

## Calculating Copyright Damages at the Digital Age

BENHAMOU, Yaniv

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**UNIVERSITÉ  
DE GENÈVE**

## CALCULATING COPYRIGHT DAMAGES AT THE DIGITAL AGE

**Yaniv Benhamou, Lecturer University of Geneva, Attorney-at-law (IP & Privacy)<sup>1</sup>**

### **Abstract**

*This contribution for ALAI analyzes the methods to quantify the damages in the event of copyright infringement, including in case of an open access license and a peer-to-peer file sharing. Indeed, the question of quantification of damages has been subject to interesting developments. Just think of the Apple-Samsung battle showing the complexity to calculate Samsung profits when it comes to multi-component products and the current debate in Europe whether punitive damages shall be recognized or not. The two main takeaways from these developments are: (i) there is a trend to overcompensate to take into account not only the specificities of IP rights but also economic and even political elements, such as the profits and the infringer's behavior; (ii) digital use of copyrighted content has increased the difficulties with the quantum of damages, so that economic methods and even scaling of damages may be helpful, if not necessary, tools to calculate damages.*

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## I. Introduction

This contribution analyzes the question of calculation of damages, in particular damages, profits, statutory and punitive damages, and follows the 2018 ALAI International Congress in Montreal.

This topic is familiar to the author, as a **PhD dated 2012** has been dedicated to the quantification of damages after an intellectual property right infringements (from a comparative law perspective, incorporating American Law, European Law and national transpositions into French and German Law, as well as Swiss law)<sup>2</sup>. There were two main takeaways. First, most jurisdictions are traditionally governed by the compensation principle (according to which only the actual injury must be compensated) but case-law often departs from this principle by making it easier to prove prejudice or by increasing the amount of damages awarded, so that one can speak of a trend of overcompensation. The main reasons being to avoid difficulties in calculating the damage and to take into account the specificities of IP rights<sup>3</sup>. Second, economic methods may help calculating damages and have been summarized in a chart to help the courts and practitioners assessing the quantum of damages<sup>4</sup>.

Since then, the topic has been subject to **interesting developments**. Just think of the Apple-Samsung battle showing the complexity to calculate Samsung profits when it comes to multi-component products and the current debate in Europe whether punitive damages shall be recognized or not<sup>5</sup>. The two main takeaways from these developments are: (i) the trend of overcompensation has been confirmed in order to take into account not only the specificities of IP rights but also economic and even political elements, such as the profits and the infringer's behavior (see below II and III); (ii) digital use of copyrighted content has increased the difficulties with the quantum of damages, so that economic methods and even scaling of damages may be helpful, if not necessary, tools to calculate damages (see below IV and V).

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<sup>2</sup> Yaniv Benhamou, Dommages-intérêts suite à la violation de droits de propriété intellectuelle, Zurich 2012. Available at <https://archive-ouverte.unige.ch/unige:75586>.

<sup>3</sup> Benhamou, p. 5 ss (for specificities of IP rights in general) and 7 ss (for repercussions on the quantum of damages).

<sup>4</sup> Benhamou, p. 286 ss.

<sup>5</sup> Apple vs Samsung, US Supreme Court, Oct 2016, No 15-777.

## II. Types of damages

### A. Preliminary procedural questions

When faced with IPR infringements, the legal system provides different remedies for enforcement (civil, administrative and criminal sanctions)<sup>6</sup>, including damages which aims at compensating the consequences of an infringement. Before considering quantifying damages, the practitioner needs to address preliminary procedural questions.

First, **jurisdiction**. The practitioner must analyze where to sue, recalling that certain courts have full jurisdiction to assess damages worldwide (mainly the courts of jurisdictions where the defendant is domiciled), while other courts only have the power to assess the damages limited to a territory (in particular the courts of jurisdictions where the damage occurred)<sup>7</sup>. This question has been traditionally answered by the application of principles of international private law. As regards online torts, it has come to be accepted that the courts have jurisdiction where the act has been committed<sup>8</sup>, the main challenge being to define the nature of where the act has been committed and if there is a required level of contacts.

Caselaw is, however, moving: recent cases tend to require minimum contacts to a given state and to accept jurisdiction only when a website directs its activity towards a forum (so-called “*targeting test*”), while other leading copyright cases regarding online torts admit jurisdiction by the mere fact that a website is accessible to users located in the forum (so-called “*accessibility test*”), the rationale being that any person who puts up a website on the Internet is aware of its global nature and should thus be ready to go to court wherever that site may be consulted<sup>9</sup>. For instance, in the EU, the CJEU has adopted this principle of jurisdiction based on the accessibility of a website as regards to copyright in the *Pinckney* decision and considered that the accessibility of a website is sufficient for triggering jurisdiction in the place of damages under article 7(2) of the Brussels I recast Regulation<sup>10</sup>. However, outside of EU community law, the accessibility standard has been mostly abandoned

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<sup>6</sup> Damages are usually opposed to injunctions: whilst damages look to the past, injunctions look to the future to stop ongoing or upcoming infringements.

<sup>7</sup> See inter alia CJEU, case C-170/12, 3 October 2013, *Peter Pinckney v KDG Mediatech AG*.

<sup>8</sup> For details and references on court cases on how and why courts have decided to exercise their jurisdictional powers over acts committed on the Internet, see Jack Goldsmith / Tim Wu, *Who Controls the Internet? : illusions of a borderless world*, 2006, Oxford University Press.

<sup>9</sup> See Michel Reymond, Geneva Internet Disputes Resolution Policies, Topic 1, and the references thereto.

<sup>10</sup> CJEU, case C-170/12, 3 October 2013, *Peter Pinckney v KDG Mediatech AG*.

and courts tend to require minimum contacts to a given state, such as some activities targeting a given stage (targeting test)<sup>11</sup>.

In our view, the *accessibility test* should be rejected, as it creates a risk of forum shopping and allows any court to enjoy universal jurisdiction over all websites which do not specifically make use of technological ways of filtering users<sup>12</sup>. It ignores that many globally available websites do not seek global attention (e.g. teen blogs, local businesses and personal websites). The *targeting test* should be applied instead, in line with criteria assessing the notion of targeting activity developed by the jurisprudence as well as soft-law instruments<sup>13</sup>.

