products incorporating trade marks. It is reasonable to assume that consumers will *not* engage only in the private use of 3D-printed objects. Admittedly, they are likely to display some of them in public. This implies that products bearing trade marks will start circulating directly outside the points of sale and this may induce consumers to mistakenly assume that goods, which in fact are 3D-printed, come from the trade mark proprietor. How trade mark law is going to deal with this phenomenon is far from clear.

To evaluate this, this study reviews the present notion of infringing use under UK and EU laws, taking into account case law and academic literature, with a view to assessing whether the concept of use can be stretched to cover home-3D printing. The approach to this research is disillusioned: if it is true that 3D printing should be welcome for its role in fostering consumer empowerment, it is crucial to remember that it may also deprive consumers of some of the advantages they derive from the trade mark system. This latter aspect is often overshadowed by the positive effects of 3D printing.

This study finds that infringement in relation to home-3D printed objects embedding trade marks can be found only in limited cases. By shifting attention to the digital environment, this study concludes that infringement is more likely to be found when private individuals engage in the sale or share of CAD files embedding trade marks. Furthermore, it argues that, under certain circumstances, online platforms displaying CAD files should be held liable for infringement.

* Eleonora Maroni is a graduate of LLM in Intellectual Property and the Digital Economy programme at the University of Glasgow. A special thanks goes to Dr M. Iljadica in her quality of supervisor for the writing of this dissertation. A special thanks also goes to the CREATe team of the University of Glasgow for giving me the chance to publish this paper.

Table of contents

Abstract.....	1
Introduction.....	3
Part I – 3D printing: the impact on trade mark law	4
1.1. The Third Industrial Revolution	4
1.2. The challenges for trade mark law.....	7
Part II – Use of trade marks in relation to 3D-printed objects	10
2.1. The notion of infringing use under pressure.....	10
2.2. Use in the course of trade	11
2.3. Use in relation to goods or services	14
2.4. A closer look at the three grounds of infringement	16
Part III: Use of trade marks in relation to CAD files.....	19
3.1. Use by private individuals.....	19
3.2. Use by online marketplace operators	21
3.2.1. OMOs as intermediaries	23
3.2.2. OMOs as providers of additional services.....	24
3.2.3. Future perspectives	25
Conclusion.....	27
Bibliography.....	29

Introduction

This study scrutinises the impact of consumer 3D printing on trade mark law as 3D printing makes it easy to fabricate objects embedding a registered trade mark. The potential of 3D printing is not going to be grasped only by the rightholders' commercial competitors. As 3D printers are becoming cheaper, 3D scanners more efficient and CAD files more and more widespread, home-based consumers may be willing to engage in the fabrication of goods incorporating trade marks. This is going to pose unprecedented challenges to trade mark law, in particular to the notion of infringing use, which has been developed mainly with a view to fostering a balance between trade mark exclusivity and the freedoms enjoyed by commercial third parties.

Importantly, not any use of a sign identical or similar to a trade mark can be addressed under trade mark law. The purpose of this study is to analyse whether the use performed by home-based consumers can be deemed as an infringing use in the light of the conditions enshrined in section 10 of the UK Trade Marks Act 1994 (TMA). As Brexit has not yet brought substantive changes, the present analysis will abundantly rely upon EU law, with specific regard to article 10 of the Trade Mark Directive 2015¹ (TMD). As the focus is on UK trade marks, the Regulation on the European Union trade mark² (EUTMR) will be dealt with only incidentally. From a methodological perspective, the research question will be answered on the basis of UK and EU case law about the notion of use in the context of trade mark infringement. The cases will be analysed in the light of the academic literature commenting on them. In order to render an account of the complexity of the phenomenon of 3D printing, the contributions of international academia will also be considered.

A disclaimer is needed: as home-3D printing is still in its infancy, this study deals with a legal problem which is going to gain relevance in the near future. This is at the same time the most difficult, but also the most fascinating, aspect of the present analysis. Admittedly, this entails that this research has an inherent limit, as it can only analyse the notion of use as it has been developed in a context where 3D printing is not yet even intended as a problem. However, this may also be considered as the main strength of this research, which will try to foresee how the present notion of infringing use can be adapted to respond to the challenges posed by 3D printing. This question will be answered with a view to finding a balance between consumer

¹ Directive (EU) 2015/2436 of the European Parliament and of the Council of 16 December 2015 to approximate the laws of the Member States relating to trade marks [2015] OJ L 336/1

² Regulation (EU) 2017/1001 of the European Parliament and of the Council of 14 June 2017 on the European Union trade mark [2017] OJ L 154/1

empowerment made possible by 3D printing and the need to preserve the functions of trade marks.

This paper is articulated in three sections. The first part gives an overview of the main features of 3D printing and its impact on the trade mark system. It underlines that the consumer empowerment made possible by 3D printing is not unfailingly positive as the home-based production of goods incorporating marks provokes consumer confusion in the post-sale environment and, consequently, adversely affects the functions of trade marks. The collision between 3D printing and trade mark law is evident if it is considered that, in some instances, EU and UK Courts have given relevance to post-sale confusion.

The second section addresses the notion of infringing use under trade mark law with regard to 3D-printed objects. It will consider whether consumer 3D printing may be deemed (i) use in the course of trade; (ii) use in relation to goods or services; (iii) use which, as appropriate, either has an adverse effect over the functions of trade marks or causes likelihood of confusion or consists of one of the relevant injuries which trigger infringement in the case of marks with a repute. Section II shows that only under limited circumstances may home-3D printing be found to be an infringing use of trade marks.

As the second section demonstrates that the use of trade marks on 3D-printed objects is likely to remain largely unaddressed, the third section suggests that rightholders may be more successful in attacking CAD files, as infringing use may be more easily found in relation to CAD files embedding trade marks. Moreover, Part III will briefly consider whether online marketplaces dedicated to CAD files can be deemed to perform an infringing use under trade mark law if they display virtual models embedding trade marks. It will be argued that it may be desirable to hold online platforms liable for infringement in the case where, by providing additional services, they play an active role in the sale or share of CAD files.

Part I - 3D printing: the impact on trade mark law

1.1. The Third Industrial Revolution

In the aftermath of the Second Industrial Revolution and all through the twentieth century, trade mark law developed mainly with a view to reflecting the exigencies of vertically integrated business models which tend to engage in the mass production of standardised goods.³ Commonly known as three-dimensional (3D) printing, additive manufacturing (AM) is likely to

³ Rossella Rivaró, 'Stampa tridimensionale e diritti di proprietà intellettuale. Riflessioni sulla proteggibilità del disegno CAD 3D' (2019) 3 *Rivista di Diritto Industriale* 226, 226

overturn this *status quo*. In use since the 1980s,⁴ AM consists of a range of digital manufacturing technologies.⁵ Differently from traditional subtractive manufacturing, 3D printers are able to create objects by progressively adding filament material layer by layer.

They do so by following the instructions contained in blueprints which are usually created with computer aided design (CAD) programmes. Alternatively, CAD files can also be created by scanning an existing physical object thanks to 3D scanners.⁶ It is relevant to note that CAD files can be easily shared and modified as any other computer file.⁷ 3D printers do not need many more elements to work: once the CAD file is available, only raw materials and electricity are needed.⁸ It comes as no surprise that the advent of this technology has been considered as marking a shift to the Third Industrial Revolution.⁹

3D printing was born as a system of rapid prototyping assisting industries in the course of the product development process.¹⁰ Tellingly, AM currently stands out more for its role as 'rapid manufacturing'¹¹ as it soon became clear that this technology could play a relevant role also in the creation of end-products with the advantage that 3D printing, differently from traditional manufacturing, ensures product design flexibility. This is made possible by three intertwined factors: products can be easily customised by modifying CAD files; AM does not encounter as many geometric limitations as traditional subtractive manufacturing; production of low unit volumes is not as cost- ineffective as in the past.¹²

This has carried many consequences which go beyond the initial industrial vocation of 3D printing. A UK report dating back to 2015 renders an account of the fact that 3D printers are usually bought by consumers for an amount between £900 and £2000,¹³ an amount which is likely

⁴ Christian Weller, Robin Kleer, Frank T Piller, 'Economic Implications of 3D Printing: Market Structure Models in Light of Additive Manufacturing Revisited' (2015) 164 *International Journal of Production Economics* 43, 44

⁵ Phil Reeves, Dinusha Mendis, 'The Current Status and Impact of 3D Printing Within the Industrial Sector: An Analysis of Six Case Studies' (2015), 1 <<https://www.gov.uk/government/publications/3d-printing-research-reports>> accessed 18 November 2021

⁶ *Ibid* 33

⁷ Amanda Scardamaglia, 'Flashpoints in 3D Printing and Trade Mark Law', (2014) 23/no 2 *Journal of Law, Information and Science* 30, 33

⁸ Weller et al (n 2) 44

⁹ Scardamaglia (n 7) 30

¹⁰ Ian Gibson, David Rosen, Brent Stucker, Mahyar Khorasani 'Development of Additive Manufacturing Technology' in Ian Gibson, David Rosen, Brent Stucker, Mahyar Khorasani , *Additive Manufacturing Technologies* (Springer 2021)

ch 2.13

¹¹ *ibid*

¹² Reeves, Mendis (n 5) 1

¹³ *Ibid* 2

to decrease in the near future.¹⁴ Moreover, through 3D scanners, consumers can easily obtain virtual models to use as an input for their 3D printers. Admittedly, the quality of 3D scanners affordable by consumers is currently fairly low. However, experts predict huge improvements in the next years.¹⁵ Furthermore, as an alternative to using 3D scanners, consumers may design their own CAD files or import them from online depositories. Hence, it is reasonable to expect that it will become more and more common for private consumers to engage in the creation of their own goods with manufacturers inevitably losing their control over production.

