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A joint publication of:

Prof. Dr. Thomas Dreier, M. C. J.,
Karlsruhe Institute of Technology,
Vincenz-Prießnitz-Str. 3,
76131 Karlsruhe

Prof. Dr. Axel Metzger, LL. M.,
Institute for Legal Informatics,
Leibniz Universität Hannover,
Königsworther Platz 1,
30167 Hannover

Prof. Dr. Gerald Spindler,
Dipl.-Ökonom, Georg-August-Universität Göttingen,
Platz der Göttinger Sieben 6,
37073 Göttingen

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Privacy in the Post-NSA Era: Time for a Fundamental Revision?

by **Bart van der Sloot,** Institute for Information Law (IViR), University of Amsterdam[1]

Abstract: Big Brother Watch and others have filed a complaint against the United Kingdom under the European Convention on Human Rights about a violation of Article 8, the right to privacy. It regards the NSA affair and UK-based surveillance activities operated by secret services. The question is whether it will be declared admissible and, if so, whether the European Court of Human Rights will find a violation. This article discusses three possible challenges for these types of complaints and analyses whether the current privacy paradigm is still adequate in view of the development known as Big Data.

Keywords: NSA, Human Rights, ECHR, Big Data, Privacy, Right of Complaint, Right to Privacy

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A. Introduction

1 The data collection by the NSA and other secret service organizations is part of a broader trend also known as Big Data,[2] in which large amounts of personal data are being collected by means of cameras, telephone taps, GPS systems and Internet monitoring, stored in large databases and analysed by computer algorithms. These data are then aggregated, used to create group profiles and analysed on the basis of statistical relationships and mathematical patterns. Subsequently, the profiles are used to individualize persons that meet a certain pattern or group profile.[3] This technique, called profiling, is used for a growing number of purposes, such as in the fight against terrorism, in which a person may be monitored or followed when he (in whole or in part) meets a certain profile (for example, male, Muslim, Arab origin and frequent trips to Yemen). Similarly, banks and insurance companies rely on risk profiles of customers to take certain decisions, and Internet companies like Google and Facebook use such profiles for advertising purposes. For example, if a person fits the profile "man, university degree, living in London", he might get an advertisement for the latest Umberto Eco book or for an apartment in one of the richer suburbs.[4]

2 In such processes, there is basically no demarcation in person, time and space, as simply everyone could be subjected to them. Data collection and processing do not start after a particular ground or reason has arisen, but the value and use of the information will only become apparent at a later stage. The gathered data are often meta-data – regarding the length of and participants to a telephone call, for example – but this often does not regard the content of the communication. Meta-data can be compared to the information visible on an envelope in the ordinary mail, such as the addressee, the size and the weight and possibly the sender. These data traditionally do not fall within the realm of privacy and the secrecy of communication. Still, through the use of modern techniques, these data can be used to generate increasingly detailed profiles.[5] Thus although they are not privacy-sensitive data initially, they may become identifying data at a later stage. In addition, the collected data are not linked directly to one person, but they are used to generate

general group profiles and statistical correlations. These profiles may be applied to an individual if he meets one or several of the elements contained in the group profile. Finally, in these processes, no reasonable suspicion is needed to individualize someone. Even a 1% chance that someone will buy an expensive luxury product or will engage in terrorist activities may provide sufficient grounds to do so. Consequently, the individual element and the interests of specific persons are moved to the background in such systems.

3 Although it is clear that European citizens cannot challenge the activities of the US National Security Agency (NSA) as unveiled by Edward Snowden, Big Brother Watch and others have filed a complaint against the United Kingdom for similar practices by its secret services under the European Convention on Human Rights (ECHR),[6] specifically Article 8, which holds as follows:

> 1. Everyone has the right to respect for his private and family life, his home and his correspondence.
>
> 2. There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.

4 In a reaction, the European Court for Human Rights has asked the parties to respond to three questions: (1) Can the applicants claim to be victims of a violation of their rights under Article 8 ECHR? (2) Have the applicants done all that is required of them to exhaust domestic remedies? (3) If so, are the acts of the United Kingdom intelligence services in relation to the collection and processing of data in accordance with the law and necessary in a democratic society? This article will try to answer questions (1) and (3) by assessing three general points. Does the complaint fall under the scope of Article 8 ECHR *ratione personae,* meaning have the applicants suffered from any personal damage? Does the complaint fall under the scope of Article 8 ECHR *ratione materiae,* meaning do the practices complained of constitute an infringement with the right to privacy? And if so, what would the likely outcome be in relation to whether the infringement was necessary in a democratic society; that is, how will the Court balance the right to privacy with the need for security? Not discussed are the questions related to the exhaustion of domestic remedies and to the matter of whether the governmental practices are "in accordance with the law".

5 Although this complaint functions as the central theme, the findings will be extrapolated to the current development of Big Data. The general conclusion will be that, currently, the right to privacy is based on the individual and his interests in a threefold manner: (1) It provides the individual with a right to submit a complaint about a violation of his privacy. (2) It provides him with protection of his personal interests, related to human dignity and personal autonomy. (3) In concrete circumstances, a privacy infringement will be judged on its legitimacy by balancing the individual with the societal interest, for example related to security. Subsequently, it will be argued that the new developments of Big Data, of which the NSA affair is a shining example, bring the following results: (1) it is increasingly difficult to demonstrate personal damage and to claim an individual right, (2) the value at stake in this type of process is a societal rather than an individual one and (3) the balance of different interests no longer provides an adequate test to determine the outcome of cases. Finally, some modest alterations of the current paradigm will be proposed.

B. Right of complaint

6 When drafting the ECHR, the authors of the Convention chose to link the right to petition only to a limited extent to the individual and the protection of his interests. Under the ECHR, there are two complaint procedures, one for inter-state complaints and another for individual complaints. In an inter-state procedure, it is not the personal interest of the applicant that is assessed, as the applicant state is not itself harmed in any way, nor that of anyone else, but the general quality of the actions and laws of the government accused of a violation of the Convention as such. In such cases, the applicant state brings an action against another state out of the general interest of the country's population, often related to abuse of power; although the citizens of that country may obviously be affected by the policies and/or laws, their individual injury is not central to the Court's assessment.

7 Moreover, the individual right of complaint may be invoked not only by natural persons, but also by legal persons (excluding governmental organizations) and groups. Typical of the latter two categories is that again, no personal harm needs to be demonstrated. A legal person may be hindered in its (business) activities but cannot suffer personal injury or complain about a violation of its autonomy or dignity, among others. Again, in such complaints, it is usually the unlawful conduct of or the abuse of power by the government as such that is at the center of the Court's assessment. In addition, the legal capacity of groups to submit a case to the Court must be understood against the backdrop of the Second

World War, in which groups were systematically discriminated against and stigmatized.[7] The authors of the Convention opened up the right to petition to a person or a group of people who want to stand up for the interests of a particular group without necessarily having suffered individually and specifically from the targeted practice that affect the group as a whole.[8]

8 Finally, given the serious fear of an excessive flow of complaints by individuals,[9] the authors of the Convention decided to introduce a two-step system, in which the admissibility of applications is first reviewed by the European Commission of Human Rights (a task which has been reassigned to a separate chamber of the Court since 1998), and is only afterwards assessed by the Court on the substance of the matter. Characteristically, individuals initially were allowed only to bring complaints before the Commission but not before the Court, even if their case was declared admissible by the Commission. Only the Commission itself or a Member State could decide to send the case for substantive assessment to the Court if they felt this was in the public interest.

9 The practice of the Court has however increasingly focused on complaints of individuals who can demonstrate their personal interest in a case. First, individuals have gradually been allowed to bring complaints directly before the Court.[10] In addition, the other modes of complaint have been of (almost) no value. Since the entry into force of the Convention, only about 20 inter-state complaints have been filed.[11] The possibility of a group complaint has been limited by the Court to the opportunity of different individuals, all of whom have directly and individually suffered from a certain practice, to join their cases, and the Court has ruled that, in principle, legal persons cannot rely on Article 8 ECHR. For example, when a church complained about a violation of its privacy by the police in relation to criminal proceedings, the Commission found that

> *[t]he extent to which a non-governmental organization can invoke such a right must be determined in the light of the specific nature of this right. It is true that under Article 9 of the Convention a church is capable of possessing and exercising the right to freedom of religion in its own capacity as a representative of its members and the entire functioning of churches depends on respect for this right. However, unlike Article 9, Article 8 of the Convention has more an individual than a collective character [].*[12]

10 Although in recent case law, a less restrictive line may be discerned,[13] in principle, the Court still requires the complainant to demonstrate that he has an individual interest and has suffered from personal injury, so that legal persons cannot rely on the right to privacy, or only to a limited extent.

11 A consequence of the emphasis on the individual interests and the personal injury of the complainant is that *in abstracto* claims, in which an applicant complains about a practice or a law as such, without it being applied or otherwise having an impact on the applicant himself, are declared inadmissible. This also holds true for the *actio popularis* or class action, in which a societal organization challenges a law or policy not from a personal perspective, but with an eye on the public interest. Finally, hypothetical complaints and *a priori* applications, in which the case regards a potential, future violation by the state, without any damage having occurred yet, are also declared inadmissible.[14]

12 This brings an obvious problem with it for complaints related to large-scale data collections, whether they are initiated by secret services or by big Internet companies, since persons are often unaware that they have been filmed, followed by cookies or subjected to Internet monitoring and accordingly only few will file a legal complaint. Those who do will have trouble demonstrating any individual harm. In addition, the personal element in this type of data processing is increasingly moved to the background, as not one individual or a particular group is affected by the large-scale data system, but an unquantified number of people, and the information often regards meta-data. Moreover, whereas in classic privacy issues, such as a house search, the individual interest is fairly clear and delineated and is causally linked to the infringement, the individual damage resulting from data collection practices is often rather hypothetical, as the collection itself usually has little impact on the personal autonomy or dignity of an individual and the damage that could arise stems from the hypothetic possibility of, for example, a data breach or the abuse of the data by a future and malicious regime. Consequently, claims regarding Big Data processes will often have an abstract and hypothetical character.