Secondly, the practitioner shall consider how and where to obtain **evidence**. Indeed, most jurisdictions provide that the court must be convinced about the quantum with sufficient evidence and damages are often rejected for lack of evidence, as they are difficult to prove, in particular due to the specific nature of IP (its intellectual, intangible, ubiquitous and non-consumable nature)<sup>14</sup>. For instance, damages for lost profits require that the claimant prove he would have the capacity to make the claimed amount of lost profit. In addition, damages for actual loss requires that the claimant prove that customers have been deceived by the quality of the counterfeit product. Finally, damages for unfair profits require that the claimant prove an actual increase in the infringer's patrimony and that this increase is attributable to the infringement<sup>15</sup>.

To secure evidence and reduce the level of proof, many jurisdictions offer **procedural mechanisms**. In several jurisdictions, the court may have the **flexibility to estimate** the quantum, e.g. by relying on probability and experience rules or accepting lower degree of certainty, in particular

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<sup>11</sup> *Inter alia*, see UK High Court, LucasFilm Ltd & Ors v Ainsworth & Anor [2011] UKSC 39; Cour d'Appel de Paris, 4ème Chambre A, 26.04.06, *SA Normalu c. SARL Acet*, num. 05/05038; US Court of Appeals, Fourth Circuit, 05.12.00, *Young v. New Haven Advocate*, 15 F.3d 256 (2002). More recently, see *GEMA vs Gutenberg*, DC Frankfurt, 9 February 2018, opposing a German publisher (S. Fischer Verlag GmbH) against a German NGO (Gutenberg Literary Archive Foundation) for making available 56'000 eBooks initially uploaded by internet-users. The District Court of Frankfurt accepted jurisdiction considering Germany as a place of harmful event (within the meaning art. 7 (2) Regulation No 1215/2012), as the website was available in German as well, eBooks in German were made available for download and the license posted on the website indicated to target a *worldwide* audience.

<sup>12</sup> For more details on these possibilities, see Dan Jerker B. Svantesson, *Private International Law and the Internet*, 2nd ed., Kluwer Law International 2007, at 320-352.

<sup>13</sup> For relevant criteria to assess whether a website is targeting a given forum, see *inter alia* the following soft-law instruments which are also useful in our view for IP-related matters: Working Party 29, *Guidelines 3/2018 on the territorial scope of the GDPR (Article 3) (to assess whether a website is targeting EU individuals)*; the WIPO Joint Recommendation Concerning Provisions on the Protection of Marks, and Other Industrial Property Rights in Signs, on the Internet (to assess whether a trademark included in a website may have commercial effect in a given state).

<sup>14</sup> Benhamou, p. 5 ss.

<sup>15</sup> Benhamou, p. 238.

when the exact value of the damage cannot be evidenced and/or when the infringement may have quantifiable effects in the future, so-called “*forward-looking damages*”) <sup>16</sup>.

All types of evidence are usually accepted (e.g. expert opinion, licensing practices, testimony, physical records, inspection, written information, examination of the parties), but the evidence mechanisms vary widely between jurisdictions. Certain countries have a **general discovery process** allowing the court to obtain extensive documents from parties and non-parties to prove the quantum of monetary remedies (e.g. sales data, costs data, pricing documents, product distribution, licenses, business and marketing plans) and testimonial depositions (e.g. accounting, marketing, and sales personnel, and of financial or economic expert witnesses) <sup>17</sup>. In other jurisdictions, where there is no such discovery process, there are other mechanisms for securing evidence. Courts will decide IP cases on infringement first, before they decide on damages, e.g. based on a **two-step approach**, which allows to separate the proceedings into several interdependent stages. As a first step, the right holder can seek a partial ruling on the production of information and accounting of books from the infringer. In a second step, the right holder can claim monetary relief. Hence, plaintiff will typically only quantify his monetary compensation claim after the abovementioned information is obtained through this first-step ruling providing information and accounting of books. Usually, the first step aiming at collecting information requires a lower level evidence than the second step on quantification <sup>18</sup>.

Claims of **trade secrets** made by certain defendants are also usually not a solid defense to object to the production of information, as courts may require the production of documents while simply protecting trade secrets of the infringer, e.g. by redacting the names of third parties <sup>19</sup>.

Thirdly, the practitioner must consider whether there is a **claim against** the infringer or the **body holding the evidence**. Obviously, it is tempting to sue the direct infringers, as they may have the relevant information for the quantum of damages (e.g. sales data, costs data, pricing documents, product). However, at the digital era, direct infringers are often **unknown** or located abroad (e.g. users or administrators of internet platforms), which often requires litigation abroad or a complex

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<sup>16</sup> Benhamou, p. 160 ss. On forward-looking damages, see Benoît Chappuis, Assessing Damage under the Discounted Cash Flow Approach (DCF): Sound Tool or Speculative Method? A Swiss perspective, RSDA 4/2012, 269.

<sup>17</sup> AIPPI, Summary report, 2017 Study question on Quantification of monetary relief, 13 ss.

<sup>18</sup> See under Swiss law, art. 85 Civil Procedure Code: “1. *If it is impossible or unreasonable to quantify the amount of the debt at the start of the proceedings, the plaintiff may bring an action for an unquantified debt. [...] 2. Once evidence is taken or the required information furnished by the defendant, the plaintiff must quantify the debt claim as soon as he or she is able to do so.*”; ATF 143 III 297, Carl Hirschmann II.

<sup>19</sup> Yaniv Benhamou, et al., AIPPI. Study Question - Quantification of monetary relief - Switzerland. AIPPI, 2017, 10.

proceeding to seek the infringer's identity. And when the infringers are known, the work may be infringed only **partially**, often via intermediaries by a single or multiple infringers. In this case, the claimant may consider suing indirect infringers, such as the intermediaries, which may have extensive information (e.g. about the duration of the infringement and the identity of the infringer). However, claimant shall first assess the jurisdiction, and whether the intermediaries may be liable for the production reliefs. A recent case opposing the GEMA against Youtube has shown that the claimant shall first assess this question<sup>20</sup>. The GEMA claimed that YouTube had committed copyright infringement for the uploading of video clips without the consent of rightholders and requested information on revenues generated by the display of these videos. The Court rejected the claim on the production of documents filed by the GEMA, considering that Youtube had no editorial responsibility or knowledge, hence not liable for financial damages. Note that the GEMA did not request injunctive relief and the court therefore did not address the issue whether YouTube had to remove infringing content if it had been made aware of its infringing nature and that the decision is now under appeal by the Supreme Court<sup>21</sup>.