It is not the case that 3D printing has attracted the attention of UK institutions, which have tried to evaluate the impact that AM is likely to have in the future. In the light of the foregoing, it comes as no surprise that, in a recent report commissioned by the UK IPO, 3D printing was emblematically defined as a form of 'democratising manufacturing',¹⁶ whose further development and spread is going to put into crisis the current intellectual property systems, the trade mark system included.¹⁷

There may be the case where 3D printing is innocuous for trade mark owners. Indeed, one of the greatest potentialities of this technology consists in enabling the creation of unique products which are immune from the standardisation of goods, which is typical of the current business models. The makers of these products are unlikely to be a problem for rightsholders.¹⁸ However, 3D printing can also live in the shade of capitalism. According to a recent UK report, the CAD files which are most viewed and downloaded by consumers are the ones relating to popular brands, for instance the iPhone-labelled files.¹⁹ From this, it can be inferred that private individuals may engage in 3D printing also with a view to acquiring a certain product incorporating a trade mark.

It is reasonable to predict a forceful reaction by trade mark owners. Scholars acknowledge that such a reaction may be taken for granted as the impact of 3D printing in the realm of trade marks will be comparable to the effect the Internet had on copyright content.²⁰ History is going to

¹⁴ Ibid 44

¹⁵ Reeves, Mendis (n 5) 46

¹⁶ Reeves, Mendis (n 5) 1

¹⁷ Ibid 3

¹⁸ Michael Weinberg, 'It Will be Awesome if They Don't Screw it Up: 3D Printing, Intellectual Property, and the Fight Over the Next Great Disruptive Technology' (Public Knowledge Whitepaper, 2012) 5 <<https://www.publicknowledge.org/blog/it-will-be-awesome-if-they-dont-screw-it-up-3d-printing/>> accessed 18 November 2021

¹⁹ Dinusha Mendis, Davide Secchi, 'A Legal and Empirical Study of 3D Printing Online Platforms and an Analysis of User Behaviour' (2015), 41 <<https://www.gov.uk/government/publications/3d-printing-research-reports>> accessed 18 November 2021

²⁰ Mark Lemley, 'IP in a World Without Scarcity' (2015) 90 *New York University Law Review* 460, 461; See also: Scardamaglia (n 7) 45

repeat itself: trade mark owners are going to claim an extension of the scope of protection of their marks similarly to what copyright owners have struggled and are still struggling to do with a view to protecting their exclusive rights in the digital era.²¹

1.2. The challenges for trade mark law

It is now appropriate to analyse how the spread of 3D printing may concretely facilitate the use of trade marks so as to constitute a threat for rightholders. Various examples can be made. The simplest scenario to consider is the case where an object embedding a trade mark is fabricated. For instance, it can be imagined that a pair of shoes embedding the mark *Adidas* is fabricated thanks to a 3D printer. A similar reasoning can be made with regard to shape marks: it can be imagined that a bottle resembling the shape of a Coca-Cola bottle is 3D-printed.

As already mentioned, with the advent of 3D printing, the customisation of products has become easier. This implies that there might be the case where the mark *Adidas* is not attached to a model of shoes perfectly resembling the authentic one marketed by Adidas (presumably, as the result of the scanning of an authentic Adidas product). Indeed, it may happen that the mark *Adidas* is attached to a similar product or, even, to a dissimilar product. For example, the mark *Adidas* could be attached on a mug. Alternatively, the trade mark itself might be subject to a process of customisation. This is not hard to imagine if fan art is taken into account. It can be imagined, for instance, that a pink version of the famous black *Mickey Mouse* is attached on a 3D-printed object.

If the above-mentioned products are created by the trade mark proprietor's commercial competitors, current trade mark law already provides the rightholders with tools to react against these conducts. Infringement conducted with the help of 3D printers does not differ in its substance from any other infringing conduct by commercial third parties. 3D printing may simply have the effect of making it easier for competitors to create infringing products.²² However, it is worth considering that 3D printers are likely to become ordinary instruments in the hands of consumers. The so-called home-3D printing may constitute a big challenge for trade mark law. This is because it is likely to affect the functions of trade marks in a way trade mark law has never dealt with.

Crucially, most of the above-mentioned products are not meant to remain in the private home environment of their maker. This is problematic because, while a mug embedding a mark, if kept

²¹ Ibid, 482

²² Elif Sonmez, 'Cottage piracy, 3D printing, and secondary trademark liability: counterfeit luxury trademarks and DIY' (2014) 48/no 4 University of San Francisco Law Review 757, 762

at home, is unlikely to create confusion,²³ the products which are meant to be displayed in public may confuse peer consumers about the trade origin of the relevant goods. Scardamaglia makes a compelling example to explain this.²⁴ It can be imagined that a person prints hubcaps embedding the mark *Mercedes Benz* and fits them on a Mercedes Benz car. The public use of the hubcaps may induce the public to think that those hubcaps came from the owner of the mark *Mercedes Benz*. An even more critical scenario is the one in which 3D-printed hubcaps embedding the mark *Mercedes Benz* are used on a Toyota Corolla. In the latter case, the risk goes beyond consumer confusion as it may entail the dilution of the *Mercedes Benz* mark.²⁵

The aforementioned scenarios show that the circulation of home-3D printed objects may alter the consumers' perception of trade marks in the post-sale environment.²⁶ Indeed, home production implies that goods start circulating directly outside the points of sale. In Europe, great relevance is attached to actual confusion, that is the confusion arising when consumers perform the act of purchase.²⁷ However, confusion with respect to trade marks can occur not only in concomitance with the purchase but also in the post-sale phase. The main rationale for addressing post-sale confusion consists of preventing consumers from making wrong assumptions about the provenance of a certain product by seeing it used by other consumers.²⁸

The origin function of trade marks goes hand in hand with the capacity of trade marks to act as badges of quality. In effect, 'the consumer is not interested in the commercial origin of goods out of idle curiosity; his interest is based on the assumption that goods of the same origin will be of the same quality'.²⁹ With the spread of 3D-printed objects, in the post-sale environment consumers may start making wrong assumptions about the quality of goods incorporating marks. For instance, there might be the case where 3D-printed objects made of poor materials are mistakenly considered as coming from a certain trader. Due to this wrong assumption, potential purchasers may be discouraged from buying from that trader in the future.³⁰

Importantly, consumers are not always oriented by quality concerns when making purchasing choices. They may opt for a certain product bearing a trade mark exclusively for acquiring or

²³ Scardamaglia (n 7) 48

²⁴ *ibid*

²⁵ Scardamaglia (n 7) 49

²⁶ James Grace, 'The End of Post-Sale Confusion: How Consumer 3D Printing Will Diminish the Function of Trademarks', (2014) 28/no. 1 *Harvard Journal of Law & Technology*, 263, 268; Taina Pihlajarinne, Max Oker-Blom, 'Different aspects of trade mark confusion with respect to distribution of CAD files in the era of 3D printing' in Taina Pihlajarinne, Juha Vesala, Olli Honkkila (eds), *Online distribution of content in the EU* (Cheltenham, UK: Edward Elgar Publishing 2019) 154

²⁷ *Ibid* 156

²⁸ *Ibid* 162

²⁹ Case C-10/89 SA Cnl-Sucal NV v Hag GF AG [1991] ECR I-03711, Opinion of AG Jacobs, para 72

³⁰ Grace (n 26) 272

maintaining a certain social status.³¹ The concept of scarcity is at the core of these choices: goods become non-interchangeable and particularly valuable for consumers precisely because trade marks make goods artificially scarce.³² With the spread of 3D-printed objects, in the post-sale environment consumers may start considering the notion of scarcity as a 'mere illusion'.³³ This may cause a phenomenon called 'status confusion'³⁴ as trade marks may lose their high status in the mind of consumers. This is not only to the detriment of rightsholders but may also diminish the benefits which trade marks have for consumers. In effect, the loss of scarcity will jeopardise the interests of the existing purchasers of authentic goods.³⁵

In the light of the foregoing, the enthusiasm for the democratising role of 3D printing should be tempered with the acknowledgement that in practice 3D printing deprives consumers of some of the advantages which trade marks ensure they receive. The frontal collision between 3D printing and trade mark law is evident if it is considered that, in some instances, both UK and EU cases have attached relevance to post-sale confusion in the context of trade mark infringement.³⁶ In the UK case *Datacard v Eagle*, it is argued that post-sale confusion should be actionable as it is conceptually difficult to distinguish between sale and post-sale confusion.³⁷ This conclusion is supported by EU jurisprudence, *inter alia Arsenal* and *Anheuser-Busch*.³⁸ In applying article 5(1)(a) TMD in *Arsenal*,³⁹ the CJEU deemed as not sufficient to escape infringement the fact that goods bearing a mark were sold on a stall which gave notice that the relevant goods were not the official merchandise of a famous football team. There could have been the possibility that the consumers who came across the goods in the post-sale environment could interpret the sign as genuinely indicating a certain source. An even more clear-cut role is played by post-sale confusion in *Anheuser-Busch*,⁴⁰ in which the CJEU established that also consumers who could come across the goods in the post-sale environment had to be considered in assessing likelihood of confusion under article 5(1)(b) TMD.