13 To overcome these problems, the Court has been willing to accept a slight relaxation of the requirement of individual damage and personal interest. Regarding a presumed surveillance practice about which no insight was given by the secret services, the Court held that it is unacceptable that "the assurance of the enjoyment of a right guaranteed by the Convention could be thus removed by the simple fact that the person concerned is kept unaware of its violation".[15] Similarly, in some cases the Court has also been prepared to adopt a broader interpretation with regard to complaints about legislation authorizing surveillance practices, which is drafted in very broad and general terms. In these cases, the Court has determined that

> *[t]he mere existence of the legislation entails, for all those who might fall within its reach, a menace of surveillance; this menace necessarily strikes at freedom of communication between users of the postal and telecommunications services and thereby constitutes an "interference by a public*

authority" with the exercise of the applicants' right to respect for correspondence.[16]

14 In similar fashion, the Court has stated in a case that

> *the authorities were authorised to capture communications contained within the scope of a warrant issued by the Secretary of State and to listen to and examine communications falling within the terms of a certificate, also issued by the Secretary of State. Under section 6 of the 1985 Act arrangements had to be made regulating the disclosure, copying and storage of intercepted material. The Court considers that the existence of these powers, particularly those permitting the examination, use and storage of intercepted communications constituted an interference with the Article 8 rights of the applicants, since they were persons to whom these powers might have been applied.*[17]

15 Consequently, cases in which the plaintiff does not know whether he was subjected to a particular surveillance practice and has no chance to determine whether this was so, and cases in which a complainant is merely affected by a law by way of its all-encompassing scope, may be declared admissible by the Court under certain circumstances. Yet here, too, it must be plausible that someone was affected by a particular practice, that the applicant was part of a specific group of people designated in the law or had engaged in activities that could lead to monitoring and surveillance. Inter alia, no right to petition under the Convention is accepted on the basis of vague assumptions and references to mysterious clicking noises during phone calls, but it is accepted when the complainants are members of a group actively campaigning against nuclear missiles, from which a reasonable fear of active monitoring may be deduced.[18] The Court therefore recognizes as matter of principle that to be granted a right of complaint, a "reasonable likelihood" must exist that the applicant has been subjected to a surveillance or monitoring practice.[19] In such instances, the Court is prepared to hold

> *that the applicants, even though they were members of a group of persons who were likely to be affected by measures of interception, were unable to demonstrate that the impugned measures had actually been applied to them. It reiterates, however, its findings in comparable cases to the effect that the mere existence of legislation which allows a system for the secret monitoring of communications entails a threat of surveillance for all those to whom the legislation may be applied. This threat necessarily strikes at freedom of communication between users of the telecommunications services and thereby amounts in itself to an interference with the exercise of the applicants' rights under Article 8, irrespective of any measures actually taken against them.*[20]

16 In conclusion, it is uncertain whether claims about Big Data, such as the application of Big Brother Watch, will be declared admissible. In principle, there not only remains the requirement for an individual to demonstrate his personal interest, or at least the plausibility of individual damage; there also is a practical threshold for citizens who do not know whether they have been targeted by a particular practice, since, if there is no evidence indicating so, few people will take a matter to court. Even if this knowledge existed, and even if personal damage could be convincingly demonstrated, the practical use of such an individual right of complaint is still questionable. In a world where not only secret services and governmental organizations, but also large companies like Google and Facebook and even ordinary citizens, assisted by their smart-phones, can gather and process large amounts of personal data, it is likely that it will simply become undoable for a person to keep track of everyone who is in possession of his personal data, to assess whether they are using that data legitimately and if there is reason to believe this is not so, to seek justice through a legal procedure. With such structural and societal tendencies, it seems that the individual is as powerless as King Canute trying to turn the tide.

C. Scope of the right to privacy

17 Article 8 ECHR protects everyone's private and family life, home and correspondence – in short, the right to privacy. However, in principle, it does not apply to large-scale data processing, which falls under what is called the right to data protection. To clarify the difference, reference can be made to the Charter of Fundamental Rights of the European Union from 2000, of which Article 7 provides that everyone has the right to respect for his private and family life, home and communications, and Article 8 holds as follows:

> 1. Everyone has the right to the protection of personal data concerning him or her.
>
> 2. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law. Everyone has the right of access to data which has been collected concerning him or her, and the right to have it rectified.
>
> 3. Compliance with these rules shall be subject to control by an independent authority.'

18 This right to data protection is separated from the right to privacy and is regulated primarily by the Data Protection Directive.[21]

19 The Council of Europe, not to be confused with the European Union, has also issued an instrument for data protection: the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data.[22] Mostly, the Convention and the Directive run along the same lines, the latter being

somewhat more elaborate. The Court has referred to both instruments in its jurisprudence[23] and similarly, the Court has referred to the Charter of the EU to overthrow its earlier jurisprudence, from before 2000, on a number of important points.[24] Since the accession of the EU to the European Convention of Human Rights, more and more synthesis has been created between the two fundamental rights instruments.[25] This article will mainly refer to the Data Protection Directive, as it is seen as the more important of the two documents, though it must be stressed that most of the rules contained therein are also present in the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data.

20 Although on a number of points there is a clear overlap between the right to privacy and the right to data protection, there are also important differences. First, the background of both rights is quite different. Privacy in the sense of a separation between the private and the public sphere, the integrity of the body and the secrecy of communications has been a part of the constitutional order for ages. Privacy is mostly linked to the protection of private interests of the individual related to personal autonomy or human dignity, among others. Data protection, in contrast, is of more recent origin and was created primarily in relation to the use of large databases by governmental agencies. The rules were not so much linked to the protection of private interests, but to the fairness and quality of the data processing. Most of the rules could be qualified as principles of good governance: collect data only when necessary, store them in a safe and confidential manner, be transparent about it and make sure that the personal data are kept correct and up to date. With the latter principle, a clear demarcation between privacy and data protection can be drawn. These principles of fair and legitimate data processing may require gathering more, not less, personal data, a rule which is difficult to reconcile with privacy rights.[26] As another difference, reference can be made to the fact that data protection is predominantly directed at private parties and horizontal relationships; especially security-related data processing by state and governmental agencies is often excluded from the scope of data protection acts.[27] This is different for the protection of privacy, especially under the European Convention of Human Rights, with regard to which citizens can only complain about the conduct of states.

21 Perhaps the most important difference lies in the material scope of the right to privacy under Article 8 ECHR, which is linked to the protection of personal interests such as human dignity, individual autonomy and personal freedom, and consequently, its scope does not extend to the collection of non-private and non-sensitive data: "[P]rivate life does not necessarily include all information on identified or identifiable persons. However, data protection covers exactly this information. This wider scope results from the definition of personal data in the Data Protection Convention and the Data Protection Directive".[28] The term "personal data", central to the Data Protection Directive, is not limited to private or sensitive information but extends to any data with which someone could potentially be identified. "Even ancillary information, such as 'the man wearing a black suit' may identify someone out of the passers-by standing at a traffic light."[29] Consequently, the Data Protection Directive not only regards the protection of personal interests of specific individuals, but also, and perhaps primarily, lays down procedural safeguards and duties of care for data processers.

22 Despite the significant differences between the two rights, the Court has increasingly recognized a number of the principles underlying the Data Protection Directive under the ECHR, specifically the right to privacy, by stressing (among other things) that the collection of personal data, such as transcripts of telephone conversation, photographs, hospital records and bodily material, also falls under the scope of the right to privacy. In addition, the Court has determined that there should be a legitimate ground for processing personal data, that processors should be cautious about transferring personal data to third parties and that where possible, personal data should be deleted when they are no longer relevant to the purpose for which they were collected.[30] Every one of these principles are core values underlying the Data Protection Directive. Finally, the Court has determined that the Member States to the Convention have a positive obligation to lay down adequate data protection rules in their national legislation.[31]

23 Nevertheless, the Court retains the position that for a case to fall under the scope of the right to privacy, there should be a link to personal interests, such as an infringement of an individual's dignity or autonomy. Consequently, if a limited amount of personal data is stored, if a dataset contains only trivial information such as names and addresses, or if the data collection must be regarded as a common and standard practice in the European Union, it is usually declared to fall outside the scope of the right to privacy.[32] Moreover, the Court has held that if data are collected in public and are not stored, or are stored but are made inaccessible, this does not fall under the scope of the right to privacy.[33] Not surprisingly, privacy experts suggest that the guarantee of data protection principles under Article 8 ECHR is quite limited and argue that the distinction between private data and non-sensitive data, which is no longer at work in the Data Protection Directive, is still a leading principle in the case law of the Court.

> *A closer reading shows that the old distinction between "data that merits protection" and "data that does not" is still at work and that processing of data is excluded from the privacy scope when (1) the data as such are not considered as private, (2) when there are no systematically stored images or sound recordings, or other data, (3) when the data are not systematically stored with the focus on the data subject, and (4) when the data subject could reasonably expect the processing.*[34]

24 Consequently, there seems to be a number of thresholds for applying Article 8 ECHR on matters related to Big Data processes. (1) Much of the data collected are not private but public; additionally, processing often regards so-called meta-data, such as data on the length of and the participants to a call, but not the content of communication itself.[35] (2) In addition, the personal data themselves are not always recorded, but they are often used for creating aggregated datasets and group profiles.[36] (3) The essential characteristic of this type of large-scale data systems is that they have no focus on any specific subject, but that they regard an unquantified group of people, potentially everyone.[37] (4) In a sense, large-scale data processing may already be described as an everyday practice, and it is highly likely that in the future, this will even be more so.