In summary, the practitioner needs to first anticipate these procedural questions before litigating.

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<sup>20</sup> see GEMA vs Youtube, OLG Munich, 28 January 2016.

<sup>21</sup> Also note that the quantification of damages for indirect/contributory infringement does not differ from the quantification of damages for direct infringement. Consequently, regardless the kind of IP right, it is possible as a matter of principle to claim the entire loss from the contributory infringer. AIPPI, Summary report, 2017 Study question on Quantification of monetary relief, 13 ss.



## B. Three (3) main types of damages

The concept of damages varies between jurisdictions, which shall be however subject to international standards, such as those set out in the the TRIPS Agreement<sup>22</sup>. From the outset, it must be recalled that damages are mainly subject to the compensation principle, according to which damages seek to “*erase*” the financial consequences of infringement (whether the prejudice suffered by the injured party or the unfair profits made by the infringer) and the strict equivalence between the compensation and the claimant’s damage or the infringer’s profits must be respected<sup>23</sup>. This compensation principle is also sometimes referred to as the “*but for*” test, according to which only the injury which is a “*but for*” consequence of the infringement must be compensated<sup>24</sup>. The plaintiff must also usually prove both the existence and the amount of its loss in a sufficiently determined and concrete manner in order to prevent the dismissal of its claim<sup>25</sup>. In addition to this compensatory function, damages may also have a deterrent function (e.g. depriving the infringer of his unfair profits), and in some jurisdictions even a punitive function (i.e. to punish malicious behavior)<sup>26</sup>. It must be also recalled that some jurisdictions provide IP-specific rules of damages, while other jurisdictions simply refer to their laws of tort. Even in jurisdictions with specific IP laws, damages did not develop in a vacuum and are subject to general rules of damages. Consequently, damages are generally governed by the “*compensation principle*”.

Despite the variety of damages conceptions, there are three main types of damages. **The first type is actual damage**, which is defined as the actual loss incurred by the claimant. Actual damage may be quantified through various ways, described below. Methods (2) and (3) below are proxies for method (1)<sup>27</sup>.

- (1) quantifying the copyright owner’s lost incurred or lost profits. This may be delicate to prove. As regards the loss incurred, the claimant must prove that there have been some

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<sup>22</sup> Art. 45 TRIPS Agreement: “1. *The judicial authorities shall have the authority to order the infringer to pay the right holder damages adequate to compensate for the injury the right holder has suffered because of an infringement of that person’s intellectual property right by an infringer who knowingly, or with reasonable grounds to know, engaged in infringing activity.* 2. [...] *In appropriate cases, Members may authorize the judicial authorities to order recovery of profits and/or payment of pre-established damages even where the infringer did not knowingly, or with reasonable grounds to know, engage in infringing activity.*”. For an analysis of art. 45 TRIPS Agreement, see Benhamou, 17 ss.

<sup>23</sup> Yaniv Benhamou. Compensation of Prejudice for Infringements of Intellectual Property Rights in France, under the Directive 2004/48/EC and Its Transposition Law : New Notions? *International Review of Intellectual Property and Competition Law (IIC)*, 2009, 126.

<sup>24</sup> Terence, *Intellectual Property Law: Damages and Remedies*, New York 2000, 1 ss.

<sup>25</sup> For Swiss law, see Chappuis, 271 ss and the several case-law references quoted thereof.

<sup>26</sup> Benhamou, 113 ss.

<sup>27</sup> AIPPI, Summary report, 2017 Study question on Quantification of monetary relief, 3 ss.

market disturbances, because he had to increase the public's knowledge through advertisement or because the company's goodwill diminished (sometimes also including pre-trial costs). As regards the lost profit, he must prove that there was a decline in, or a non-increase of his turnover and that, in the absence of IP infringement, he would have made those profits (e.g. that he would have sold his products instead of the infringer).

- (2) quantifying the right holder's lost sales by reference to the infringer's profit. This may be delicate to prove, in particular due to the causation requirement and the deductibility of costs; or
- (3) assessing a reasonable royalty. The reasonable royalty is assessed on a case-by-case basis, usually by reference to comparables (i.e. previous licensing agreements, tariffs or recommendations of the respective sectors) or to a hypothetical negotiation (i.e. based on what "reasonable parties" would have agreed on based on all the circumstances and with full knowledge of the relevant facts)<sup>28</sup>. The principles set out in the patent-related US decision *Georgia-Pacific Corp. v. United States Plywood Corp.*, might be relevant to determine the amount of the hypothetical license fee, and is often quoted by caselaw also outside the US<sup>29</sup>.

**The second type of damages is unfair profits**, which refer to the profits unduly made by the infringer with the infringement of right. This may be delicate for two reasons. First, since only the profits attributable to the infringement shall be recordable, they shall be reduced depending on other factors causing that profits, such as non-infringing component incorporated into a multifaceted device ("causation-test"). Secondly, since only the net profits shall be recordable, certain costs must be deducted from the turnover<sup>30</sup>.

**The third type of damages are statutory damages**, which refer to a specific type of damages provided under certain jurisdictions, according to which the court may elect pre-established amount (or increase the damages by a multiplier, usually up to three times the amount), to take account of the circumstances (such as the defendant's behaviour before and during the proceeding and its financial conditions). The rationale for providing statutory damages is because actual damage is

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<sup>28</sup> See Jenny, Die Eingriffskondition bei Immaterialgüterrechtsverletzungen: unter Berücksichtigung der Ansprüche aus unerlaubter Handlung und unechter Gesch.führung ohne Auftrag, Zurich/ Bâle/Genève 2005, 317: depending on the concrete needs of the parties, the reasonable royalty can be a lump-sum, a per-unit royalty, a percentage of revenues or, or a combination of the aforementioned.

<sup>29</sup> *Georgia-Pacific Corp. v. United States Plywood Corp.*, 446 F.2d 295, 170 USPQ 369 (2d Cir. 1971), cert.den., 404 U.S. 870 (1971), which established that the licensor's established policy and marketing program to maintain its monopoly by not licensing others to use his invention.