From these cases, it can be inferred that, abstractly, rightsholders have a legitimate interest to react against post-sale confusion. However, this does not necessarily mean that, in practice, they are entitled to prevent the use of trade marks on 3D-printed objects which, as

³¹ Grace (n 26) 273

³² Lemley (n 20) 462

³³ *Ibid* 277

³⁴ Pihlajarinne, Oker-Blom (n 26) 162

³⁵ *Ibid* 273

³⁶ P Sean Morris, *Guess What Gucci? Post-Sale Confusion Exists in Europe*, (2012) 47/no. 1 Val U L Rev, 1, 3

³⁷ *Datacard Corporation v Eagle Technologies Ltd* [2011] EWHC 244 (Pat), [2011] RPC 17 [288]

³⁸ *Ibid* [279] - [283]

³⁹ Case C-206/01 *Arsenal Football Club Plc v Matthew Reed* [2003] ETMR 19, para 57

⁴⁰ Case C-245/02 *Anheuser-Busch Inc v Budejovicky Budvar NP* [2005] ETMR 27, para 60

demonstrated above, may be responsible for such confusion. In order to react against home-3D printing, rightsholders will need to prove that the use of trade marks on 3D-printed objects can be deemed to fall within the realm of uses which trade mark owners are entitled to prevent.

Part II – Use of trade marks in relation to 3D-printed objects

2.1. The notion of infringing use under pressure

According to section 9(1) TMA, a registered trade mark is infringed by use of the trade mark in the UK without the trade mark proprietor's consent. Section 10 TMA, in line with article 10 TMD, sets a series of conditions defining when the use of a sign by a third party can be infringing. In particular, use must be 'in the course of trade' and 'in relation to goods or services'. Moreover, such use must be liable to have an adverse effect on the functions of the trade mark,⁴¹ to provoke a likelihood of confusion⁴² or, in presence of a trade mark with a reputation, to take unfair advantage of, or be detrimental to, the distinctive character or the repute of a trade mark, being the use without due cause.⁴³

Scholars argue that these preconditions are responsible for fostering a proper balance between trade mark rights, being fundamental rights under article 17(2) of the EU Charter of Fundamental Rights,⁴⁴ and the fundamental rights of third parties as they impose limits to trade mark exclusivity.⁴⁵ This prevents trade mark rights from frontally colliding with the freedom of competition enjoyed by commercial third parties.⁴⁶ Importantly, the notion of use can also be considered the bulwark of freedom of expression⁴⁷ within trade mark law.⁴⁸ This is urged by Recital 27 TMD which affirms that the 'Directive should be applied in a way that ensures full respect of fundamental rights and freedoms, and in particular the freedom of expression.' The reference to fundamental rights and freedoms in the recital 'can be construed as a general call for taking them into account in the process of interpreting and applying trade mark law'.⁴⁹

⁴¹ Section 10(1) TMA; Article 10(2)(a) TMD

⁴² Section 10(2) TMA; Article 10(2)(b) TMD

⁴³ Section 10(3) TMA; Article 10(2)(c) TMD

⁴⁴ [2012] OJ C 326/391

⁴⁵ Michal Bohaczewski, 'Conflicts Between Trade Mark Rights and Freedom of Expression Under EU Trade Mark Law: Reality or Illusion?' (2020) 51 IIC 856; Łukasz Żelechowski, 'Invoking freedom of expression and freedom of competition in trade mark infringement disputes: legal mechanisms for striking a balance' (2018) 19/no 1 ERA Forum 115; Ilanah S Fhima, 'Trade Marks and Free Speech' (2013) 44/no 3 IIC 293

⁴⁶ Article 16 of the Charter

⁴⁷ Article 10 of the Convention for the Protection of Human Rights and Fundamental Freedoms (European Convention on Human Rights), Rome, 4 November 1950; Article 11 of the Charter of Fundamental Rights of the European Union; Section 12 of the Human Rights Act 1998

⁴⁸ Eg Unilever Plc v Griffin & Anor [2010] FSR 33, [2010] EWHC 899 (Ch)

⁴⁹ Żelechowski (n 45) 117

In the context of 3D printing, the interplay between trade mark rights and freedom of expression must be given great consideration. On the one hand, the core of trade mark rights must be protected. The CJEU in *Hoffman-La Roche*⁵⁰ affirmed that the essential function of trade marks 'is to guarantee the identity of the origin of the trade-marked product to the consumer or ultimate user, by enabling him without any possibility of confusion to distinguish that product from products which have another origin'.⁵¹ In the light of *Bellure*,⁵² it may be argued that great relevance must be given also to the non-essential functions of trade marks, namely the quality, investment, communication and advertising functions. Importantly, the latter three functions play a significant role in justifying the enhanced protection of trade marks with a repute, whose rationale cannot be straightforwardly reconducted to the need to prevent consumer confusion.⁵³ On the other hand, the democratising attitude of 3D printing allowing the customisation of goods through the creation or modification of CAD files shall be considered as a new frontier of freedom of expression.⁵⁴

This implies that the notion of use must be carefully applied in order to foster a proper balance between the various interests at stake: it is crucial to protect the functions of trade marks while not unnecessarily expanding such a protection so as to unduly impede the customisation of goods by consumers. In other terms, when reasonably possible, consumers must be left free to fabricate their own *Adidas* mug or to attach on 3D-printed products their own version of a pink *Mickey Mouse*.

The following subsections will analyse within which limits it is reasonable to deem home-3D printing as (i) use in the course of trade; (ii) use in relation to goods; (iii) a kind of use following within one of the infringement grounds enshrined in sections 10(1), 10(2) or 10(3) TMA (respectively 10(2)(a), 10(2)(b), 10(2)(c) TMD).

2.2. Use in the course of trade

To be infringing, use must be in the course of trade. Intuitively, this is the hardest obstacle to a finding of infringement in the context of home-3D printing. Use is in the course of trade if 'it

⁵⁰ Case C-102/77 *Hoffmann-La Roche & Co. AG v Centrafarm Vertriebsgesellschaft Pharmazeutischer Erzeugnisse mbH* [1978] ECR 01139

⁵¹ *Ibid* para 7

⁵² Case C-487/07 *L'Oréal SA v Bellure NV* [2009] ETMR 55 para 58

⁵³ Andreas Breitschaft, 'Intel, Adidas & Co -is the jurisprudence of the European Court of Justice on dilution law in compliance with the underlying rationales and fit for the future?' (2009) 31/n 10 *European Intellectual Property Review*, 497, 498-499

⁵⁴ Kyle Langvardt, 'Remarks on 3D Printing, Free Speech, and Lochner' (2016) 17/no 2 *Minnesota Journal of Law, science and technology* 779, 786

takes place in the context of commercial activity with a view to economic advantage and not as a private matter'.⁵⁵

Some interesting hints are offered by the UK case *Och-Ziff v Och Capital*,⁵⁶ which dealt with the exchange of internal mails containing a trade mark from one employee to another within the same company. In this regard, it was argued that, although the context was commercial, there was no use in the course of trade as the use was merely internal.⁵⁷ This dictum suggests that, in assessing whether use of a trade mark is infringing, the reach of use must be considered. In particular, use is expected to have an impact outside the sphere of the user. *Mutatis mutandis*, this case can have some applications with regard to 3D printing, as it precludes any attempt by rightsholders to claim that the notion of use should encompass the use of trade marks on 3D-printed objects which are not meant to be displayed in public by the person engaging in 3D printing.

The problem is how to deal with 3D-printed objects which reach other peer consumers besides the one engaging in 3D printing.⁵⁸ In this regard, it is noteworthy that, exceptionally, use can be deemed in the course of trade also where it is performed by non-commercial third parties. In *L'Oréal v eBay*, the CJEU affirmed that, as a general rule, rightsholders can rely upon their exclusive rights only against economic operators.⁵⁹ However, there may be the case where non-commercial individuals engage in a kind of use 'beyond the realms of a private activity'.⁶⁰ This is determined on the basis of the volume of goods involved, the frequency and the other characteristics of the use itself.⁶¹ Interestingly, the case *L'Oréal v eBay* dealt specifically with the conduct of some private individuals engaging in the sale of products bearing marks on eBay. Due to the characteristics of the sales, the CJEU found use was in the course of trade.

A similar scenario is plausible in the context of 3D printing: consumers might start selling 3D-printed products on online marketplaces. In the light of *L'Oréal v eBay*, if the sale is sufficiently massive, consumers may be deemed as infringers. It is crucial to note that, in the scenario at stake, 3D-printing is not addressed as a phenomenon adversely affecting the function of trade marks in the post-sale environment. Its impact is transferred on the sale dimension of online marketplaces where the presence of 3D-printed objects may cause actual consumer confusion.