25 In conclusion, it seems questionable whether the right to privacy under the ECHR provides adequate protection in relation to Big Data systems and data processing such as revealed with regard to the NSA. This may be the fundamental question: Is a doctrine focussed on the protection of the individual interest – related to human dignity, individual autonomy or personal freedom – still feasible in a world that is increasingly engulfed by large-scale data processing techniques, which, by their very nature, are not focused on the individual?

D. Balance of interests

26 Even if the NSA data processing were to fall under the scope of Article 8 ECHR, and even if a right of complaint were to be accepted, it is still highly questionable whether the Court would rule in favour of the complainants. Article 8, paragraph 2 specifies as follows:

> *There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.*

27 Consequently, privacy limitations are allowed when they are prescribed by law and necessary in a democratic society in connection to, among others, national safety, public health and economic prosperity.

28 The authors of the Convention had in mind that the outcome of a case should be determined by an assessment of the necessity of an infringement, inter alia by determining the effectiveness, proportionality and subsidiarity of a particular measure. Although this 'intrinsic test' has not been completely abandoned by the Court, it has been moved to the background and is increasingly supplemented by a 'balancing test'. "This test requires the Court to balance the severity of the restriction placed on the individual against the importance of the public interest."[38] Consequently, to determine the outcome of a case, the Court balances the damage a specific privacy infringement has done to the individual interest of a complainant against its instrumentality towards safeguarding a societal interest, such as national security.

29 The problem with a balancing test in relation to Big Data systems is twofold. First, the necessity test seems a far better tool to assess the problems posed by, among others, the NSA affair and similar cases. The question here seems simply whether such large data sets regarding so many people and collected over such a large time span is at all necessary and proportionate in the light of public safety, even apart from any individual interest, and whether there are no less intrusive means at the disposal of the government. In addition, it might be asked how effective such data processing systems really are.

> *Some agency insiders now believe that NSA is only able to report on about 1 percent of the data that it collects, and it is getting harder every day to find within this 1 percent meaningful intelligence. Senior Defense and State Department officials refer to this problem as the "gold to garbage ration," which holds that it is becoming increasingly difficult and more expensive for NSA to find nuggets of useful intelligence in the ever-growing pile of garbage that it has to plow through.'*[39]

30 On the other hand, it is increasingly difficult to make a proper balance of interests in this kind of Big Data systems. A balancing test provides an adequate tool when reviewing classic privacy issues – for example, a house search in the context of a criminal investigation – in which the infringement is clearly delineated in person, time and space, and both the resulting individual interest and the public interest – for example related to solving a murder case – have a clearly defined character. With Big Data systems, however, both the public and the individual interest are rather hypothetical and abstract, as it is often unclear whether a particular data set will contribute to the national security and how; and, as indicated earlier, the individual element in these processes is often moved to the background and the presumed damage arises from potential future data leaks or the abuse of the data by malicious regimes. Both interests are consequently very vague and therefore difficult to balance.

31 To address these problems, in data processing cases the Court is prepared to focus predominantly on the intrinsic qualities of legal frameworks and governmental activities. Among others, the "Court must be satisfied that, whatever system of surveillance is adopted, there exist adequate and effective guarantees against abuse".[40] It has also stipulated that where possible, persons have to be informed of the fact that they have been subjected to monitoring, that there must be proper democratic control by parliament to assess the activities of the secret services and that there should be effective legal remedies open to individuals who believe they have been subjected to monitoring and surveillance.[41]

32 Although the Court's case law does leave some room for assessing cases without directly balancing the individual with the public interest, this seems to provide only meagre safeguards with regard to Big Data systems. First, it should be noted that the Court is willing to focus on procedural conditions, such as with regard to access to a court and the existence of democratic control, but not on the necessity, proportionality and subsidiarity of the measures as such.[42] If the national court or legislature were to decide that the practices are indeed necessary and proportionate, the Court would in principle follow their judgment. The Court has also stated that in the case of intelligence and surveillance systems, "the margin of appreciation available to the respondent State in assessing the pressing social need [] and in particular in choosing the means for achieving the legitimate aim of protecting national security, [is] a wide one".[43]

33 Moreover, the Court accepts that both confidentiality regarding the nature and purpose of the intelligence activity and reluctance in informing specific persons about the fact that they have been subjected to eavesdropping, in principle, must be deemed legitimate since confidentiality is part of the effectiveness of the activities by secret services. Finally, it should be noted that although the requirement that a privacy infringement must be prescribed by law also applies to the practices of intelligence organizations, it is precisely with regard to secret services that a separate and rather limited legal framework exists, so that usually neither the ordinary citizens nor the ordinary parliamentarian will know exactly what activities are conducted and with which specific purpose. In any case, the fundamental point remains that, apart from the specific context of secret services, the balancing test seems simply unsuitable for Big Data systems. Another fundamental question may be whether the privacy interests at stake should still be considered relative, to be balanced against other values such as security. If it is true that incidents such as the NSA affair challenge the basic legitimacy and effectiveness of the state, it could be argued that these are absolute minimum principles to be respected by every democratic order respecting the rule of law.

E. Analysis

34 The current privacy doctrine under Article 8 ECHR is based on three characteristics: it is the right of a natural person; it protects his personal interests related to, among others, autonomy and dignity; and the outcome of a case will be determined primarily by weighing the private against the public interests, such as those related to national security. Developments in the field of Big Data and profiling challenge each of these principles. Although the Court is willing to adopt a certain amount of flexibility to meet these challenges, the question remains whether this is sufficient to provide adequate protection. Even if the Court were willing to compromise the three fundaments so as to ensure adequate protection, there remains a fundamental tension between the focus on the individual and his interests on the one hand and the current technological developments on the other. With regard to the claim of *Big Brother Watch and others v. the United Kingdom*, it is questionable whether they will be successful in their claim. This article has signalled three potential hurdles.[44]

35 First, the applicants would have to prove that they have been subjected to monitoring practices, or at least demonstrate that this is likely, as *in abstracto* claims are declared inadmissible. More importantly, the Court's case law makes clear that there is a prohibition on an *actio popularis* or class action, in which a civil society organization or group complains about a matter not out of personal interest, but in the interest of the society as a whole. The first complainant, Big Brother Watch, is a limited company, not in any way directly affected by the presumed practices of the British secret services, and the second and third applicants are a charity and a limited company, for which the same holds true. The only natural person is the fourth and last applicant, Constanze Kurtz, but she works and lives in Berlin and is thus highly unlikely to have been a victim of the practices complained of.

36 Second, it is questionable whether the matter falls under the material scope of Article 8 ECHR.

> *The applicants allege that they are likely to have been the subject of generic surveillance by GCHQ [The Government Communications Headquarters] and/or the United Kingdom security services may have been in receipt of foreign intercept material relating to their electronic communications, such as to give rise to interferences with their rights under Article 8 of the Convention. [] The applicants further contend that the generic interception of external communications by GCHQ, merely on the basis that such communications have been transmitted by transatlantic fibre-optic cables, is an in-*

herently disproportionate interference with the private lives of thousands, perhaps millions, of people.[45]

37 If it is recalled that to fall under the scope of Article 8 ECHR, (1) the data must be considered private, (2) they must be systematically stored, (3) with a focus on the data subject and (4) the possessing could not be reasonably expected, it seems that at least point three will provide a threshold, as the data are not stored with the focus on a particular subject, but are aggregated for the use of making group profiles and determining statistical correlations.

38 Finally, even if it is accepted that the applicants may successfully claim their right to privacy and that the matter complained of does fall under the scope of Article 8 ECHR, it is questionable whether the ECtHR will judge in their favour. Although the applicants claim that there has been "an inherently disproportionate interference with the private lives of thousands, perhaps millions, of people", it remains unclear how exactly they have been affected by the practices and how this influences their daily lives, their autonomy or their dignity. The individual interest is thus highly abstract and hypothetical. It seems that the British parliament has simply determined the need for such practices necessary with an eye on the national security and has felt that this outweighs the particular interests of private individuals. If the European Court of Human Rights were to conclude that the matter complained of is "in accordance with the law", as laid down by the British parliament, a question not assessed in this article, it is highly likely that it would accord a wide margin of appreciation to the British legislator and respect its decision in this regard.