<sup>30</sup> For a discussion regarding which costs (fixed, general and/or specific costs attributable to the infringement), with reference to the jurisprudence and doctrine, see Benhamou, 100 ss.

difficult to prove<sup>31</sup> and because the guarantee of statutory damages incentivizes copyright owners to invest in and enforce their copyrights<sup>32</sup>.

Examples of statutory damages may be found in American law which grants the court discretion in the awarding of such statutory damages in lieu of actual loss or unfair profits (within the prescribed minimum and maximum amounts of USD 200 - 150'000 per infringed work)<sup>33</sup>, using several benchmarks within the allowable range, such as the amount of expenses saved and profits reaped by the defendant, the amount of revenue lost by the copyright owner and the infringer's behaviour<sup>34</sup>. For instance, in a recent case (*5Pointz*), the District Court of New York ordered the landlord of a building in Staten Island to pay 21 graffiti-artists whose works were destroyed a total of USD 6.7 million, so that the maximum amount of statutory damages had been awarded due to the infringer's behaviour (i.e. USD 150,000 per 45 infringing work)<sup>35</sup>.

While actual damages and unfair profits are traditional in continental law systems and of a compensatory nature, statutory and increased damages are typical of common law systems and contain a punitive nature. However, all these damages inherently contain a deterrent effect (one can think that the unfair profits deprive the infringer of his wrongful conduct, based on idea that committing the crime does not pay) and there is a trend for continental law systems to over-compensate, so that one can speak of a shift towards punitive damages<sup>36</sup>.

## **I. Actual loss and overcompensation**

Given the trend of overcompensation while remaining attached to the principle of compensation, it is interesting to see how such overcompensatory amounts may be legally justified.

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<sup>31</sup> Ross, 12, referring to *Lauratex Textile Corp. v. Allton Knitting Mills Inc.*, 519 F. Supp. 730, 732-733 (S.D.N.Y. 1981) (statutory damages are appropriate when measure of actual damages is difficult to prove).

<sup>32</sup> Ross, 12, referring to *Unicity Music, Inc. v. Omni Communications, Inc.*, 844 F. Supp. 504, 510 (E.D. Ark. 1994) (statutory damages aim at compensating plaintiffs and deterring defendants from future infringing conduct by making it clear that infringement is more expensive than obtaining permission).

<sup>33</sup> Section 504 Copyright Act allows the copyright owner to recover statutory damages instead of actual damages and profit, provided that he has complied with the Copyright Act's registration requirement found in Section 412 to recover statutory damages and if he has not already been compensated for the infringement through another cause of action, such as breach of a contractual prohibition on reproduction and distribution.

<sup>34</sup> See Ross, 12 ss.

<sup>35</sup> *Jonathan Cohen et al. vs Gerald Wolkoff et al.*, Case No. 13-CV-05612(FB)(RLM): Considering that the defendant and owner of the building (Gerald Wolkoff) has not given the artists 90 days' notice to allow them the opportunity to salvage their works, did not take any preservation measures, and that the destruction "*was an act of pure pique and revenge for the nerve of the plaintiffs to sue to attempt to prevent the destruction of their art*".

<sup>36</sup> Benhamou, p. 113 ss.

## A. Royalty as a minimum standard

As an example of overcompensation, one can observe many examples of legislation and caselaw that tend to grant a royalty fee, as a minimum standard in lieu of the actual damage. According to the strict compensation principle, a (lost) royalty fee should be only granted if the claimant can show that he would have effectively concluded a license agreement “*but-for*” the infringement, which should never be the case whenever the infringer had no intention to invest for using an IPR and even less whenever the copyright owner does not intend to commercialize his right (e.g. when a protected work is under an open access license). However, many statutes (such as EU-law) and court decisions grant a royalty-fee, even when the infringer would not have concluded a license agreement (i.e. without the proof of a lost royalty fee, sometimes even multiplied by 2 or 3), so that damages may exceed the actual loss<sup>37</sup>.

In a recent case opposing the Polish collective management organisation SFP against the broadcaster OTK, which used copyright works without authorization, the CJEU considered that it is compliant with the Enforcement-Directive to order OTK to pay a (hypothetical) royalty fee (up to 2 or 3 times the standard fee) without the proof of an actual loss. The CJEU also indicated that the Enforcement Directive seems to leave room for punitive damages, considering that it does not preclude “*national legislation to compensate for [...] a sum corresponding to twice the amount of a hypothetical royalty*”<sup>38</sup>. Scholars should not interpret this decision as a blank check to grant punitive damages in the EU. First, the CJEU speaks about punitive damages only in relation to the hypothetical royalty fee. Second, because the CJEU explicitly did not address the issue of whether Article 13 of the Enforcement Directive allows or prohibits “real” punitive damages, which aims at sanctioning the infringer, the amount payable in the present dispute was simply considered punitive because no proof of loss was required. Third, the Polish law provision in question (provided up to 2 or 3 times the standard fee) was declared partially unconstitutional in 2015 by the Polish Constitutional Court. Consequently, this decision shall not be seen as a *blanc-seing* to provide significant punitive damages but simply that a hypothetical royalty may exceed the standard fee (e.g. up to 2 or 3 times).

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<sup>37</sup> For EU-Law, see art. 13 Directive 2004/48 of 29 April 2004 on the enforcement of intellectual property rights (“Enforcement-Directive”) (“*as an alternative to [lost profit and unfair profits, Courts] may, in appropriate cases, set the damages as a lump sum on the basis of elements such as at least the amount of royalties or fees which would have been due if the infringer had requested authorisation to use the intellectual property right in question*”). For national transpositions into German and French law and several case-law granting a reasonable royalty-fee, see Benhamou, 37 ss. For American Law and several case-law granting a reasonable royalty-fee, see Benhamou, 87 ss.

<sup>38</sup> OTK vs SFP, ECJ, 25 January 2017, para. 25. This royalty-fee multiplied by 3 has been awarded by the Polish court based on a Polish provision which allowed up to 2 or 3 times the standard fee, provision that has been subsequently declared partially unconstitutional in 2015 by the Polish Constitutional Court.

Consequently, practitioners may try to claim more than the standard fee, relying on other elements (such as attorney's fees, actual loss or unfair profits).

## **B. Aggregation of negative consequences**

Another example of overcompensation is the trend to increase the actual loss by adding losses for other alleged negative consequences, sometimes without clear justification.