⁵⁵ Arsenal (n 39) 40

⁵⁶ *Och-Ziff Management Europe Ltd v Och Capital LLP* [2010] EWHC 2599

⁵⁷ *Ibid* [65]

⁵⁸ Cesare Galli, Alberto Contini, 'Stampanti 3d e proprietà intellettuale: opportunità e problemi' (2015) 3 *Rivista di Diritto Industriale* 115, pt 5

⁵⁹ Case C-324/09 *L'Oréal SA and Others v eBay International AG and Others* [2011] ETMR 52, para 54

⁶⁰ *Ibid* para 55

⁶¹ *Ibid*

However, the canons developed in *L’Oreal/v eBay* may be stretched to address also the effects of 3D printing in the post-sale environment. Indeed, the fact cannot be excluded that consumers may start spreading 3D-printed objects incorporating trade marks also in the physical world. The easiest scenario to imagine is the case where items in excess are given to friends, who are perfectly aware that the products are not authentic. The risk is that, if the 3D-printed goods are displayed in public by the friends themselves, other consumers may mistakenly think that those products come from the trade mark proprietors. The rationale underlying the dictum of the Court in *L’Oreal/v eBay* seems to cover also the case where a massive amount of 3D-printed objects is distributed to friends, as also this conduct is not in line with the normal features of private activity. In this regard, it is crucial to note that the economic advantage obtained by the private person engaging in the use of trade marks is not decisive for a finding of infringing use: in a recent case,⁶² the CJEU found use in the course of trade even though the individual in question had been remunerated only with a carton of cigarettes and a bottle of brandy.⁶³

Admittedly, it is hard to imagine that the notion of use in the course of trade could be stretched more than how the CJEU did in *L’Oreal/v eBay*. Indeed, in this case the Court went far beyond the literary meaning of the provision. This decision must be welcome because it elaborates an approach which is fairly flexible. Indeed, it enshrines canons which are quite vague: tellingly, it affirms that ‘the characteristics’ of the use must be taken into account. It seems desirable that, in the light of the vagueness of the canons, Courts are enabled to assess infringement on a case by case basis, proceeding to a balance ad hoc of the various interests at stake.

However, it is impossible to deny that, if these are the standards for a finding of infringement performed by non-commercial individuals, in most cases home-3D printing will not be covered, as use cannot be deemed in the course of trade where the spread of 3D-printed objects is not sufficiently massive. While this may possess the merit of encouraging consumers’ creativity in fabricating and personalising their own goods, the risk is that the protected functions of trade marks are jeopardised in the post-sale environment by the use performed by a myriad of consumers all engaging in the fabrication of very few objects.

However, it is worth considering that, even assuming that the prerequisite of use in the course of trade could be extended further by Courts as to prohibit unauthorised private non-commercial use of trade marks, this would be pointless in terms of practical utility.⁶⁴ Indeed, the law and its

⁶² Case C-772/18 A v B (CJEU 30 April 2020)

⁶³ Leigh Smith, Roland Scarlett, Uche Eseonu, ‘CJEU assesses the meaning of ‘in the course of trade’ in the context of importation by private individuals’ (2020) 15/no 8 *Journal of Intellectual Property Law & Practice*, 578

⁶⁴ Grace (n 26) 280

application have to go hand in hand with practical feasibility. Scardamaglia noted that 'it is highly inefficient for trade mark owners to pursue individuals for trade mark infringement involving the reproduction of 3D and 2D marks using their 3D printers at home'.⁶⁵ In point of fact, this does not only seem inefficient, but also practically impossible where the prerequisites of volume and frequency established in *L'Oreal v eBay* are not met. It is hard to imagine that trade mark proprietors could be able to sue 'disparate home-based consumers'⁶⁶ for the use of a few 3D printed objects embedding a trade mark.

2.3. Use in relation to goods or services

The notion of use 'in the relation to goods or services' was defined by the CJEU in *BMW*,⁶⁷ a case dealing with the conduct of Mr Deenik, who specialised in the resale of second-hand BMW cars and in the repair of BMW cars. As he used the *BMW* mark in advertisements, BMW sued Mr Deenik for trade mark infringement. The CJEU stated that use is in relation to goods or services if 'the trade mark is used for the purpose of distinguishing the goods or services in question as originating from a particular undertaking, that is to say, as a trade mark as such'.⁶⁸ As Mr Deenik used the mark to distinguish BMW's goods from the ones of other undertakings, that use was deemed to amount to use as a trade mark.⁶⁹

It is controversial in academic literature whether the prerequisite of use 'in relation to goods or services' operates also with regard to marks with a reputation which enjoy an enhanced protection.⁷⁰ Compellingly, some scholars argue that this condition applies also with regard to famous marks on the basis of the reasoning of the CJEU in *Adidas v Fitnessworld*,⁷¹ in which the Court stated that, if a sign is perceived by the public as a pure decoration, dilution is not actionable despite the similarity between the sign and the famous mark. Scholars claim that the implicit premise of this statement is that, if a sign is perceived only as a decoration, there is no use as an indicator of origin and, hence, no 'use as a trade mark'.⁷²

⁶⁵ Scardamaglia (n 7) 52

⁶⁶ Grace (n 26) 280

⁶⁷ Case C-63/97 Bayerische Motoren Werke AG v Deenik [1999] ETMR 339

⁶⁸ *Ibid*, para 38

⁶⁹ *Ibid*, para 42

⁷⁰ Ilanah Simon, *Embellishment: trade mark use triumph or decorative disaster?* (2006) 28/no 6 EIPR 2006 321

⁷¹ Case C-408/01 Adidas-Salomon AG, Adidas Benelux BV v Fitnessworld Trading Ltd [2004] ETMR 10 para 41

⁷² Po Jen Yap, *Making Sense of Trade Mark Use* (2007) 29/no 10 EIPR 420, 424-425; Bohaczewski (n 45) pt 2.2

Importantly, case law shows that in the UK the prerequisite of 'use as a trade mark' has great relevance. Far before *BMW*, the case *Unidoor Ltd v. Marks and Spencer plc*⁷³ was decided. This case dealt with the fact that Unidoor's trade mark registered for clothes, namely the mark '*COAST TO COAST*', had been attached on t-shirts sold by Marks & Spencer. The Court concluded that no use as a trade mark was at stake because the use of the words '*COAST TO COAST*' could not be intended to indicate the commercial origin of the t-shirts. This because Unidoor did not use the words '*COAST TO COAST*' on the labels of clothes. Consequently, the public was not used to see it as an indicator of origin. Indeed, when the mark was visibly attached on clothes, it was conceived by the public as a decoration or a slogan. This entailed that, when Marks and Spencer used the sign, consumers did not perceive it as distinguishing the origin of the t-shirts. Hence, there was no trade mark use by the defendant.

It is easy to imagine that, with the help of 3D printers, consumers may fabricate their own clothes and attach marks on them. In the light of Unidoor, there may be the case where this use could not be deemed 'in relation to goods' in a trade mark sense. However, it must be admitted that the UK notion of 'use as a trade mark' has lost part of its autonomy after the decision of the CJEU in *Arsenal v Reed*.⁷⁴ The CJEU decided on this case on the basis of a preliminary ruling referred by the High Court of Justice of England and Wales.⁷⁵ The case dealt with the conduct of Mr Reed who sold memorabilia bearing the mark of the football team Arsenal. Having regard to the perception of the public, the UK Court found that the marks attached on Mr Reed's souvenirs were conceived as badges of support for the team and not as badges of origin.⁷⁶ Consequently, there was no use in trade mark sense. Therefore, the UK Court asked the CJEU whether non-trade mark use could nonetheless constitute infringement.⁷⁷

Unpredictably, the CJEU deviated from the conclusions held by the UK Court and solved the issue of 'use in relation to goods', simply affirming that 'the use at issue in the main proceedings is "for goods" (...) since it concerns the affixing to goods of a sign identical to the trade mark and the offering of goods, putting them on the market or stocking them'.⁷⁸ Then, the Court added that it is irrelevant that the sign is perceived as a badge of support for the trade mark proprietor, where the use by the third party is liable to affect the origin function of the trade mark.⁷⁹ When deciding about the case following the dictum of the CJEU, the High Court of

⁷³ [1988] RPC 275

⁷⁴ *Arsenal* (n 39)

⁷⁵ *Arsenal Football Club Plc v Reed* [2001] EWHC 440 (Ch)

⁷⁶ *Ibid* [58]

⁷⁷ *Ibid* [69]

⁷⁸ *Arsenal* (n 39) para 41

⁷⁹ *Arsenal* (n 39) para 61

Justice claimed the CJEU had disregarded the findings of fact on the basis of which the Court had affirmed Mr Reed's memorabilia were only perceived as badges of support. Therefore, it decided in favour of the defendant.⁸⁰ The interplay between the findings of fact put forward by the High Court of Justice and the ruling by the ECJ was subsequently made clear by the England and Wales Court of Appeal that reversed the decision in favour of Arsenal:

I do not believe that the ECJ disregarded the conclusions of fact made by the judge in his first judgment. (...) As found by the judge, the trade marks, when applied to the goods, were purchased and worn as badges of support, loyalty and affiliation to Arsenal, but that did not mean that the use by a third party would not be liable to jeopardise the functions of the trade marks, namely the ability to guarantee origin. To the contrary, the wider and more extensive the use, the less likely the trade marks would be able to perform their function. As the ECJ pointed out, the actions of Mr Reed meant that goods, not coming from Arsenal but bearing the trade marks, were in circulation. That affected the ability of the trade marks to guarantee the origin of the goods.⁸¹

The reasoning developed by the Court of Appeal offers good hints to assess whether consumers engaging in 3D printing may be said to perform use in trade mark sense. Indeed, the use of 3D-printed objects has much in common with Reed's memorabilia: the private individuals engaging in 3D printing may perceive the signs as mere decorations or badges of support for a certain brand but this does not mean that, once the 3D-printed objects start circulating in public, peer consumers will see them in the same way. More probably, they are going to see the sign as indicating a certain commercial origin. To tell the truth, the reasoning of the Court of Appeal in Arsenal is not in contradiction with the dictum in Unidoor: in this case, the Court was able to exclude 'use as a trade mark' *a priori* because, due to the behaviour of the trade mark proprietor, the public had not been placed in the position where they saw that sign as an indicator of origin. In more nuanced situations, as in Arsenal, it is undoubtedly more difficult to think that the public may be able to conceive the capacity of marks to act as badges of support as totally divorced from the origin function of trade marks.⁸² These considerations lead to the conclusion that in most cases home-3D printing may be considered as use in relation to goods in a trade mark sense. It could be argued that a sign is not used 'as a trade mark' on 3D-printed objects in a limited scenario, that is where, as in Unidoor, the public is *a priori* not placed in a position to see that sign as an indicator of origin.