39 The question arises whether the current approach of the Court and the chosen interpretation of Article 8 ECHR is still feasible in a world in which technological developments and data processing techniques rapidly succeed each other. Not only does it not give a satisfactory outcome for cases regarding NSA-like data processing systems, it must be recalled that the NSA affair is part of a bigger and structural change in society. Two possible approaches are possible. First, the Big Data processes and the resulting problems may simply be said not to qualify as privacy issues but to fall under other doctrines, such as the abuse of power, anti-discrimination provisions and general procedural doctrines. However, this seems an unsatisfactory solution because the problems are indeed related to and partly derived from classic privacy issues, such as the monitoring of private individuals, placing wiretaps and generating large dossiers about possible suspects. In addition, the right to privacy, both in legal and in societal discourse, is the doctrine which is referred to when it comes to these issues. However, if the right to privacy under the European Convention of Human Rights is to retain its relevance in the changing environment, some fundamental revisions seem necessary.[46]

40 First, it may be questioned whether the requirement of personal injury should be maintained. The problem with this principle is that complaints about data collection processes often have a hypothetical and abstract nature, but that does not mean that they are of less importance. Although the chance of an 'evil' regime seizing power and abusing the collected data for malicious purposes is extremely small, the possible negative consequences dwarf the importance of ordinary privacy cases related to a house search, for example. Moreover, the background of this principle lies in ensuring that the Court is not flooded with complaints and that only those can file an application who have suffered individually and directly from the matter complained of. However, it is questionable whether the abandonment of the principle of personal injury will indeed result in an increased flow of complaints. Allowing an *actio popularis* may in fact ensure that potential damage arising from structural problems is addressed so that individual damage and myriad claims can be prevented or at least bundled. Likewise, allowing for *in abstracto* claims may ensure that potential future damage is prevented and would also ensure that the judgment of the ECtHR would be substantially more concise as there is no need for a description and analysis of the particular circumstances of the case, the personal situation of the complainant and the causal link between the act or practice complained of and the harm to the individual interest. The decision would merely regard the necessity, proportionality and effectiveness of the measures themselves.

41 Second, it may be questioned whether the right to privacy should be focused solely on protecting the personal interest of the complainant in relation to, among others, his dignity, autonomy or freedom, or that the underlying value and the related material scope of the right to privacy could also be formulated as or connected to a public interest. For example, under the Universal Declaration of Human Rights, on which Article 8 ECHR is based, the right to privacy was initially simply formulated as the 'freedom from wrongful interference' and specified as such: "Freedom from unreasonable interference with his person, home, reputation, privacy, activities, and property is the right of every one."[47] Privacy, as it was originally understood by the authors of both the Declaration and the Convention, was primarily a duty of the state and was connected to a societal interest, namely the prevention of abuse of governmental power and the disproportionate and unnecessary meddling in the private sphere of citizens. It regarded primarily the quality of legislation and governmental practices as such and not or only to a limited extent the protection of specific individual interests, related to their autonomy or dignity. Possibly, renewed emphasis could be placed on this

approach, which would also dovetail with dropping the injury requirement, because the prime norm-addressee of the privacy doctrine would be the state, which has an obligation to respect it independently of any subjective right or individual interest.

42 Third, this might also facilitate the reintroduction of an 'intrinsic' test, in which the outcome of a case is determined by assessing the necessity, proportionality, subsidiarity and effectiveness of the measures or laws. This focus could not only be adopted to large data collection processes but perhaps also be applied to more traditional privacy issues regarding house searches and wiretaps, in which the primary question is also whether a certain interference is necessary and proportionate, irrespective of the individual interests involved. In relation to cases related to national security, this method seems reasonable: if a house search, telephone-tap or data collection is necessary and effective in the context of national security, it is often simply irrelevant whether and to what extent a citizen is affected, as the public interest will almost always outweigh the individual interest.[48] It would therefore be worthwhile to assess whether the subjective element in this respect could be substituted for a more objective and intrinsic-based test.

1 Bart van der Sloot is a researcher at the Institute for Information Law (IViR), University of Amsterdam, the Netherlands. This research is part of the project "Privacy as virtue", which is financed by the Dutch Scientific Organization (NWO). Parts of this research will also appear in Dutch: B. van der Sloot, "Privacy in het post NSA-tijdperk: tijd voor een fundamentele herziening?", NJB, to be published.

2 V. Mayer-Schonberger & K. Cukier, "Big data: A revolution that will transform how we live, work, and think", Boston, Houghton Mifflin Harcourt, 2013.

3 See further: S. Bu (et al.), "Preservation of Patterns and Input-Output Privacy", Proceedings of ICDE2007, 20070. T. Calders, & S. Verwer, "Three Naive Bayes Approaches for Discrimination-Free Classification", Data Mining and Knowledge Discovery 21(2), 2010. J. S. Fulda "Data Mining and Privacy", Alb. L.J. Sci. & Tech. 11, 2000. H. P. Grice, "Logic and conversation". In: P. Cole & J. Morgan (eds.), "Syntax and semantics", New York, Academic Press, 1975. K. Guzik, "Discrimination by Design: Data Mining in the United States's 'War on Terrorism'", Surveillance & Society (7), 2009. M. Hildebrandt & S. Gutwirth (eds.), "Profiling the European Citizen: Cross-Disciplinary Perspectives", New York, Springer, 2008. D. Pedreschi, S. Ruggieri & F. Turini, "Discrimination-Aware Data Mining, KDD, 2008. C. C. Porter, "De-Identified Data and Third Party Data Mining: The Risk of Re-Identification of Personal Information", Shidler i.L. Com. & Tech. (30), article no. 3, (2008). Y. Poullet & A. Rouvroy, "General introductory report", (2008). <http://portal.unesco.org/ci/en/files/27268/12145631033Intro_gen_rapporteur_Y-Poullet_en.pdf/Intro_gen_rapporteur_Y-Poullet_en.pdf>. A. Ramasastry, "Lost in translation? Data mining, national security and the 'adverse inference' problem", Santa Clara Computer & High Tech. L.J. (22), 2006. W. N. Renke, "Who controls the past now controls the future: Counter-terrorism, data mining and privacy", Alta. L. Rev. (43), 2006. C. Westphal, "Data Mining for Intelligence, Fraud & Criminal Detection", Boca Raton, Taylor & Francis Group, 2009. T. Z. Zarsky, "Mine your own business!: making the case for the implications of the data mining of personal information in the forum of public opinion", Yale Journal of Law & Technology, 2003 (5).

4 B. Custers, T. Calders, B. Schermer & T. Zarsky (eds.), "Discrimination and privacy in the information society: Data mining and profiling in large databases", Heidelberg, Springer, 2013.

5 See regarding meta-data (with thanks to Matthijs Koot <http://blog.cyberwar.nl/> for these suggestions): <http://www.cs.princeton.edu/~felten/testimony-2013-10-02.pdf>. <http://www.crypto.com/blog/metatapping>. B. Greschbach, G. Kreitz and S. Buchegger, "The Devil is in the Metadata – New Privacy Challenges in Decentralised Online Social Networks", <http://www.csc.kth.se/~bgre/pub/GreschbachKB12_MetadataPrivacyDecentralisedOnlineSocialNetworks.pdf>. <http://www.theguardian.com/technology/interactive/2013/jun/12/what-is-metadata-nsa-surveillance#meta=1111111>.

6 <https://www.privacynotprism.org.uk/assets/files/privacynotprism/letter_from_ecthr_to_uk_gov.pdf>.

7 A. H. Robertson, "Collected edition of the 'travaux préparatoires' of the European Convention on Human Rights. Vol. 1", The Hague, Nijhoff, p. 160-162

8 Robertson, vol. 2, p. 270.

9 Robertson, vol. 2, p. 188-192.

10 An intermediate step: <http://conventions.coe.int/Treaty/en/Treaties/Html/140.htm>.

11 <http://hudoc.echr.coe.int/sites/eng/Pages/search.

12 ECmHR, Church of Scientology of Paris v. France, application no. 19509/92, 09 January 1995.

13 See among others: ECtHR, Stes Colas Est and others v. France, application no. 37971/97, 16 April 2002.

14 See among others: ECmHR, Tauira and others v. France, application no. 28204/95, 04 December 1995.

15 ECtHR, Klass and others v. Germany, application no. 5029/71, 06 September 1978, § 36.

16 ECtHR, Lordachi and others v. Moldavia, application no. 25198/02, 10 February 2009, § 34.

17 ECtHR, Liberty v. Great Britain, application no. 58243/00, 01 July 2008, § 57.

18 ECmHR, Matthews v. Great Britain, application no. 28576/95, 16 October 1996.

19 See among others: ECtHR, Kennedy v. Great Britain, application no. 26839/05, 18 May 2010.

20 ECtHR, Weber and Saravia v. Germany, application no. 54934/00, 29 June 2006.

21 Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data.

22 <http://conventions.coe.int/Treaty/en/Treaties/Html/108.htm>.

23 Convention: ECtHR, Rotaru v. Romania, application no. 28341/95, 04 May 2000. Directive: ECtHR, Romet v. the Netherlands, application no. 7094/06, 14 February 2012. ECtHR, S. and Marper v. the United Kingdom, application nos. 30562/04 and 30566/04, 04 December 2008. ECtHR, M.M. v. the United Kingdom, application no. 24029/07, 13 November 2012.

24 See for example: ECtHR, Christine Goodwin v. the United Kingdom, application no. 28957/95, 11 July 2002. ECtHR, I. v. the United Kingdom, application no. 25680/94, 11 July 2002.

25 <http://hub.coe.int/what-we-do/human-rights/eu-accession-to-the-convention>.

26 B. van der Sloot, "From Data Minimization to Data Minimummization". In: B. Custers, T. Calders, B. Schermer &

T. Zarsky (eds.), Discrimination and Privacy in the Information Society. Data Mining and Profiling in Large Databases, Springer, Heidelberg, 2012.

27 See among others, Article 3.2 Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data.

28 J. Kokott & C. Sobotta, "The distinction between privacy and data protection in the jurisprudence of the CJEU and the ECtHR", p. 89, in: H. Hijmans & H. Kranenborg (eds.), "Data Protection anno 2014: How to Restore Trust? Contributions in honour of Peter Hustinx, European Data Protection Supervisor (2004-2014)", Intersentia, 2014. See in the same book also: C. Docksey, "The European Court of Justice and the Decade of surveillance".

29 Article 29 Working Party, "Opinion 4/2007 on the concept of personal data", 01248/07/EN, WP 136, 20 June 2007, Brussels, p. 13.