Different negative consequences, in particular actual loss and unfair profits and/or further consequences such as reputational damage, may be sometimes cumulated, provided, however, that they do not compensate the same element. For instance, a reasonable royalty may be cumulated with unfair profits, or further negative consequences, usually to take into account, and deprive the infringer from, unfair profits. In a French case, the textile company Renoma used photographs for an advertising campaign linked to an exhibition in New York. The Paris court increased the damages by (i) reference to the standard royalty as actual loss, (ii) multiplied by 2 on account of the defendant not seeking the consent and (iii) by adding an amount of EUR 2,000 for “*the loss of opportunity*” to commercialize photographs following an infringement<sup>39</sup>. The court cumulated these losses without clear justification as to the calculation. One can also remember the French *eBay vs. LVMH* case, where the Paris court calculated the reasonable royalty and the reputational damage based on the profits made by eBay, multiplied by 2 for the reasonable royalty and by 4 for the reputational damage to ensure to deprive the infringer from any unfair profits and obtain a deterrent effect, so that one can think of “*hidden punitive damages*”<sup>40</sup>.

Consequently, practitioners may try to claim more than the standard fee, relying on these other negative consequences, or rely on actual damage or unfair profits and try additional factors cumulatively, bearing in mind that all elements shall be brought to the judge and made clear that they do not compensate the same element.

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<sup>39</sup> Paris Tribunal, 22 September 2017: Mr. X. v Mr. Y., Société Textile des Articles Renoma and Renoma Invest (“*the loss of opportunity to hope to sell the original prints of the photographs since he is a professional photographer*”).

<sup>40</sup> *eBay c. LVMH*, Tribunal de commerce de Paris, 30 Juin 2008, RG 2006077799, analyzed by Benhamou, p. 78 ss. See Behar-Touchais Martine, in: Faut-il moraliser le droit français de la réparation du dommage?. Colloque Paris V, Petites Affiches, Hors-Série 20 nov. 2002, p. 114 who speaks about “*hidden punitive damages*” (*dommages-intérêts punitifs déguisés*).

### III. Unfair profits and causation

With unfair profits, an interesting question is to analyze the causation between the profits and the infringement, as only the profits attributable to the violation are recoverable. Consequently, the causation test may reduce the damages depending on the infringing and other non-infringing elements. However, causation can also sometimes expand the amount of damages.

#### A. Causation limiting damages

Causation may limit the unfair profits, as only the profits attributable to the violation must be returned and as the overall profits shall be reduced depending on all additional non-infringing elements, such as the infringer's performance (e.g. network, business knowledge, advertisement efforts) and other non-infringing elements that motivate the purchasing decision of consumers (e.g. functionality of the product). For example, a music band plays in a festival one copyrighted song without authorization among a total of 10 songs. The unfair profits shall be based on a tenth of the profits made by the concert organizer. For a more complex example, think of multi-component products, such as a TV control software program incorporated into a smart-phone, which requires a delicate allocation of profits between the amount attributable to the software and the amount attributable to other non-infringing elements (e.g. design, functionality, other softwares and functionalities)<sup>41</sup>.

This allocation of profits is highlighted in a recent American case around the Apple-Samsung battle. The courts had to determine, based on Article 35 of the U.S. Code, which provides "*Whoever [...] sells any [infringing] article of manufacture [...] shall be liable to the owner to the extent of his total profit*", the "*article of manufacture*," whether the "*article of manufacture*" must always be the end-product sold to the consumer or whether it can also be a component of that product.

In 2007, Apple released the first-generation iPhone. It obtained several patents in connection with the iPhone, including three of particular importance to this case: D618,677 for the black rectangular front face with rounded corners; D593,087 for the rectangular front face with rounded corners; and D604,305 for the grid of 16 colorful icons on a black screen. Samsung released a series of smartphones after the iPhone was released. In 2011, Apple determined that these smartphones re-

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<sup>41</sup> Example inspired from a recent litigation between a Swiss company (SmartData) against Apple, alleging that Apple's iPhone, AppleTV and Remote are infringing upon their patent. See <https://www.patentlyapple.com/patently-apple/2012/02/apple-sues-samsung-for-patent-infringement-and-gets-sued-by-smartdata.html>.

sembled the iPhone and sued Samsung for design patent infringement, claiming damages for infringement of the three above-named patents. The **previous court** ordered Samsung to pay USD 399 million, equaling the total profit Samsung made from selling the infringing smartphones on the **assumption that unfair profits shall be calculated on the whole end-product as an “article of manufacture”**<sup>42</sup>. The district court upheld the jury verdict and rejected Samsung’s argument to limit damages to the infringing ‘article of manufacture’ (35 U.S.C. Section 289) because the “*innards of Samsung’s smartphones were not sold separately from their shells as distinct articles of manufacture to ordinary purchasers*”<sup>43</sup>.

The US Supreme Court reversed the decision and remanded based on the following grounds: The term “article of manufacture” is “*broad enough to encompass both a product sold to a consumer as well as a component of that product*”<sup>44</sup>. Today many products are **complex and incorporate many protected and non-protected items**. For instance, a smartphone may contain a patented item that costs no more than USD 1 to produce and the whole smartphone finally may be sold for USD 500 to the end-user. It is not clear why damages shall be based on the whole product<sup>45</sup>. Just because the consumer cannot purchase the component separately from the end product, does not mean that the component is not an “article of manufacture.” **Relevant Dicta:** Justice Sotomayor offered the following example to differentiate between a **single-component product** and a **multi-component product**: “*In the case of a design for a single-component product, such as a dinner plate, the product is the ‘article of manufacture’ to which the design has been applied. In the case of a design for a multicomponent product, such as a kitchen oven, identifying the ‘article of manufacture’ to which the design has been applied is a more difficult task*”<sup>46</sup>. The Court **declined** to answer whether in the patent issue at stake, the relevant article of manufacture was the smartphone or a particular smartphone component.

The Federal Circuit declined to decide the matter and **further remanded** to the district court. In **July, 2017**, the Northern District of California reheard the case. After procedural questions, the district court declined to grant a new trial, deferring the decision until the parties submitted further briefs outlining a **test for how to determine whether the relevant “article of manufacture” is a**

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<sup>42</sup> 920 F. Supp. 2d 1079 (N.D. Cal. 2013); 926 F. Supp. 2d 1100 (N.D. Cal. 2013).