2.4. A closer look at the three grounds of infringement

The final step of the reasoning consists in assessing whether use by consumers engaging in 3D printing can be deemed as infringing, as appropriate, under either section 10(1) or section 10(2)

⁸⁰ Arsenal Football Club Plc v Reed [2002] EWHC 2695 (Ch)

⁸¹ Arsenal Football Club Plc v Reed [2003] EWCA Civ 696 [48]

⁸² Po Jen Yap (n 72) 422

or section 10(3) TMA (respectively articles 10(2)(a), 10(2)(b), 10(2)(c) TMD). As demonstrated above, in most cases consumers engaging in 3D printing may not be held liable for trade mark infringement: the hardest obstacle for a finding of infringement is that use may not be in the course of trade. Therefore, it is worth conducting the present analysis, keeping in mind the specific case where private individuals engage in a type of use which is sufficiently massive to fall within the canons developed in *L’Oreal/v eBay*.

Importantly, where consumers engage in the sale of 3D-printed objects on marketplaces, infringement depends on whether actual consumer confusion exists. By contrast, if the extensive circulation of 3D-printed objects takes place in informal contexts directly outside the points of sale, infringement depends on the finding of confusion in the post-sale environment. It is also vital to specify that confusion will play a different role, depending on the ground of infringement concerned.⁸³

Quite straightforwardly, it plays a decisive role in likelihood of confusion cases. Relevantly, under certain circumstances, the massive use of 3D-printed objects may constitute infringement under section 10(2) TMA. By personalising CAD files, consumers may decide to engage in the modification either of the trade mark or of the product embedding it. The resulting 3D-printed object may generate a likelihood of confusion provided that both ‘the marks at issue are identical or similar and that the goods or services which they cover are identical or similar’.⁸⁴ Importantly, likelihood of confusion is assessed on the basis of the perception of the average consumer.⁸⁵

With regard to the case where consumers fabricate 3D-printed replicas of products bearing a trade mark, it must be specified that in double identity cases the CJEU developed the so-called function theory, which implies that use must have an adverse effect on the protected functions of trade marks in order for the infringement claim to be successful.⁸⁶ This implies that replicas are not necessarily infringing. This is clear from *Opel/v Autec*,⁸⁷ an EU case dealing with the use by Autec of the mark *Opel* on the toy replicas of Opel cars which Autec manufactured and distributed. Autec’s intent was to produce perfect replicas: this implied that also the Opel mark had to be reproduced. Importantly, the *Opel*/mark was registered both for cars and for toys.

⁸³ Pihlajarinne, Oker-Blom (n 26) 155

⁸⁴ Case T-398/16 Starbucks Corp v EUIPO/Hasmik Nersesyan [2018] ETMR 17 para 17

⁸⁵ Case C-251/95 Sabel BV v Puma AG, Rudolf Dassler Sport [1998] ETMR 1 para 23

⁸⁶ Arsenal (n 39) para 51

⁸⁷ Case C-48/05 Adam Opel AG v Autec AG [2007] ETMR 33

The CJEU found that Autec's use was 'in relation to goods' as it consisted of affixing a sign identical to a trade mark on replicas which were considered to be an identical product with respect to the goods for which the mark had been registered, that is toys.⁸⁸ Hence, current article 10(2)(a) was deemed as applicable. The CJEU excluded infringement by Autec at a later stage, that is when it found that no detriment to the origin function of the mark *Opel* was provoked by Autec's use. It did so by engaging in a contextual analysis of the market, which led the Court to conclude that consumers could not be confused by the fact that the mark *Opel* was attached to Autec's replicas, as consumers were used to distinguishing toys from scale models due to the characteristics of the German market, where the fabrication of replicas had a long tradition.⁸⁹ It seems that a contextual analysis may in limited circumstances exclude infringement also with regard to 3D-printed replicas of products bearing a trade mark. Scholars have noted that no detriment to the protected trade mark functions exists where the 3D-printed replica is made of such a poor material that the average consumer is able to distinguish the authentic goods from the 3D-printed ones.⁹⁰

The massive use of 3D-printed objects may cause the dilution of trade marks with a reputation. Where the similarity between the famous mark and the sign enables the public to establish a link between the sign embedded in the 3D-printed object and the mark,⁹¹ rightsholders may be able to argue that infringement under section 10(3) is at stake, if one of the relevant injuries can be proved. Admittedly, the extensive spread of 3D-printed objects may contribute to make the mark generic. In *Interflora*,⁹² this was considered sufficient by the CJEU to find blurring. Alternatively, rightsholders might argue home-3D printing causes the tarnishing of their marks. In this regard, it seems that infringement of famous marks can be found also when the 3D-printed objects embedding the mark is made of such a poor material that no consumer confusion is generated. As already mentioned, preventing consumer confusion is not the core rationale of famous marks, which stand out for their investment and communication functions. Provided that the consumer is able to establish a link between the sign and the famous mark, it may be argued that infringement can be found if the 3D-printed objects convey a negative impression of the famous mark to the public so that its reputation is impaired.

Importantly, infringing use of marks with a reputation must be 'without due cause'. This clause has been intended by the CJEU as a powerful instrument to arbitrate the conflicts between

⁸⁸ Ibid para 20

⁸⁹ Luis H Porangaba, 'A contextual account of the trade mark functions theory' (2018) 3 IPQ 230, 232-234

⁹⁰ Grace (n 26) 277

⁹¹ Adidas (n 71) para 38

⁹² Case C-323/09 *Interflora Inc, Interflora British Unit v Marks and Spencer Plc, Flowers Direct Online Ltd* [2012] ETMR 1 para 79

contrasting interests in the context of trade mark infringement.⁹³ Due to its vagueness, this clause has the advantage of being a flexible instrument in the hands of Courts. Scholars note that its flexibility makes it an important bulwark of freedom of expression within trade mark law.⁹⁴ This is significant with regard to the phenomenon of 3D printing. If one of the aforementioned examples is recalled, it can be imagined that, in the context of fan art, consumers may fabricate and distribute a massive quantity of 3D-printed objects with a pink version of a mouse similar to the famous *Mickey Mouse*. Assuming that this use could evoke a link with the mark with a reputation and be detrimental to its repute or distinctiveness, the question arises as to whether consumers could rely upon the 'due cause' clause to escape infringement on the grounds that their use is for parodic purposes or an expression of their artistic freedom.

This depends on a case by case assessment. This because, in the light of current case law, use is with due cause in the presence of some factors. More precisely, in the UK case *Comic Enterprises Ltd v Twentieth Century Fox Film Corporation*,⁹⁵ the England and Wales Court of Appeal accepted that the 'due cause' clause could exclude infringement on the grounds of free speech. However, the Court underlined the need to prove whether the user is in good faith and whether there is an alternative which is less detrimental to the trade mark proprietor. Moreover, the Court noted that, where the use entails high likelihood of confusion and a significant detriment to the mark, use is not likely to be found with due cause.⁹⁶

Part III: Use of trade marks in relation to CAD files

3.1. Use by private individuals

The challenges posed by 3D printing are not limited to the creation of 3D-printed objects. 3D printing presupposes the use of CAD files, which can contain a virtual 3D model to which a trade mark is attached. CAD files can either be designed directly by the user or can be imported from online depositories. They can also be obtained by scanning a physical object. Importantly, they can easily be subsequently modified and uploaded on online platforms.⁹⁷ CAD files give all the information for the printing of a physical object. The spread of virtual models bearing marks may trigger the reaction of rightsholders. Intuitively, given that the circulation of 3D-printed

⁹³ Case C-65/12 *Leidseplein Beheer BV, Hendrikus De Vries v Red Bull GmbH, Red Bull Nederland BV* [2014] ETMR 24 para 46

⁹⁴ *Żelechowski* (n 45) pt. 3.3

⁹⁵ [2016] EWCA Civ 41, [2016] ETMR 22

⁹⁶ *Ibid* [145] – [147]

⁹⁷ Dukki Hong, Simon Bradshaw, 'Digital trade mark infringement and 3D printing implications: what does the future hold?' in Dinusha Mendis, Mark Lemley and Matthew Rimmer (eds), *3D printing and beyond: intellectual property and regulation* (Northampton, Massachusetts, Edward Elgar Publishing, 2019) 101

objects embedding trade marks is hard to prevent under trade mark law, rightsholders might be willing to attack CAD files precisely with a view to impeding the spread of 3D-printed objects embedding their mark. Alternatively, rightsholders may have a direct interest in attacking CAD files. Indeed, in order to keep up with the potentialities of 3D printing, more and more rightsholders will start providing consumers with CAD files enabling them to print products bearing a trade mark. Indeed, a paradigm shift is already evident from some recent initiatives.⁹⁸

It seems that use of a trade mark in relation to CAD files is 'use in relation to goods'. The fact that CAD files are intangible objects is not problematic per se. Goods in a trade mark sense need not necessarily be intangible, as demonstrated by the fact that Class 9 of the Nice Classification of Goods⁹⁹ includes software. Hong and Bradshaw¹⁰⁰ persuasively argue that CAD files can be considered as software by assimilating 3D virtual models to computer games which, being computer programs, can be goods in a trade mark sense. In fact, both online games and CAD files project graphical items onto the computer screen and require human action for the obtainment of an intended purpose.¹⁰¹ It is noteworthy that use of a sign in relation to CAD files can be deemed to be use as a trade mark because it seems that a sign embedded in a CAD file can be used as an indicator of commercial origin. Although this practice does not yet feature many current business models, it seems likely that in the future more and more rightsholders will provide consumers with CAD files and will incorporate their trade marks in them. This implies that the marks incorporated in CAD files will start indicating that those files come from a specific trader.