30 For the standard cases on data protection among others, see: ECtHR, P.G. & J.H. v. Great Britain, application no. 44787/98, 25 September 2001. ECtHR, Perry v. Great Britain, application no. 63737/00, 17 July 2003. ECtHR, Malone v. Great Britain, application no. 8691/79, 02 August 1984. ECtHR, Copland v. Great Britain, application no. 62617/00, 03 April 2007. ECtHR, Halford v. Great Britain, application no. 20605/92, 25 June 1997. ECtHR, Peck v. Great Britain, application no. 4467/98, 28 January 2003.

31 ECtHR, Köpke v. Germany, application no. 420/07, 05 October 2010.

32 See among others: ECmHR, Murray v. Great Britain, application no. 14310/88, 10 December 1991.

33 ECmHR, Herbecq v. Belgium, application nos. 32200/96 and 32201/96, 14 January 1998.

34 P. De Hert & S. Gutwirth, "Data Protection in the Case Law of Strasbourg and Luxemburg: Constitutionalisation in Action", p. 17. In: S. Gutwirth, Y. Poullet, P. De Hert, J. Nouwt & C. De Terwangne (Eds), "Reinventing data protection?", Dordrecht, Springer Science, 2009. Cited from: <http://works.bepress.com/cgi/viewcontent.cgi?article=1009&context=serge_gutwirth>.

35 <http://www.theguardian.com/world/2013/sep/30/nsa-americans-metadata-year-documents>.

36 See further: B. H. M. Custers, "The Power of Knowledge; Ethical, Legal, and Technological Aspects of Data Mining and Group Profiling in Epidemiology", Tilburg, Wolf Legal Publishers, 2004. J. Jin & C. Clifton, "When do data mining results violate privacy?", in: Proceedings of the 10th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD"04), 2004. D. Skillicorn, "Knowledge Discovery for Counterterrorism and Law Enforcement", Boca Raton, Taylor & Francis Group, 2009. H. T. Tavani, "Genomic research and data-mining technology: Implications for personal privacy and informed consent", Ethics and Information Technology (6), 2004. T. Wang & L. Liu, "Output Privacy in Data Mining", Transactions on Database Systems, 36 2011 (1).

37 See further: A. Evfimievski, R. Srikant, R. Agrawal & J. Gehrke, "Privacy preserving mining of association rules", Proceedings of the 8th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD"02), 2002. P. Kuhn, "Sex discrimination in labor markets: The role of statistical evidence", The American Economic Review, 1987 (77). M. LaCour-Little, "Discrimination in mortgage lending: A critical review of the literature", Journal of Real Estate Literature 1999 (7). D. T. Larose, "Data mining methods and models", New Jersey: John Wiley & Sons, 2006. V. C. Müller, "Would you mind being watched by machines? Privacy concerns in data mining", AI & Soc (23), 2009. S. Ruggieri, D. Pedreschi & F. Turini, "Data Mining for Discrimination Discovery", Transactions on Knowledge Discovery from Data, 4 2010 (2). B. W. Schermer, "The limits of privacy in automated profiling and data mining", Computer law & security review, 2 2011 (7). G. D. Squires, "Racial profiling, insurance style: Insurance redlining and the uneven development of metropolitan areas", Journal of Urban Affairs 25 2003 (4). V. S. Verykios, et al., "State-of-the-art in Privacy Preserving Data Mining", Sigmod Record, 33 2004 (1).

38 C. Ovey & R. C. A. White, "European Convention on Human Rights", Oxford, Oxford University Press, 2002, p. 209.

39 M. M. Aid, "The Secret Sentry: The Untold History of the National Security Agency", New York, Bloomsbury Press, 2009, p. 304.

40 ECtHR, Klass and others v. Germany, application no. 5029/71, 06 September 1978, § 50.

41 See among others: ECtHR, Eimdzhiev v. Bulgaria, application no. 62540/00, 28 June 2007.

42 See further: EHRM, Kruslin/Frankrijk (11801/85), 24/04/1990. EHRM, Huvig/Frankrijk (11105/84), 24/04/1990. EHRM, Uzun/Duitsland (35623/05), 02/09/2010. EHRM, Telegraaf Media e.a./Nederland (39315/06), 22/11/2012. EHRM, Amann/Zwitserland (27798/95), 16/02/2000.

43 ECtHR, Leander v. Sweden, application no. 9248/81, 26 March 1987, § 59.

44 The question of exhausting domestic remedies has not been discussed in this article.

45 <https://www.privacynotprism.org.uk/assets/files/privacynotprism/letter_from_ecthr_to_uk_gov.pdf>.

46 Whether they will replace or complement the current paradigm and how this should be envisaged could be a matter of debate, but these are the points that could be considered.

47 <http://daccess-ods.un.org/TMP/1333278.56659889.html>.

48 It seems like the Court's jurisprudence would allow for such an interpretation: A. McHarg, "Reconciling Human Rights and the Public Interest: Conceptual Problems and Doctrinal Uncertainty in the Jurisprudence of the European Court of Human Rights", The Modern Law Review, Vol. 62, no. 5, 1999.

UsedSoft and the Big Bang Theory: Is the e-Exhaustion Meteor about to Strike?

by **Emma Linklater**, Doctoral Researcher at the European University Institute, Florence

Abstract: Since the UsedSoft ruling of the CJEU in 2012, there has been the distinct feeling that – like the big bang - UsedSoft signals the start of a new beginning. As we enter this brave new world, the Copyright Directive will be read anew: misalignments in the treatment of physical and digital content will be resolved; accessibility and affordability for consumers will be heightened; and lock-in will be reduced as e-exhaustion takes hold. With UsedSoft as a precedent, the Court can do nothing but keep expanding its own ruling. For big bang theorists, it is only a matter of time until the digital first sale meteor strikes non-software downloads also. This paper looks at whether the UsedSoft ruling could indeed be the beginning of a wider doctrine of e-exhaustion, or if it is simply a one-shot comet restrained by provisions of the Computer Program Directive on which it was based. Fighting the latter corner, we have the strict word of the law; in the UsedSoft ruling, the Court appears to willingly bypass the international legal framework of the WCT. As far as expansion goes, the Copyright Directive was conceived specifically to implement the WCT, thus the legislative intent is clear. The Court would not, surely, invoke its modicum of creativity there also.... With perhaps undue haste in a digital market of many unknowns, it seems this might well be the case. Provoking the big bang theory of e-exhaustion, the UsedSoft ruling can be read as distinctly purposive, but rather than having copyright norms in mind, the standard for the Court is the same free movement rules that underpin the exhaustion doctrine in the physical world. With an endowed sense of principled equivalence, the Court clearly wishes the tangible and intangible rules to be aligned. Against the backdrop of the European internal market, perhaps few legislative instruments would staunchly stand in its way. With firm objectives in mind, the UsedSoft ruling could be a rather disruptive meteor indeed.

Keywords: *UsedSoft*, CJEU, Exhaustion, WCT, Copyright Directive, ReDigi

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A. Introduction

1 When faced with an appeal on a point of law by *UsedSoft* against a regional court order to the effect that *UsedSoft* cease marketing of 'used' software licences for Oracle products, the German Bundesgerichtshof referred three questions to the CJEU.[1] The questions referred concerned the meaning of the term 'lawful acquirer' as was contained in Article 5(1) of the Computer Program Directive (CPD).[2] (Question 1), whether the distribution right is exhausted within the meaning of Article 4(2) of the CPD when the first acquirer downloads a copy of the program from the Internet (Question 2), and, if the distribution right is exhausted and the first acquirer deletes his copy, whether a second acquirer of the now 'used' licence can become a 'lawful acquirer', again within the meaning of Article 5(1) CPD (Question 3).

2 To the second question – agreeing with the Advocate General – the CJEU answered in the affirmative: The distribution right could indeed by exhausted, so long as the transaction was one of a 'sale'. In response to the first and third questions, contradicting the AG, it found that a second acquirer could become a lawful acquirer, and thus did not need authorisation

from the rightholder to make a reproduction copy necessary for use. The result was nothing short of a revelation: Contractual licences could be sales and thus subject to exhaustion – a principle which until this point had applied only to physical goods – and resale was permissible without authorisation even where a reproduction took place. The significance of the ruling become even more evident when, just short of one year later, a US District Court decided the direct opposite on a notably similar issue.[3]

3 This paper sets out to examine the impact that the *UsedSoft* decision could have on the development of a doctrine of e-exhaustion within the EU. Part B looks into the provisions of the CPD and how these were applied by the Court. Part C then holds the ruling against the international law framework established principally by the WIPO Copyright Treaty 1996 (WCT),[4] with a view to determining whether there is any solid international *legal* basis for such a doctrine of e-exhaustion to develop. Finding that there is not, it then looks at the provisions of the European Copyright Directive (EUCD).[5] These too would seem to 'block' any digital exhaustion applying to non-software content, and thus it seems that if the Court wishes to press the issue, it is going to have to go beyond the written law at both the EU and international levels. With this in mind, section D considers how the CJEU got to its decision in *UsedSoft* in the first place. It appears that this was done through a combined application of internal market principles and a willingness to look at the digital environment as functionally equivalent to the physical one. With the unpredictability of purposive reasoning in mind and equal treatment as an underlying principle, the article concludes that the expansion of the *UsedSoft* ruling, even though implausible from a technical legal perspective, may be much closer than the content industries might care to imagine.

B. Putting *UsedSoft* in context

4 Before looking at the *UsedSoft* decision itself, it is useful to highlight the structure of the CPD, particularly insofar as it relates to reproduction and distribution. It is due to the structure of the CPD on these matters that the Court could come to the findings that it did, and, as will be examined in part C.III, it is worthy of note that this specific construction is not replicated in the more general EUCD.