<sup>43</sup> 786 F.3d 983 (Fed. Cir. 2015).

<sup>44</sup> Samsung Electronics Co., Ltd., et al. v. Apple Inc., US Supreme Court, 6 December 2016, case number 15-777.

<sup>45</sup> For the anecdote, Justice compared the case with the VM-Auto: do people buy a car only for their great design? It is absurd to rely on the whole product. *I can’t get over the thought that nobody buys a car, even a Beetle, just because they like the way it looks.*

<sup>46</sup> Samsung Electronics Co., Ltd., et al. v. Apple Inc., US Supreme Court, 6 December 2016, case number 15-777, Justice Sotomayor’s opinion.

**component or the end-product** (mainly who bears the burden of proof). The district court approved an **Amicus curiae brief** (submitted by the **United States Government** in support of neither party) based on a **four-factor test, and awarded a new trial. This is the final decision thus far; the decision from the new trial has not yet been issued.** The following are the four factors detailed in the U.S. Government's amicus brief:

- “[T]he scope of the design claimed in the plaintiff’s patent, including the drawing and written description”;
- “[T]he relative ***prominence of the design within the product*** as a whole”;
- “[W]hether the ***design is conceptually distinct from the product as a whole***”; and
- “[T]he ***physical relationship between the patented design and the rest of the product,***” including whether “the design pertains to a component that a user or seller can physically separate from the product as a whole,” and whether “the design is embodied in a component that is manufactured separately from the rest of the product, or if the component can be sold separately.”<sup>47</sup>

In lieu of this approach (determining whether or not unfair profits shall be determined on the whole end-product based on a four-factor test), we believe that the profits should always be allocated by taking into account all infringing and non-infringing elements, such as the functionality of the product (mainly for works of applied art), the price and network of the infringer, and the differences between the protected good and the infringing good (e.g. whether it is an imitation or a slavery copy)<sup>48</sup>.

To highlight this approach, it is helpful to consider a few other cases. In a German case (“Tripp-Trapp”) opposing the holder of the exclusive user rights to the “Tripp-Trapp” children's highchair against a defendant who marketed the “Alpha” similar children's highchair, the German Supreme Court recalled that the causality principle requires only the part of the profits that derives from the infringement to be surrendered. According to the causality principle, it is appropriate to take account not only aesthetic elements and whether the disputed object is a copy or imitation, but also other non-infringing elements such as functionality and the price of the object. Consequently, the unfair profits were reduced by about 50% due to the functionality of the chair and the lower price

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<sup>47</sup> Samsung Electronics Co., Ltd., et al. v. Apple Inc., US Supreme Court, 6 December 2016, case number 15-777, Brief for the United States as amicus curiae supporting neither party <https://www.scotusblog.com/wp-content/uploads/2016/06/15-777npUnitedStates.pdf>.

<sup>48</sup> For an analysis of all criteria, see Benhamou, p. 60 (German Law), p. 77 (French Law), p. 100 (American Law), p. 188 (Swiss Law).



which prominently motivated the purchasing decision of the consumers as well as the infringer network<sup>49</sup>.

Similarly in another German case (“four lines”) opposing the Adidas company against a counterfeiter, the Frankfurt court reduced the profit made by the sale of infringing shoes up to 80%, as the purchasing decision was not only based on infringing elements (similarity between 4 and 3 lines) but also on the selling skills of the infringer. In a nuts hell, 4 lines do not equal 3 lines<sup>50</sup>.

## **B. Causation expanding damages**

The causation may also expand damages, particularly by **extending to the whole end-product**, when the infringing element incorporated into a multifaceted machine motivated the consumer’s purchasing decision (“*entire market value rule*“). This results from the four-factor test explained above and answers whether the whole-end product in lieu of separate single element shall be taken into account for the unfair profits.

Causation may also **extend to non-infringing separate elements** (goods or services) which are offered alongside the protected article (e.g. equipment, spare parts, which the right holder ordinarily sells alongside the protected article) (“*functional unit rule*”)<sup>51</sup>. To assess this rule, we suggest the theory of accession of constituent parts of whole product, in particular the "*functional condition*", which may help in determining whether the non-infringing good shall be seen as a constituent part of a whole-end product. This depends on whether the constituent part appears incomplete without the main part, i.e. would not fulfil its destination / characteristic. If yes (e.g. because the ancillary products cannot be sold separately, or because it appears incomplete without the main part), the claimant could well argue that the non-infringing good is a constituent part of the whole-end product and shall be comprised in the lost profits. If not (e.g. because the ancillary products can be sold separately), then the lost profits shall be limited to the infringing good. Examples of constituent parts are include the roof of a house, a scale fixed in a sustainable way, an electrical system attached to a building, or an installation of water or fuel tanks. Examples of items that are not constituent parts include a provisional scaffolding or scale<sup>52</sup>.

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<sup>49</sup> Benhamou Yaniv, Comment on the German Federal Supreme Court (Bundesgerichtshof, 14 May 2009 - Case No. I ZR 98/06). *International Review of Intellectual Property and Competition Law (IIC)*, 2010, p. 236 ss.

<sup>50</sup> Adidas vs Vier-streifen, OLG Frankfurt GRUR-RR 2003, 274.

<sup>51</sup> HEINRICH Peter, PatG/EPÜ: Kommentar zum Schweizerischen Patentgesetz und den entsprechenden Bestimmungen des Europäischen Patentübereinkommens, Berne 2010, art. 73 PA, N 35.

<sup>52</sup> Swiss Supreme Court, ATF 116 II 333.

For instance, in a Swiss case of an illegal copy of a watch crown, the Swiss Supreme Court admitted that Rolex could claim the profits made by the defendant (Schmitz Brothers) not only based on the infringing element (crown) but also the non-infringing elements (such as watch case)<sup>53</sup>.

#### IV. Online infringement

If these principles seem pretty clear, even if difficult to apply, the use of online goods raises new difficulties. To highlight these difficulties, consider the following three examples.

##### A. Damages when violating a GPL?

A first delicate example is to know if and how to assess damages when violating a content subject to *open access*<sup>54</sup>, specifically *open licenses*<sup>55</sup>, as the copyright owner intended to distribute his work freely.