Also, with regard to CAD files, use by non-commercial individuals can be deemed 'in the course of trade' within the limits of *L'Oreal v eBay*.¹⁰² However, it must be admitted that the sale of CAD files is likely to meet the requirement of use in the course of trade more easily than the sale of 3D-printed objects. It can be argued that, in the situation where the same CAD file can be downloaded by numerous individuals, the sale of a CAD file does inevitably comply with the requirements of volume and frequency enshrined in *L'Oreal v eBay*. In other terms, it could be maintained that the sale of CAD files on online platforms is almost unavoidably in the course of trade as, when files can be downloaded an infinite number of times, they can potentially reach

⁹⁸ see Duann Scott, 'Nokia becomes the first major manufacturer to release 3D printable files for their product' (Shapeways Blog 2013) <<https://www.shapeways.com/blog/archives/1886-nokia-becomes-the-first-major-manufacturer-to-release-3d-printable-files-for-their-product.html>> accessed 18 November 2021

⁹⁹ Established by the Nice Agreement concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks (1957)

¹⁰⁰ Hong, Bradshaw (n 97) 103

¹⁰¹ *Ibid*

¹⁰² *L'Oreal v eBay* (n 59)

a huge number of possible buyers. Moreover, if it is considered that the CJEU has recently found that economic remuneration is not decisive for a finding of use in the course of trade, this implies that also the sole act of sharing CAD files for free on online platforms may be deemed as infringing under trade mark law.

As a matter of policy, this solution seems desirable. If the objective is to find a balance between the democratising role of 3D printing and the protection of the functions of trade marks, it must be admitted that the notion of use in the course of trade should encompass the sale or share of CAD files. Indeed, this solution does not imply that private individuals are not free to customise their own products, nor that they are prevented from sharing CAD files with peers where there is no massive remultiplication of the files. At the same time, this solution enables trade mark owners to prevent *a priori* the circulation of products all resulting from the extensive download of the same CAD files. This might reduce the risk of the functions of trade marks becoming jeopardised in the post-sale environment, with considerable benefits for consumers.

The solution suggested encounters some limits. Infringing use in relation to CAD files may be difficult to argue because the mark embedded in a CAD file is not in a perceivable form.¹⁰³ However, it often happens that CAD files are sold or shared on online platforms which include a photo of the 3D-printed item in question. Trade mark owners may claim that actual consumer confusion is provoked, as the photographs can induce the searcher to think that the CAD files have been licensed by the trade mark proprietor. This may not be conceived as a compelling argument if it is considered that CAD files are likely to be mostly used by well-informed users who are aware of the fact that files available on online platforms are not necessarily commercially connected to trade mark holders. To tell the truth, given the currently prevailing business model, users correctly tend to assume that CAD files never originate from trade mark owners. However, as 3D printing becomes more popular, rightsholders may decide to provide consumers with CAD files of their products. This implies that, in the near future, it may become more and more difficult for users to clearly distinguish the origin of CAD files. This implies that in the future it may become easier to establish confusion.

3.2. Use by online marketplace operators

Shifting attention from the physical world to the virtual environment has further implications. It is noteworthy that numerous platforms dedicated to the sale or share of CAD files have been

¹⁰³ Pihlajarinne, Oker-Blom (n 26) 153; Jean-Sebastien Dupont, 'Uncharted Territories of Trade Mark use', (2013) 2 Intellectual Property Quarterly 139

proliferating, for instance Shapeways,¹⁰⁴ CGTrader,¹⁰⁵ Pinshape¹⁰⁶ or Thingiverse.¹⁰⁷ This calls for a reflection on the responsibility of the platforms which act as online marketplace operators (OMOs) for CAD files. OMOs can be defined as forums allowing the accomplishment of transactions.¹⁰⁸ In particular, OMOs may act as mere intermediaries if they simply host the content uploaded by users. However, in some cases they might act also as advertisers or providers of other services.¹⁰⁹ The question arises as to whether OMOs enabling the sale or share of CAD files embedding trade marks can be deemed to perform an infringing use.

The answer to this question is important from a practical perspective, as rightsholders would have a greater leverage in reacting against 3D printing if they could take action against OMOs, as they are easier to monitor than 'disparate home-based consumers'.¹¹⁰ This may contribute to fostering a balance between 3D printing and the advantages enjoyed by rightsholders and consumers in virtue of the trade mark system. Again, it is a matter of assessing whether the conditions enshrined in section 10 TMA exist. Importantly, if no use of a trade mark by online platforms can be found, liability under UK law can only be established in the realm of joint tortfeasance.¹¹¹

It is necessary to specify that a complete account of the liability of online platforms would require an analysis of the E-Commerce Directive,¹¹² with particular regard to Article 14 which, under certain circumstances, exempts from liability providers of hosting services, *id est* services consisting 'of the storage of information provided by a recipient of the service'.¹¹³ The exemption applies if the provider (i) is not aware of the illegal activity or of the circumstances from which illegality is apparent; or (ii) disables access or removes information, once having become aware of the illegality. Importantly, under Article 15 E-commerce Directive, providers are not under a general obligation to monitor the information they store. Moreover, a complete

¹⁰⁴ Shapeways <<https://www.shapeways.com/>> accessed 18 November 2021

¹⁰⁵ CGTrader <<https://www.cgtrader.com/>> accessed 18 November 2021

¹⁰⁶ Pinshape <<https://pinshape.com/>> accessed 18 November 2021

¹⁰⁷ Thingiverse <<https://www.thingiverse.com/>> accessed 18 November 2021

¹⁰⁸ Carina Gommers and Eva De Pauw, 'Liability for trade mark infringement of online marketplaces in Europe: are they 'caught in the middle'?' (2020) 15/no 4 Journal of Intellectual Property Law & Practice 276, 280

¹⁰⁹ *Ibid*

¹¹⁰ Grace (n 26) 280

¹¹¹ Gommers, De Pauw (n 108) 278; Richard Arnold, 'Intermediary Liability and Trade Mark Infringement: A Common Law Perspective' in Giancarlo Frosio (ed), Oxford Handbook of Online Intermediary Liability (Oxford handbooks online, 2020) 411

¹¹² Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce')[2000] OJ L 178/01

¹¹³ Art 14 E-Commerce Directive

account would require the analysis of Article 11 of the IP Enforcement Directive,¹¹⁴ which ensures that rightholders can apply for an injunction against intermediaries whose services are used to infringe intellectual property rights. However, these aspects will be tackled only incidentally as, coherently with the scope of this study, the focus will be on the notion of use under trade mark law. Different scenarios will be dealt with.

3.2.1. OMOs as intermediaries

The first scenario to analyse consists of the case where OMOs host the content uploaded by private individuals who sell or share CAD files embedding trade marks. When OMOs do not provide other services, they can be said to act as intermediaries.¹¹⁵ If OMOs' conduct is passive, use under trade mark law can be excluded under current jurisprudence as potentially infringing use 'involves active behaviour and direct or indirect control of the act constituting the use'.¹¹⁶ Importantly, it is not considered use the mere making available of the technical conditions which make infringement possible.¹¹⁷

This applies also with regard to the conditions created by operators in the digital environment, as made clear by Google France,¹¹⁸ dealing with the purchase of third parties' trade marks as keywords on Google for advertisement purposes. In this case, a distinguishing must be operated: on the one hand, the advertiser uses the mark in the course of trade because 'the selection of a keyword identical with a trade mark has the object and effect of displaying an advertising link to the site on which he offers his goods or services for sale';¹¹⁹ on the other, Google's conduct does not constitute an infringing use. Indeed, the fact that Google operates in a commercial context with a view to obtaining a commercial advantage from its customers does not necessarily imply use of the trade mark. Use 'implies, at the very least, that that third party uses the sign in its own commercial communication'.¹²⁰

If applied to OMOs, the dictum in Google France implies that the use of signs identical or similar to trade marks for the advertisement of goods put on sale on the OMO constitutes infringing use only by the OMO's customers and not by the OMO itself.¹²¹ With regard to 3D printing, it emerges that the OMOs which simply enable users to sell or share CAD files embedding trade marks cannot

¹¹⁴ Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights (IP Enforcement Directive)[2004] OJ L 157/45

¹¹⁵ Arnold (n 111) 409

¹¹⁶ Case C-179/15 Daimler AG v Együd Garage Gépjáromjavító és Értékesítő Kft [2016] ETMR 27 para 39

¹¹⁷ Case C-119/10 Frisdranken Industrie Winters BV v Red Bull GmbH [2012] ETMR 16

¹¹⁸ Joined Cases C-236/08, C-237-08, and C-238/08 Google France, Google Inc v Louis Vuitton Malletier SA and Others [2010] ETMR 30, para 57

¹¹⁹ Ibid para 52

¹²⁰ Ibid para 56

¹²¹ Gommers, De Pauw (n 108) 281; see L'Oréal v eBay (n 59) para 103

be held liable for trade mark infringement provided that they do not integrate the sign in their own commercial communication.