I. The Computer Programs Directive

5 In the CPD, the reproduction right is granted by way of Article 4(1)(a). It provides that any "permanent or temporary reproduction of a computer program by any means and in any form, in part or in whole" can only be undertaken with the authorisation of the rightholder. The distribution right is to be found in Article 4(1)(c), which gives the author the right to control "any form of distribution to the public, including the rental, of the original computer program or of copies thereof."

6 The principle of exhaustion is also codified in the Directive, and appears in Article 4(2):

> *The first sale in the Community of a copy of a program by the rightholder or with his consent shall exhaust the distribution right within the Community of that copy, with the exception of the right to control further rental of the program or a copy thereof.*

7 There are two key elements to this provision. First, there is the term 'first sale'. According to Oracle, what was occurring when a consumer downloaded its software and concluded a user licence was not a sale, but a licence. As such, if exhaustion was to apply at all, the Court would have to find a way of viewing the contractual licence concluded between the parties as a 'first sale'. Second, we must consider the wording 'that copy'. In the physical world, where a rightholder authorises the distribution of a particular copy in the EU, his or her right of further distribution is said to be 'exhausted' and the purchaser is free to resell it to whomever he chooses, with no obligation to the rightholder.[6] The exhaustion doctrine, however, as envisaged and developed by the EU Courts, had up until the *UsedSoft* ruling been applied only to physical copies of a work, where it is only ever 'that copy' under consideration. The digital context brings difficulties for this wording as it is not the original copy being passed along, but a new one.

8 A final provision, which is specific to the CPD but was critical for the CJEU's ruling, is a qualification for the exclusive right of reproduction. Article 5(1) provides that:

> *In the absence of specific contractual provisions, the acts referred to in points (a) and (b) [the right of he translation, adaptation, arrangement or alteration] of Article 4(1) shall not require authorisation by the rightholder where they are necessary for the use of the computer program by the lawful acquirer in accordance with its intended purpose, including for error correction.*

II. The factual background to UsedSoft

9 The transaction at issue was labelled by Oracle as a 'licence', incurring no transfer of ownership. Rather than the user having to access the program via a physical CD-ROM loaded onto a computer, any consumer could, via the Oracle website, download

a copy of the software free of charge.[7] However, the download can only be made useable where a user agreement has been concluded with Oracle. This agreement gives a "non-exclusive and non-transferrable user right for an unlimited period for that program".[8]

10 The technicalities of the contested 'resale' were such that, when the first acquirer chooses to resell the software via UsedSoft, he is only reselling the *user agreement* and not the copy of the software which he downloaded from the Oracle website. Thus, the second acquirer would actually only have the user agreement transferred via UsedSoft, and would take it upon himself or herself to download the software from the Oracle site. To use the software, the second acquirer would require both the 'second-hand' licence and the newly downloaded copy of the software; no reproduction of the software necessarily takes place in the process. Nonetheless, as we will see, the Court considered that the reproduction right did risk being infringed.

III. The UsedSoft ruling

11 Dealing with Question 2 first, the CJEU addressed the question of whether the transaction at issue was a "first sale or other transfer of ownership" which can be subject to the distribution right. If the transaction could not be categorised as such, no exhaustion could take place.

12 To interpret the meaning of 'first sale', the Court drew upon a "commonly accepted definition" of a sale, which necessarily involves a transfer of ownership, be it in the form of a tangible or intangible item.[9] At the core of the categorisation of what looked like a licence that was in fact a 'sale' was the perpetuity of the right of use, which was not limited in time.[10] By the fact that the right of use granted was perpetual in nature and "designed to enable the copyright holder to obtain a remuneration corresponding to the economic value of the copy of the work of which he is the proprietor",[11] the Court felt warranted to conclude that the contract at hand was one of sale rather than a licence. The result of this was that the transaction could be categorised as one of distribution, with the consequence that – since a 'first sale' had taken place – exhaustion could plausibly come into play.

13 However, at this point the transferral of the exhaustion doctrine, as codified by Article 4(2) of the CPD, from the tangible world to the intangible one becomes slippery. For e-exhaustion to be possible, the Court must consider the novel interaction between the distribution and reproduction rights, an interaction that was not at issue in the world of physical goods where it was simply *that same copy* being passed to a new owner. This intangible-only connection between the reproduction right and the distribution right is reminiscent of a 'hen-and-egg' type situation:[12] the two rights, which previously held separate existences, are now forced to interact.[13] The Court found that the purpose of Oracle allowing free downloads, exploitable only upon conclusion of a user licence, was to make the copy useable by the consumer: The agreement and the download form a whole since both parts are necessary for use.[14] As noted above, the resale in UsedSoft was in reality of the licence alone (there was no passing along of the first acquirer's copy of the software); however, the CJEU created a link in finding that the agreement and the download were indivisible and must be "examined as a whole for the purposes of their legal classification".[15] As such, the Court in *UsedSoft* considered that the reproduction right was indeed at issue.[16] It is interesting to note, however, that this set-up is quite uncommon for the distribution of copyrighted content other than software; for e-books, music and film, for example, the conclusion of the user agreement and the downloading of the content take place almost instantaneously, one leading to the other.[17] In these situations, the reproduction right more clearly comes into play, since a second copy must be created on the new 'owner's' hardware.

14 The true ingenuity of the Court's initial finding that a download could be a 'sale' comes in its application of this to the provisions of the CPD. As a distribution, there is a right that can be exhausted; when exhausted, any subsequent acquirer becomes a 'lawful acquirer' within the meaning of Article 5(1). That second acquirer can then, as provided by Article 4(1)(a), make any reproduction 'necessary for use' without the authorisation of the rightholder. However, this finding was not unconditional. Underpinning the expansion of the doctrine was the notion that the tangible and intangible worlds should be treated as functionally, but not formally, equivalent.[18] As such, it is only if the original acquirer "make[s] the copy downloaded onto his computer unusable at the time of its resale" that he can "avoid infringing the rightholder's exclusive right of reproduction". In essence, the Court adapted the tangible rule to take into account the qualitative difference between tangible and intangible content that comes with the ease of reproduction, but did so in such a way that the same outcome (creation of an aftermarket[19]) could be achieved.

15 With the details of the decision now clear, we can look to how this formulation holds up against the broader legislative landscape. Indeed, despite this new forced interaction between the distribution and reproduction rights, the next section shows that they are still nonetheless two separate rights under the legislative framework established by the WCT. Further, the WCT sets out another right – the

right to make works available for digital interactive transmission – which was wholly neglected by the Court in *UsedSoft*. These formalistic points alongside the lack of replication in the EUCD of the provisions of Articles 5(1) and 4(1)(a) which allowed the conclusions above would seem to render the *UsedSoft* decision something of a one-shot comet.

C. UsedSoft as a one-shot comet

16 It is not the purpose of this article to chronicle the multifaceted interactions between the international and European copyright frameworks, but it is useful – for the purposes of demonstrating how oddly *UsedSoft* sits in the broader landscape – to briefly highlight the main points of contention. This section therefore looks at the WIPO Copyright Treaty, its provisions and the relationship it has with the CPD.

I. The missing 'making available' right

17 Known as the 'Internet treaties', the WCT and the WIPO Performances and Phonograms Treaty were adopted by the Member States of WIPO in 1996.[20] As well as providing for distribution and communication rights,[21] the WCT covers situations of "digital interactive transmission[22]" through the introduction of a new exclusive right for authors covering the "making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them".[23]

18 In *UsedSoft*, it seems clear that Oracle's right to 'make available' its software was at issue when UsedSoft "promoted an 'Oracle Special Offer' in which it offered for sale [via the Internet] 'already used' licences for the Oracle programs".[24] This would appear to be all the more so given the Court's willingness to see the download and the licences as "indivisibly linked".[25] It seems rather strange then that in *UsedSoft* the Court made no reference to this new WCT-based right in its ruling.[26] Why might this be the case?

19 A clue in this respect is that the 'making available' right does not appear in the text of the CPD itself. A possible explanation for this omission could lie in timing; although the CJEU cites the current CPD, Directive 2009/24/EC, the substantive provisions of this Directive were actually adopted in 1991, prior to the WCT.[27] Directive 2009/24/EC is in fact a "straightforward codification"[28] of consolidated amendments to the original Directive. Nonetheless, the failure to incorporate these rights into the 2009 Directive can and should be read as a severe defect on the part of the drafters.[29] In fact, the Commission's Report to the Council, the EP and the Economic and Social Committee on the implementation of the CPD dated 2000[30] *does* make reference to the WCT. The Commission's Report states that:

> *Whilst Article 4 (c) is capable of such a wide interpretation [so as not to be "limited to the distribution of tangible copies of a computer program on floppy disks"], the author's exclusive right of authorising any making available to the public of the work in such a way that members of the public may access it from a place and at a time individually chosen by them (cf. Article 8 WCT) is currently not provided for. Under these circumstances the need for the Community to ensure compliance with WCT requirements by providing for complementary rules on making available of computer programs is being taken into account in the proposal for a Directive on copyright and related rights in the Information Society.*[31]

20 This can be used to criticise the argument used by the CJEU that the CPD is 'lex specialis'. The CPD simply does not provide authors with an exclusive right to make their works available which, due to the hierarchical nature of international treaties, it should. Article 216(2) of the TFEU provides that such "agreements concluded by the Union are binding upon the institutions of the Union and on its Member States" and, as a matter of international law, Article 26 of the Vienna Convention on the Law of Treaties provides that "every treaty in force is binding upon the parties to it and must be performed by them in good faith". As such, from the moment the WCT was concluded, the EU came under an international law – and EU Treaty – obligation to implement it and ensure compliance with its provisions.[32] This obviously leads the ruling to come under some fire, and the above quote could give force to an argument that the CPD being defective in this respect should have been read in light of the EUCD. This is all the more so upon a reading of Article 1(2)(a) of the EUCD, which provides that "this Directive shall leave intact and shall in no way affect existing Community provisions relating to the legal protection of computer programs". In the view of the present author, had the Court relied on the EUCD to invoke the 'making available' right and for interpretative guidance in this respect, it could still have left the provisions on computer programs intact and caused no disruption the relationship between the two Directives.