In a recent case, a German court considered that, when violating a GPL<sup>56</sup>, a license fee of zero must be assumed, as compliance with the terms of the GPL means no license fee<sup>57</sup>. The claimant was an IT company which offered a WLAN software program under the GNU General Public License and claimed damages of EUR 100,000 against a German university for not supplying the source code and the license terms, hence violating the GPL. The lower court decided that the unlawful distribution (breach of the license terms, which leads to the termination of the license §4.2 GPL) was a copyright infringement and the university had to pay damages corresponding to the royalty fee. The District Court of Hamm considered, however, that no damages would be granted, as the IT-company offered the software for free and completely waived any payment<sup>58</sup>. There was a similar case in Switzerland, which opposed a photographer who uploaded his photograph to an open access

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<sup>53</sup> Swiss Supreme Court, ATF 63 II 277, Recital 3 (Rolex vs Schmitz frères).

<sup>54</sup> Open access is understood here as the possibility to view the work, which may be either fully unrestricted (in particular covering the right to reproduce, share, and disseminate the digitized work) or restricted (in particular permits users to view but not to reproduce, share, and disseminate the digitized work).

<sup>55</sup> Open licenses are understood here as standardized licenses (whether partly restricted or not), such as those proposed by certain organizations, such as Creative Commons for literary and artistic works by [creativecommons.org](http://creativecommons.org), or General Public Licenses (GPL) for software by the Free Software Foundation.

<sup>56</sup> General Public Licenses (GPL) version 2 (GPLv2), is dated June 1991, and has been renewed in 2007 in GPL version 3 (GPLv3).

<sup>57</sup> Hamm District Tribunal, 13 June 2017 (4 U 72/16). For the entire decision see [http://www.justiz.nrw.de/nrwe/olgs/hamm/j2017/4\\_U\\_72\\_16\\_Urteil\\_20170613.html](http://www.justiz.nrw.de/nrwe/olgs/hamm/j2017/4_U_72_16_Urteil_20170613.html). For a summary of the judgment, see Kluwer Copyright blog : LABELSIUS, No Damages when Violating the GPL.

<sup>58</sup> GNU GPL Software, LG Hamm, 13 June 2017.

website (Wikimedia) against a third party using the photograph without authorization and mentioning the source. The Court refused to grant any damages on the assumption that, because the photograph has been made available on Wikimedia subject to a free license, “*Claimant does not intend to license his photo against payment. No damage in the form of lost sale must be assumed*”<sup>59</sup>.

If courts tend to easily conclude that there are no damages in case of open access content, several situations must be distinguished. If the above cases were characterized by the lack of intent to monetize the work, there may be other cases with licenses actually concluded in parallel to the open access license (so-called dual-licensing).

From the outset, it is good to remember that any third party who does not comply with the terms of an *open license* is infringing the copyrighted work<sup>60</sup> and that there are different types of terms, hence infringements.

First, one can consider the infringement of a **fully permissive license** (such as CC0 or BSD). These licenses allow the use of work without restriction whatsoever (users may use, modify and distribute the work freely without restriction). Consequently, there seems to be no infringement *per se*<sup>61</sup>. Even assuming that there is an infringement, there seems to be no damage. The author’s patrimony does not fluctuate with the use of the work. CC0 may be even seen as a transfer, or at least a waiver of the author to exercise his right of integrity<sup>62</sup>. However, in certain jurisdictions, the right of integrity is unwaivable, or at least when the modification affect the personality’s right<sup>63</sup>. Consequently, there may be reputational harm, in particular if the changes are significant enough to affect the author’s reputation.

Next, consider the infringement of a **free license** (such as copyleft, GPL or CC BY-SA). Most licenses grant the right to use and modify the content (e.g. CC BY, CC0 or GPL), but require the

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<sup>59</sup> Court of Appeal Basel, Panoramabild, sic! 2016 594. After having rejected copyright protection for the photograph for lack of originality (realized with a smartphone without sufficient level of creativity / originality).

<sup>60</sup> A contrario of the mere fact to use a copyrighted work subject to a free license means an implied consent to be bound by the license terms (e.g. art. 9 GPLv3 : « [t]herefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so ». See also CC BY : « [b]y exercising any rights to the work provided here, you accept and agree to be bound by the terms of this license. The licensor grants you the rights contained here in consideration of your acceptance of such terms and conditions »).

<sup>61</sup> Michel JACCARD/EVA CELLINA, Les creative commons, Avenir du droit d’auteur ?, SJ 2017 II p. 229 ss, 237. Under Swiss law, certain moral rights are considered absolute and not assignable, such as the paternity right (art. 9 al. 1 Swiss Copyright Act) and integrity right (art. 11 al. 1 Swiss Copyright Act).

<sup>62</sup> François DESSEMONTET, Le droit d’auteur, Lausanne (CEDIDAC) 1999, N 107.

<sup>63</sup> For instance, under Swiss law, see art. 11 al. 2 Swiss Copyright Act “*Even where a third party is authorised by contract or law to alter the work or to use it to create a derivative work, the author may oppose any distortion of the work that is a violation of his personal rights*”.

indication of the source or access to the source code and that modified versions be marked as changed<sup>64</sup>. When an infringer uses such content by making the content proprietary and hence not complying with the term *copyleft*, there should be no damages, as no license fee may be required by the author (there may be, however, unfair profits).

However, when an infringer makes use of the video for commercial purposes which is subject to a **dual-licensing**, there may be damages in the form of lost royalty-fee as the infringer should have paid the *ad hoc* license fee but for the infringement<sup>65</sup>. When an infringer modifies the content but the **changes are not marked**, and the modified version becomes defective, this could affect the reputation of the author. There is no way to distinguish between the original and the defective version and public would associate the defective software with the original software, causing damage to the author's reputation. This reputational damage could decrease his turnover, e.g. when he offers other coding services and the clients lose trust in his services, or existing clients terminate contracting services due to the reputational damage. When the infringer **does not attribute** the original content to the author (which becomes successful), the author could also claim reputation damages (based on the decrease or non-increase of his reputation). The author could even try to claim lost profits, as he would have concluded other commercial contracts. In this case, these profits could be qualified as "*lost opportunity to make profit*", or as lost profit defined as the profits he would have made without the infringement.