3.2.2. OMOs as providers of additional services

Another scenario to analyse is the case where OMOs displaying CAD files embedding trade marks act themselves as advertisers, instead of behaving as mere intermediaries. In the light of EU case law, OMOs engaging in this conduct may be deemed to infringe trade mark law. A useful case in this regard is *L’Oreal/v eBay*,¹²² in which the CJEU clarified further implications of Google France. In this case, eBay did not only create the technical conditions for its users to market infringing goods. Indeed, eBay itself acted as an advertiser as it purchased keywords consisting in L’Oreal’s trade marks on Google so that the sign was displayed to users by Google in a link to the website www.ebay.co.uk. The CJEU concluded that, under these circumstances, eBay had used the sign in its own commercial communication, thereby fulfilling the prerequisite of use in the course of trade.¹²³

The CJEU specified that, when OMOs act as advertisers, they do not necessarily satisfy the prerequisite of ‘use in relation to goods or services’, which is fulfilled only if a link is created between the sign and the service provided by the OMOs.¹²⁴ It must be borne in mind that if OMOs use the sign to promote their own market services there is no use related to goods or services identical or similar to those of the rightsholders. This implies that, if a trade mark with a repute is not at stake, use of a trade mark as a keyword can be deemed as infringing only where it relates to the products offered on the OMOs by its customers.¹²⁵ In *L’Oreal/v eBay*, the CJEU found that eBay had performed an infringing use as it had promoted its customers’ goods while creating a link between the advertised goods and the possibility to buy them through eBay.¹²⁶

Finally, the CJEU affirmed that, once the prerequisites of use in the course of trade and use in relation to goods or services are fulfilled, it is necessary to ascertain whether the reasonably well-informed Internet users would be able to assess without excessive difficulties whether the advertised goods originate from the trade mark proprietor or from a third party. If not, an infringing use of the trade mark by OMOs is at stake.¹²⁷

¹²² *L’Oreal v eBay* (n 59)

¹²³ *Ibid* para 87

¹²⁴ *Ibid* para 88

¹²⁵ *Ibid* paras 89-90

¹²⁶ *Ibid* para 93

¹²⁷ *Ibid* para 94

Interestingly, OMOs can act both as marketplaces and search engines. In the UK case *Cosmetic Warriors v Amazon*,¹²⁸ Amazon was found liable for infringement because it showed a dropdown menu displaying the trade mark *Lush* when consumers typed the letters 'lu' on the Amazon website. Problematically, Amazon did not offer Lush products for sale but made reference to similar products. In line with *Google France and L'Oreal v eBay*, Amazon's conduct was deemed as constituting the use of Lush trade mark.¹²⁹ With specific regard to 3D printing, this dictum entails that, in order not to incur liability, OMOs shall refrain from giving suggestions to consumers in such a way that they can believe a link exists between a certain commercial origin and the CAD files displayed by the OMO itself.

3.2.3. Future perspectives

One of the main controversial issues about the responsibilities of OMOs is that online platforms 'can be used both for good and for bad purposes'.¹³⁰ In the context of 3D printing, it can be imagined that OMOs display both infringing and non-infringing CAD files. This implies that the assessment of the liability of online platforms requires a careful process of balancing: if the regime is too strict the risk is that online platforms stop being the channels not only for bad purposes but also for good ones.

It seems that the case *Google France* fosters a proper balance. It appears reasonable to exclude infringing use when platforms act as mere intermediaries: if platforms could be held liable for the sole fact of providing the technical conditions for the sale or share of CAD files, this would imply a far too broad chilling effect over the activities of platforms. However, as has already been underlined, it is worth noticing that claiming the responsibility of online platforms might be one of the few tools to protect the functions of trade marks from the adverse effects of 3D printing. The question arises as to what extent platforms should be held responsible if they do not act as pure intermediaries.

The debate is ongoing at EU level. In the recent case *Coty v Amazon*,¹³¹ the CJEU dealt with the conduct performed by Amazon that provided its customers with some services under the so-called 'Fulfilment by Amazon' programme. The services included the storage of infringing goods some sellers wanted to market on Amazon itself. The question arose as to whether Amazon's conduct could constitute use under Article 9 EUTMR (corresponding to article 10 TMD). Following *Google France*, the Court concluded that third parties storing goods cannot be held to use a trade

¹²⁸ *Cosmetic Warriors Ltd & Anor v Amazon.co.uk Ltd & Anor* [2014] EWHC 181 (Ch)

¹²⁹ *Ibid* [49] - [69]

¹³⁰ Gommers, De Pauw (n 108) 278

¹³¹ Case C-567/18 *Coty Germany GmbH cv Amazon Services Europe Sàrl et al* (CJEU 2 April 2020)

mark if, without being aware of the infringement, they do not engage themselves in the sale of the goods concerned.¹³²

A more nuanced approach was adopted by Advocate General Campos Sánchez-Bordona in his conclusions.¹³³ The 'Fulfilment by Amazon' programme included a broad range of services, such as the preparation of goods for delivery, the promotion of products, the return of products. For the AG, this entailed that Amazon performed too active a role to benefit from the exemption under article 14 E-Commerce Directive.¹³⁴ Amazon could be assumed to have some kind of knowledge about the infringing nature of the goods involved in the programme. The problem is to assess how much diligence could be required by Amazon to detect infringement.

The AG suggested that a balanced solution could consist of distinguishing 'between intermediaries according to the nature of the services provided to the direct perpetrator of the trade mark infringement'.¹³⁵ In consideration of the fact that Amazon, by providing additional services, was very involved in the sale of infringing goods, it was reasonable to expect it to exercise 'special care'¹³⁶ in checking their lawfulness. In the light of this reasoning, Amazon could be held to have used the trade marks and it could not be exempted from liability for the lack of knowledge of infringement, as it could reasonably be expected to detect the infringement. Relevantly, for the AG, requiring such a special diligence would not clash with the fact that service providers are not subject to a general obligation to monitor in accordance with Article 15 E-Commerce Directive.¹³⁷

The solution suggested by the AG is far from settled, as demonstrated by the decision taken by the CJEU. However, in the near future it may break through present resistance with important consequences also on OMOs dealing with CAD files. Indeed, similarly to Amazon, these marketplaces already provide users with very pervasive services. Tellingly, some platforms offer users a 3D printing service linked to the marketplace. An outstanding example of this is the platform Shapeways,¹³⁸ which allows users to choose a 3D model and select a material. Subsequently, Shapeways prints the model and delivers it to the customer.¹³⁹ Admittedly, it may happen that this service is offered also in relation to CAD files embedding a trade mark. Under

¹³² *Ibid* para 45

¹³³ Case C-567/18 *Coty Germany GmbH cv Amazon Services Europe Sàrl et al*, Opinion of AG Campos Sánchez-Bordona (28 November 2019)

¹³⁴ *Ibid* para 74

¹³⁵ *Ibid* para 78

¹³⁶ *Ibid* para 82

¹³⁷ *Ibid* para 77

¹³⁸ *Sonmez* (n 22) 785

¹³⁹ Shapeways <<https://www.shapeways.com/create>> accessed 18 November 2021

these circumstances, in the light of the AG's conclusions, it could be argued that the marketplaces for CAD files could be held to perform an infringing use of trade marks. As a matter of policy, this is a balanced solution because online platforms are held liable only where it is almost unavoidable for them to detect infringement.

Conclusion

This study renders an account of the interplay between home-3D printing and the notion of infringing use in trade mark law. It has been demonstrated that resolving this legal problem is vital because 3D printing is not a phenomenon which is unfailingly positive: while it must be welcome for its 'democratic' attitude, at the same time it may be detrimental for the functions of trade marks, as in the near future it will enable more and more consumers to engage in the fabrication of products bearing trade marks directly at home.

Predictably, consumers will not perform exclusively a private use of 3D-printed products embedding trade marks. Indeed, it is reasonable to expect that they will display these goods in public. This is likely to cause consumer confusion in the post-sale environment. In some instances, UK and EU cases have given relevance to post-sale confusion in the context of trade mark infringement. This implies that rightsholders have a legitimate interest in reacting against home-3D printing. Importantly, such a reaction will carry advantages for consumers themselves, who are benefitted by the trade mark system. It has been argued that the major problem consists of protecting the functions of trade marks without unduly compressing the potential of 3D printing as a democratic form of manufacturing. This study claims that a major role in this balancing process is played by the notion of infringing use, which is the bulwark of third parties' freedoms within trade mark law.

In the light of the present research, it must be concluded that home-3D printing cannot be considered as an infringing use, apart from the specific case where private consumers engage in the massive sale or spread of 3D-printed objects incorporating a trade mark, provided that, as appropriate, an adverse effect over the functions of trade marks, likelihood of confusion or dilution of the trade mark with a reputation can be proved. This is because the single consumers engaging in the use of a few 3D-printed products bearing trade marks fulfil the prerequisite of 'use in relation to goods' but not the requirement of 'use in the course of trade'. This paper questioned the appropriateness of keeping the latter prerequisite and it found that it is practically pointless to remove it. Consequently, home-3D printing seems meant to remain largely unaddressed.

Finally, this study analysed the notion of use in relation to CAD files embedding a trade mark. This study claims that the sale or share of CAD files should be deemed to fulfil the prerequisite of use in the course of trade, where the same CAD file can be downloaded innumerable times. Moreover, it argues that online marketplaces for CAD files should be held liable for infringement when they have an active involvement in the sale or share of infringing CAD files embedding trade marks.