21 Knowing that the 'making available' right is implemented in the EUCD, this should provide an extra layer to shield the expansion of e-exhaustion to other digital content: Only the distribution right is exhaustible, not the making available or reproduction rights. Would the Court really push the boundaries so far as to overlook this right specifically envisaged to provide authors with the ability to authorize every act of making available on the Internet for digital interactive transmission?

II. Recital 29 of the EUCD as blocking exhaustion of intangibles

22 In addition, the very categorisation of the making available right in the EUCD is relevant and could also be used to keep big bang theorists at bay. The 'making available' right described above was envisaged as a "neutral, legal-characterization-free description of interactive transmissions":[33] It leaves contracting states with relative freedom as to how they categorise it, which can be under the communication right or the distribution right.[34] Since the CPD makes no mention of a 'making available' right, it could be something of a guessing game to ascertain which way the European legislator would have gone in this respect.[35] However, taking advantage of the 'umbrella solution' offered by the WCT, we can see in the preparatory documents leading up to the EUCD that legislative intent was to characterise 'making available' under the communication right, in which case the question of distribution of 'digital interactive transmissions' – even if these were in the form of downloads – would not arise.[36] However, for big bang theorists wishing to advocate in favour of a making-available-as-distribution-thus-exhaustible approach, this point could be contested on the basis of the initial 1995 Green Paper, which seemed to indicate categorisation as closer to distribution, perhaps as a form of rental,[37] while the post-WCT proposal seems to have had primarily non-copy-related uses in mind rather than the type of situations entailing downloads to be stored and accessed by the user.

23 From the Commission's report on the implementation of the CPD cited above and recital 29 to the EUCD, however, we can discount any legislative intent for exhaustion to apply to the resale of intangibles without a material medium. Speaking of the 1991 CPD, the Commission states that:

> *As to the exhaustion of copyright it must be borne in mind that under the Directive Community exhaustion only applies to the sale of copies i.e. goods, whereas supply through on-line services does not entail exhaustion.*[38]

24 The issue as to possible exhaustion of intangibles also appears to be clarified by Recital 29, which provides that:

> *The question of exhaustion does not arise in the case of services and on-line services in particular. This also applies with regard to a material copy of a work or other subject-matter made by a user of such a service with the consent of the rightholder.*

25 Rather than a simple statement reiterating that the communication right cannot be exhausted as is the view of some authors, to the present author, the second sentence was not in fact required by the WCT and represents an active choice on the part of the EU legislator to restrain the distribution right from applying to *any* intangible. To understand this notion requires some additional information about the WCT: Article 6 on the right of distribution provides that:

> *(1) Authors of literary and artistic works shall enjoy the exclusive right of authorizing the making available to the public of the original and copies of their works through sale or other transfer of ownership.*
>
> *(2) Nothing in this Treaty shall affect the freedom of Contracting Parties to determine the conditions, if any, under which the exhaustion of the right in paragraph (1) applies after the first sale or other transfer of ownership of the original or a copy of the work with the authorization of the author.*

26 The AS qualifies that "the expressions 'copies' and 'original and copies,' being subject to the right of distribution [...] refer exclusively to fixed copies that can be put into circulation as tangible objects".

27 AS 6 can, however, be read as allowing for the exhaustion of intangibles where contracting states have chosen these to be characterised as 'distributions' under the umbrella solution and if they view such transactions as a "first sale or other transfer of ownership".[39] This is on the basis that the provision of a distribution right over tangible goods is the minimum level of protection set out by the Treaty. States can choose to go beyond this and apply the distribution right to intangibles such as downloads. However, even then the scope of exhaustion is still narrowly set and likely to be of little commercial significance: it still only covers *that (downloaded) copy*. This would only enable, for example, a user who stored a music download on his or her iPod to sell the iPod along with the content, since no further invocation of the making available or exhaustion rights takes place.[40] The second sentence of recital 29 can be read as indicative that the legislator did not intend to go beyond the minimum provision of a distribution right over tangible goods and did not wish this to extend to intangibles also. As such, this reading of the EUCD, and with the Report of the Commission on the implementation of the CPD in mind, it seems that the Court in *UsedSoft* was going beyond what was intended by the legislator.

III. The specific provisions of the CPD

28 A final point to the effect that *UsedSoft* cannot be expanded beyond the CPD can be made on point of legal construction: If the *UsedSoft* decision was decided under the EUCD, the Court's modicum of creativity in overcoming the reproduction copy hurdle could not have been conceived because – private copying aside[41] – there is no allowance for a 'lawful acquirer' to create a reproduction copy without the authorisation of the rightholder.

29 Already, we have seen this point arise in a regional court decision stemming from Bielefeld, Germany, where it was found that the cross-application of the CPD reasoning to the EUCD context was not possible.[42] Therein, the Bielefeld Court paid particular attention to the difference between the EUCD and the CPD in the way that they treat reproduction copies. In the view of the present author, this distinction is warranted given that the CJEU in *UsedSoft* at no point strayed from a ruling on the CPD alone in its consideration of questions 1 and 3. The CPD – but *not* the EUCD – provides a 'get around' for the reproduction copy in the form of Article 5(1). Thus under the CPD alone *could* the CJEU find that if the reproduction was necessary for use, then a second acquirer could be a lawful acquirer. Were the EUCD to contain a provision similar to Article 4(1)(a) CPD, the possibility for a broader e-exhaustion doctrine to be read into the ruling could be feasible. But the reality is that, without this reproduction get around, the *UsedSoft* ruling is more likely to be contained to future rulings on the CPD alone.

D. UsedSoft as the big bang for e-exhaustion

30 The above points have attempted to counter big bang theorists' arguments that *UsedSoft* is the beginning of a new era for e-exhaustion. By setting out the complex legal framework with which the question of digital exhaustion should interact, we can already see that the simplicity in any arguments towards cross-fertilisation from the CPD to the more general EUCD, or elsewhere, is *a priori* unwarranted. However, we already by now clearly have the feeling that the Court is willing to go beyond the strict word of the law – be it international or European – and introduce reasoning so as to reach outcomes it sees as just and warranted.

31 This part will explore two features of the ruling which go some way to explaining why the Court weighed its outcome in *UsedSoft* as apt for the digital age. First, it considers the purpose the Court was aiming to achieve: the preservation of the exhaustion doctrine. As an aim unto itself, this is to be regarded in the broader context of the free movement rules. Second, it considers that the Court achieves its goals in a particular way: by equating the digital, online world, to the physical one, regardless of whether different legal structures exist for each. It does so by calling upon the principle of equal treatment, and as such widens the ambit of the ruling away from specific legislative provisions to much broader concepts of EU law. Lastly, the ruling is briefly contrasted with the very different approach to resale of digital downloads in the US *ReDigi* decision.

32 This section shows that with two overarching aims in mind – equal treatment (equivalence) and free movement – the *UsedSoft* ruling, even noting that it falls short of international copyright obligations set out by the WCT, could be a rather dangerous meteor indeed.

I. A ruling with firm internal market aims

33 The *UsedSoft* ruling has been described as being "firmly purposive"[43] in nature. However, to describe it as such we must first consider what norms the Court was attempting to preserve. From the above, it seems clear that the legislator was not seeking simply to preserve the copyright framework as set out in the WCT. If the intent of the legislator behind the Directives at hand was to implement – or at least not neglect – the WCT, then a purposive construction would seem unfitting. What then did the Court have in mind?

34 One clue to the Court's doggedness in the ruling points stems from the motive of protecting the very principle of exhaustion itself. This is apparent from the key paragraph 49, whereby the Court senses that any alternative ruling would "divest [the rule of exhaustion] of all scope".[44] The nature of the exhaustion rule that the Court wishes to preserve is, however, what the Court itself wants to make of it. While it has been argued that exhaustion is an act of balance, thus making its aim to place a limit on the significant rights bestowed upon intellectual property owners under national law, in the EU context, the "promulgation of an overarching European exhaustion principle has been, if at all, a response to the dynamics of shaping a single market rather than an attempt to approximate intellectual property laws".[45]

35 Thus, beyond preservation of the purpose of exhaustion as an objective unto itself, we should read the underlying aim as to "avoid partitioning of markets" and "to limit restrictions of the distribution of those works to what is necessary to safeguard the specific subject-matter of the intellectual property concerned".[46] In order to protect these internal market aims, the Court engaged in reasoning based in a sense of 'equivalence';[47] essentially it asked why online and offline markets should be treated differently if downloading is the "functional equivalent of the supply of a material medium"[48] and "from an economic point of view [they] are similar".[49]

II. Applying the norms through the notion of tangible-intangible equivalence

36 A sense of 'equivalence' is to be found throughout the ruling.[50] To the Court, it "makes no difference" whether the software is made available through a download or a CD-ROM or DVD.[51] The permanency of the use, which is granted "for an unlimited period in return for payment of a fee", leads the Court to determine that both downloads and physical sales constitute "transfer of the right of ownership of that copy".[52] This sense is also clear when, in response to Oracle's submission that policing the deletion is difficult, the Court responds by saying that in a like situation with a physical medium – a CD-ROM or DVD – the ability to control reproductions is equally hard but "it is permissible for the distributor – whether 'classic' or 'digital' – to make use of technical protective measures such as product keys".[53] While the Court is firm in its conviction that downloads are functional equivalents for consumers, it does perhaps simplify the matter.[54]

37 Paragraph 61 reads:

> *It should be added that, from an economic point of view, the sale of a computer program on CD-ROM or DVD and the sale of a program by downloading from the internet are similar. The on-line transmission method is the functional equivalent of the supply of a material medium. Interpreting Article 4(2) of Directive 2009/24 in the light of the principle of equal treatment confirms that the exhaustion of the distribution right under that provision takes effect after the first sale in the European Union of a copy of a computer program by the copyright holder or with his consent, regardless of whether the sale relates to a tangible or an intangible copy of the program.*

38 If we simply replace the reference to computer programs with 'e-book' or 'downloaded music file' then we get the distinct feeling that the implications of *UsedSoft* could be much broader than it first appears. Looking at the second sentence of this paragraph, the Court's reference to equal treatment as a justification for treating tangibles and intangibles alike could have wide repercussions.