## **B. Damages by internet users and online sharing platforms**

It may be challenging to assess damages when the violation concerns only a portion of the protected work, in particular in relation to online sharing platforms. , as the copyrighted works are mostly used as training data not recognizable or inexistent in the output.

Distinction is to be made between the (direct) liability of internet users sharing their files with other internet users, or (secondary) liability of the online sharing platforms for indexing links to files "ready for download".

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<sup>64</sup> See GPLv3 § 7 : « [f]or both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors previous versions ».

<sup>65</sup> Think of the following hypothesis: an author makes his work (e.g. a video) available under a license CC BY-NC and, in parallel, to third parties under a non-exclusive license for commercial purposes.

**Internet users** may be held liable for making files available to other users (providing users are called “seeders”, downloading users “leechers”) via online sharing platforms<sup>66</sup>. The platforms allow users to share and upload, in segments (“torrents”), works present on their computers. The files offered on the online sharing platforms are mostly copyrighted works without the rightholders having given their consent to the operators or users of that platform to carry out the sharing acts in question. The problem is that only a fraction / segment of each user's file is actually downloaded by other users. According to the compensation principle, only the works that have been actually downloaded shall be compensated, so that each user shall only be liable to the portion of their segment (which may be one tenth, or even less depending on the circumstances).

**Online sharing platforms** may be also held liable for making files available to other users, now that the CJEU has confirmed that linking to protected content could lead to infringing copyright in some cases. The next question is then to know how much do copyright owners lose from online platforms hosting links to unauthorized copies of their works uploaded by third parties? In other words, how much should the court award in damages, and on what basis? The problem is that only a fraction of users “viewing” or accessing the files may have downloaded them. According to the strict compensation principle, only the works that have been actually downloaded shall be compensated.

In a recent French decision involving a sharing platform (wawa-mania) against copyright owners (music and film industry), the courts admitted secondary liability of the platform for redirecting users to servers hosting infringing downloadable content (videos, music, films and computer softwares) and generated revenues from advertising spaces on its pages. The court then calculated a flat rate damages of 13 million based on the formula: Two (2) euros of royalty-fee per protected works listed on the website, multiplied by the number of views each file received, divided by two<sup>67</sup>:

$$\text{damages} = \text{number of copyright works} \times \left( \frac{\text{number of views of each copyright work}}{2} \right) \times 2\text{€}$$

The formula could have been simplified to the number of works multiplied by the number of views, but the court halved the number of views for each work listed on the linking-website considering

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<sup>66</sup> Whether a torrent file (i.e. trackers identifying them and a particular file) or magnet link (i.e. links identify the content of a torrent file and refer to it through a digital fingerprint).

<sup>67</sup> SACEM et al. vs Wanna.com Paris Court of Appeal, 7 June 2017.

that users "**viewing**", or **accessing, the files may not have downloaded them**. Applying a coefficient of two in the number of views to calculate damages was regarded as a **fair account of the "likely" levels of infringement**. Nothing in the decision explains or justifies why the likely levels of infringement would be accurately obtained by dividing the number of views by two. Was there expert evidence submitted to support this calculation? Was it based on the court's own experience of downloading and streaming - or perhaps that of a reasonable person? The Court of Appeal approved the calculation, considering this division of "views" by two as appropriate since there was **no evidence** provided by the claimant that viewing (or accessing) the files leads to their **download consistently**. For this reason, the fixed amount of damages had to account for a probable, and not proven, prejudice.

This coefficient in the equation to calculate damages was regarded as a fair account of the "likely" levels of infringement. If such decision is in line with the current jurisprudence and legislation to consider internet intermediaries as key allies in the fight against infringement and to sometimes ease the burden of proof, nothing in the decision explains or justifies why the likely levels of infringement would be accurately obtained by dividing the number of views by two. Was it based on expert evidence or the court's own experience of downloading and streaming or perhaps that of a reasonable person? Or is this a rough guess on the part of the court?

A good approach could be, in line with the compensation principle, to start from the following formula: the number of works multiplied by the number of views, which has to be proven by the claimant. Then if the defendant is able to prove that only a portion of views has led to the download and infringement, then damages shall be reduced accordingly.

## V. Conclusion

The trend to overcompensate by exceeding the amount of the actual loss or unfair profits, in order to take account of other elements, namely prevention or punishment, blurs the line between punitive and compensatory damages. While US law recognizes punitive damages to take account the behavior of the defendant (in the form of statutory damages or increased damages up to three times the actual amount), EU law has recently seemed less reluctant to recognize overcompensation, at least for deterrent purposes to deprive the defendant from his profits, even if courts need to depart from the traditional principles of tort, so that one can speak of “*disguised damages*“. This trend, however, does not seem to have reached online infringements, where caselaw has not yet departed from the traditional principles of tort.

Due to the lack of predictability (for instance, with the departure from the traditional tort principles in general, except for online infringements), we contemplate a few solutions. First, additional economic methods may be considered to calculate the damages in general, such as the *Discounted Cash Flow Method* (DCF) and the *Financial Indicative Running Royalty Model* (FIRRM), and, the *Royalty Rate Method*<sup>68</sup> for reasonable royalty calculations specifically. Caselaw about Fair, Reasonable and Non-Discriminatory license terms (FRAND) for disputes about the licensing of Standard Essential Patents (SEP) may be also relevant data to set reasonable royalties.

If courts are still reluctant to rely on economic methods, it is because plaintiffs do not bring this type of evidence and because courts are not all familiar with economic methods. We further believe that each method gives a useful index-value for the courts (sort of benchmark to calculate the damages) and that the solution consists of a combination of these methods. Finally, this path is in line with the increasing complexity of IP infringements (e.g. software incorporated into multi-component products, or infringements of online content without visible loss or lost profits). As an outcome, there will be certainly a “flat-rating“ (“*barémisation*“ or “*forfaitisation*“) of damages. Think of the next challenge to quantify damages in relation to personal data breaches: economists have just started talking about the value of personal data. Similarly, regulators have started fining personal data breaches (e.g. with the General Data Protection Regulation, GDPR). Consequently, IP lawyers and courts will be asked to calculate the related damages, bearing in mind that breaches usually do not show any quantifiable loss. Economic methods and flat-rating of loss will be certainly an answer.

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<sup>68</sup> For an in-depth analysis of the calculation of damages based on these economic methods, see Benhamou, 286 ss. For the DCF method, see Chappuis, 269 ss.