Bibliography

Books

Arnold R, 'Intermediary Liability and Trade Mark Infringement: A Common Law Perspective' in Giancarlo Frosio (ed), *Oxford Handbook of Online Intermediary Liability* (Oxford handbooks online, 2020)

Gibson I, Rosen D, Stucker B, Khorasani M, 'Development of Additive Manufacturing Technology' in Ian Gibson, David Rosen, Brent Stucker, Mahyar Khorasani, *Additive Manufacturing Technologies*(Springer 2021)

Hong D, Bradshaw S, 'Digital trade mark infringement and 3D printing implications: what does the future hold?' in Dinusha Mendis, Mark Lemley and Matthew Rimmer (eds), *3D printing and beyond: intellectual property and regulation* (Northampton, Massachusetts, Edward Elgar Publishing, 2019)

Kur A and Senftleben MRF, 'European trade mark law: a commentary'(First edn, Oxford University Press 2017)

Pihlajarinne T, Oker-Blom M, 'Different aspects of trade mark confusion with respect to distribution of CAD files in the era of 3D printing' in Taina Pihlajarinne, Juha Vesala, Olli Honkkila (eds), *Online distribution of contents in the EU*(Cheltenham, UK, Edward Edgar Publishing, 2019)

Articles

Bohaczewski M, 'Conflicts Between Trade Mark Rights and Freedom of Expression Under EU Trade Mark Law: Reality or Illusion?' (2020) 51 IIC 856

Breitschaft A, 'Intel, Adidas & Co -is the jurisprudence of the European Court of Justice on dilution law in compliance with the underlying rationales and fit for the future?' (2009) 31/n 10 European Intellectual Property Review 497

Dupont J, 'Unchartered Territories of Trade Mark use', (2013) 2 Intellectual Property Quarterly 139

Fhima IS, 'Trade Marks and Free Speech'(2013) 44/no 3 IIC 293

Fhima IS, 'The Trade Mark Defences Meet Copyright: Fair use Or Three Step Test?' (2014) 4/no 4 Queen Mary Journal of Intellectual Property 297

Galli C, Contini A, 'Stampanti 3d e proprietà intellettuale: opportunità e problemi'(2015) 3 Rivista di Diritto Industriale 115

Grace J, 'The End of Post-Sale Confusion: How Consumer 3D Printing Will Diminish the Function of Trademarks', (2014) 28/no. 1 Harvard Journal of Law & Technology 263

Gommers C and De Pauw E, 'Liability for trade mark infringement of online marketplaces in Europe: are they 'caught in the middle'?' (2020) 15/no 4 Journal of Intellectual Property Law & Practice 276

Langvardt K, 'Remarks on 3D Printing, Free Speech, and Lochner' (2016) 17/no 2 Minnesota Journal of Law, science and technology 779

Lemley M, 'IP in a World Without Scarcity' (2015) 90 New York University Law Review 460

Morris PS, *Guess What Gucci? Post-Sale Confusion Exists in Europe*, (2012) 47/no. 1 Val U L Rev 1

Porangaba LH, 'A contextual account of the trade mark functions theory' (2018) 3 IPQ 230

Rivaro R, 'Stampa tridimensionale e diritti di proprietà intellettuale. Riflessioni sulla proteggibilità del disegno CAD 3D' (2019) 3 Rivista di Diritto Industriale 226

Scardamaglia A, 'Flashpoints in 3D Printing and Trade Mark Law' (2014) 23/no 2 Journal of Law, Information and Science 30

Simon I, 'Embellishment: trade mark use triumph or decorative disaster?' (2006) 28/no 6 EIPR 2006 321

Smith L, Scarlett R, Eseonu U, 'CJEU assesses the meaning of 'in the course of trade' in the context of importation by private individuals' (2020) 15/no 8 Journal of Intellectual Property Law & Practice 578

Sonmez E, 'Cottage piracy, 3D printing, and secondary trademark liability: counterfeit luxury trademarks and DIY' (2014) 48/no 4 University of San Francisco Law Review 757

Weller C, Kleer R, Piller FT, 'Economic Implications of 3D Printing: Market Structure Models in Light of Additive Manufacturing Revisited' (2015) 164 International Journal of Production Economics 43

Yap PJ, Making Sense of Trade Mark Use (2007) 29/no 10 EIPR 420

Żelechowski Ł, 'Invoking freedom of expression and freedom of competition in trade mark infringement disputes: legal mechanisms for striking a balance' (2018) 19/no 1 ERA Forum 115

Online sources

Duann S, 'Nokia becomes the first major manufacturer to release 3D printable files for their product' (Shapeways Blog 2013) <<https://www.shapeways.com/blog/archives/1886-nokia-becomes-the-first-major-manufacturer-to-release-3d-printable-files-for-their-product.html>> accessed 18 November 2021

Mendis D, Secchi D, 'A Legal and Empirical Study of 3D Printing Online Platforms and an Analysis of User Behaviour' (2015) <<https://www.gov.uk/government/publications/3d-printing-research-reports>> accessed 18 November 2021

Reeves P, Mendis D, 'The Current Status and Impact of 3D Printing Within the Industrial Sector: An Analysis of Six Case Studies' (2015) <<https://www.gov.uk/government/publications/3d-printing-research-reports>> accessed 18 November 2021

Weinberg M, 'It Will be Awesome if They Don't Screw it Up: 3D Printing, Intellectual Property, and the Fight Over the Next Great Disruptive Technology' (Public Knowledge Whitepaper, 2012) <<https://www.publicknowledge.org/blog/it-will-be-awesome-if-they-dont-screw-it-up-3d-printing/>> accessed 18 November 2021

CGTrader <<https://www.cgtrader.com/>> accessed 18 November 2021

Pinshape <<https://pinshape.com/>> accessed 18 November 2021

Shapeways <<https://www.shapeways.com/>> accessed 18 November 2021

Thingiverse <<https://www.thingiverse.com/>> accessed 18 November 2021

Case law

UK

Arsenal Football Club Plc v Reed [2001] EWHC 440 (Ch)

Arsenal Football Club Plc v Reed [2002] EWHC 2695 (Ch)

Arsenal Football Club Plc v Reed [2003] EWCA Civ 696

Comic Enterprises Ltd v Twentieth Century Fox Film Corporation [2016] EWCA Civ 41, [2016] ETMR 22

Cosmetic Warriors Ltd & Anor v amazon.co.uk Ltd & Anor [2014] EWHC 181 (Ch)

Datacard Corporation v Eagle Technologies Ltd [2011] EWHC 244 (Pat), [2011] RPC 17 [288]

Och-Ziff Management Europe Ltd v Och Capital LLP [2010] EWHC 2599

Unidoor Ltd v. Marks and Spencer plc [1988] RPC 275

Unilever Plc v Griffin & Anor [2010] FSR 33, [2010] EWHC 899 (Ch)

EU

Case C-772/18 *A v B* (CJEU 30 April 2020)

Case C-48/05 *Adam Opel AG v Autec AG* [2007] ETMR 33

Case C-408/01 *Adidas-Salomon AG, Adidas Benelux BV v Fitnessworld Trading Ltd* [2004] ETMR 10

Case C-245/02 *Anheuser-Busch Inc v Budejovicky Budvar NP* [2005] ETMR 27

Case C-206/01 *Arsenal Football Club Plc v Matthew Reed* [2003] ETMR 19

Case C-63/97 *Bayerische Motoren Werke AG v Deenik* [1999] ETMR 339

Case C-10/89 *SA Cnl-Sucal NV v Hag GF AG* [1991] ECR I-03711

Case C-567/18 *Coty Germany GmbH cv Amazon Services Europe Sàrl et al* (CJEU 2 April 2020)

Case C-567/18 *Coty Germany GmbH cv Amazon Services Europe Sàrl et al*, Opinion of AG Campos Sánchez-Bordona

Case C-179/15 *Daimler AG v Együd Garage Gépjárműjavító és Értékesítő Kft* [2016] ETMR 27

Case C-119/10 *Frisdranken Industrie Winters BV v Red Bull GmbH* [2012] ETMR 16

Joined Cases C-236/08, C-237-08, and C-238/08 *Google France, Google Inc v Louis Vuitton Malletier SA and Others* [2010] ETMR 30

Case C-102/77 *Hoffmann-La Roche & Co. AG v Centrafarm Vertriebsgesellschaft Pharmazeutischer Erzeugnisse mbH* [1978] ECR 01139

Case C-323/09 *Interflora Inc, Interflora British Unit v Marks & Spencer Plc, Flowers Direct Online Ltd* [2012] ETMR 1

Case C-487/07 *L'Oréal SA v Bellure NV* [2009] ETMR 55

Case C-324/09 *L'Oréal SA and Others v eBay International AG and Others* [2011] ETMR 52

Case C-65/12 *Leidseplein Beheer BV, Hendrikus De Vries v Red Bull GmbH, Red Bull Nederland BV* [2014] ETMR 24

Case C-251/95 *Sabel BV v Puma AG, Rudolf Dassler Sport* [1998] ETMR 1

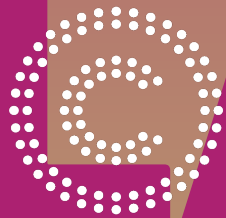
Case T-398/16 Starbucks Corp v EUIPO/Hasmik Nersesyan [2018] ETMR 17

Legislation

UK Trade Marks Act 1994, sec. 9; sec. 10

Directive (EU) 2015/2436, art. 10

Regulation (EU) 2017/1001, art. 9



CREATE

UK Copyright and Creative Economy Centre

School of Law / University of Glasgow

10 The Square

Glasgow G12 8QQ

www.create.ac.uk

2021/13 DOI: [10.5281/zenodo.5720665](https://doi.org/10.5281/zenodo.5720665)

CC BY-SA 4.0

In collaboration with:



LLM in Intellectual Property
& the Digital Economy