39 As a general principle, equal treatment means that "comparable situations must not be treated differently, and different situations must not be treated in the same way unless such treatment is objectively justified".[55] In the field of economic law, this principle is applied to avoid distortions of competition for the purposes of completing the internal market, and so recourse to equal treatment is in keeping with the objectives set out in the above section.[56] However, presenting intangible downloads as the 'functional equivalent' of physical sales implies that the two are comparable so as to warrant the application of the principle of equal treatment. This could be taken already from the ruling insofar as the Court concludes that a 'sale' is taking place; however, the second sentence of this paragraph is particularly menacing if it could be taken to mean that based solely on the substitutive capacity of online transmissions for the supply on a material medium, the principle of equal treatment necessitates that the exhaustion doctrine also encompasses e-exhaustion.

40 Under this reading of paragraph 61, the implications are much wider, but strangely for a statement based on general principles the Court does not consider any objective justifications for a difference in treatment. The reason for this omission could lie in the nature of the call to general principles itself – the Court inserts paragraph 61 after it has already established that, on the basis of the objectives of the CPD (or, somewhat less convincingly, on the lack of evidence of any legislative intent to differentiate), the computer programs on any medium should be subject to the same treatment.[57] Tridimas notes that where equality is a ground for review of Community measures (here the CPD), "the application of the principle is qualified by the discretion of the Community legislature and the Court focuses more on the objectives of the measure at issue"; the Court already noted that the CPD was not intended to differentiate and so it did not need to investigate further.

41 Although its statement reasons towards across-the-board equivalence of intangibles and tangibles on the basis of the general principle of equal treatment, developments along these lines should be approached with caution. The situation of e-books is a case in point, with rumours abounding that the Netherlands Public Library Association (VOB) has started a test case against *Stichting Leenrecht* (the Dutch public lending right collecting agency), in which it has asked the Regional Court of the Hague to refer questions to the CJEU on whether libraries have a legal right to e-lending based on an 'electronic interpretation' of the Rental and Lending Right Directive 2006,[58] as justified by the *UsedSoft* decision.[59] This case would be of particular interest since the same doubts as to the legislative intent behind e-exhaustion arise in the rental context as in the CD, as expressed above. With this (potential) case in mind, it still remains to be discerned whether e-books and books are comparable, although it can be noted that for the CJEU at least the potential of substitutability has been accepted as sufficient support for a finding of comparability.[60] A bigger stumbling block could lie in any objective justifications that can be argued for a difference in treatment. Here, most certainly, the lack of reliability of the 'original acquirer deletes' method proposed by the Court would seem to justify that across-the-board e-exhaustion is not justified unless a greater means is provided for rightholders to protect themselves against the nemesis 'additional copy'.

III. Comparison with the US ReDigi Decision

42 If the reasoning of the Court in *UsedSoft* is to be understood as being firmly rooted in free movement aims – with the reference to the principle of equal treatment also being motivated by competition within the market – then this can provide an inroad to understanding how and why the US District Court in *ReDigi*, when faced with a largely similar issue,[61] came to the opposite outcome.

43 In *ReDigi*, the Court held that "the unauthorised transfer of a digital music file over the internet – where only one file exists before and after the transfer – constitutes a reproduction.[62]" It asserted that it is "the creation of a new material object, and not the creation of an *additional* material object, that defines this right".[63] This is in stark contrast to CJEU's unwillingness to deny "effective use" because the user would be blocked by the inability to make a reproduction copy without authorisation.[64] In this respect, the Advocate General's Opinion in *UsedSoft* is in fact much closer to the US decision, both of which regard the reproduction right as blocking the creation of new copies without authorisation, rather than simply barring additional copies from being brought into circulation as the CJEU did.[65]

44 When considered in light of the underlying norms, it seems that the legal blockages to e-exhaustion (from the EU legislator or the WCT) can in reality cause but a little stir in the wider vision of the European Court: "[C]opyright must justify itself and fit in with the free movement rules".[66] It is for this reason that we see such a major contrast appearing between the CJEU's ruling and the *ReDigi* decision in the US. The latter can be seen as firmly rooted in copyright; not the US Copyright Act alone, but also the Copyright Clause in the Constitution which grants Congress the express power to enact copyright laws "to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries".[67] An interpretation of the first sale doctrine to alter the wording of 'that copy' and implicate the reproduction right also would imply a reading beyond the express word of the written law. While the US Court seemed to consider there may be some *need* for exhaustion to apply to certain digital situations, it did not feel it was appropriate to take such a decision and instead deferred to Congress to decide if physical limitations on the first sale doctrine were indeed 'outmoded'.[68]

45 It is therefore due to the "fundamentally different logic"[69] behind the EU approach as compared to the US one that e-exhaustion could be placed firmly on the table. Despite the legal surrounds, particularly as far as the EUCD would appear to expressly prohibit digital resale, this purposive interpretation of the exhaustion doctrine as an enabler of free movement, regardless of whether that free movement concerns physical objects or digital downloads, could be the carrot-like norm leading the (exhausted) digital donkey onwards.

E. Conclusion

46 This article has sought to address the question of whether the *UsedSoft* ruling is a one-shot comet or whether it could be expanded with a big bang effect for the exhaustion of downloads of content other than software. Looking at the word of the WCT alone and reading the CPD and EUCD in such a way as to implement this Treaty, it is clear that the *UsedSoft* ruling does not line up in a number of respects. To the present author, it seems unlikely that the making available right can remain 'missing in action' when we transfer to the EUCD, which is after all the Directive that concerns the majority of digital content and seems all the more relevant after the *Nintendo* ruling of January 2014.[70] Further, there appears to be specific legislative intent *not* to allow e-exhaustion under the EUCD and a lack of foundation therein under which the reproduction 'trick' the Court pulled off using Article 5(2) of the CPD could be repeated.

47 Nonetheless, although the strict word of the law does not support any extension of *UsedSoft*, the ruling itself shows that the Court seems to have another – much bigger – plan up its sleeve. Batchelor sees in *UsedSoft* "a court determined to make the free movement and exhaustion principles of the off-line world... [apply] to a digital world",[71] but one whose "commitment to ideology" could be seen as coming "at the expense of legal certainty". This sentiment is also held by the present author: With more overarching principles in mind, which undoubtedly go beyond the copyright framework alone, it is conceivable that the impact of the ruling could indeed be much broader than software, despite first appearances.

1 Case C-128/11 Usedsoft Gmbh v. Oracle International Corp. [2012] ECR I- 0000.

2 Directive 2009/24 of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs ('CPD') OJ L 111, 05.05.2009, pp. 16–22.

3 Capitol Records, LLC v. *ReDigi* Inc. ('*ReDigi*'), 1:12-cv-00095, No. 109 Southern District of New York, 30 March 2013.

4 WIPO Copyright Treaty of 20 December 1996, 2186 U.N.T.S. 121, S. Treaty Doc. No. 105-17 (1997); 36 I.L.M. 65 (1997). The WIPO Copyright Treaty was ratified on behalf of the European Community by Council Decision 2000/278/EC of 16 March 2000, OJ L 89, 11.04.2000, pp. 6-9.

5 Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society, OJ L 167, 22.06.2001, pp. 10-19.

6 This is known as the 'doctrine of Community exhaustion' and first appeared in the jurisprudence of the Court in the early 1970s in the context of free movement and limitations on parallel trade; see Case 78/70 Deutsche Grammophon Gesellschaft Mbh v Metro-Sb-Großmärkte Gmbh & Co. Kg. [1971] ECR 487.

7 Ibid.

8 UsedSoft at para. 43 (argument of Oracle).

9 Ibid., at para. 42.

10 Ibid., at para. 47. Although this paper focuses on the legal blockages to the development of a broader e-exhaustion doctrine, this point has caused some authors to comment that software developers can easily circumvent the ruling by providing only time limited access. See, for example, Batchelor, B. and Keohane, D. (2012), 'Usedsoft - Where to Now for Software Vendors?', 33 European Competition Law Review 12, pp. 545-551; Stothers, C. (2012), 'When Is Copyright Exhausted by a Software Licence?: Usedsoft v. Oracle', 34 European Intellectual Property Review 11, pp. 787-791 Torremans is in contrast not overly convinced by this; see Torremans, P. (2013), 'The Future Implications of the Usedsoft Decision', ALAI Conference on Dissemination and Management of Works of Authorship on the Internet in Cartagena, September 2013, available at http://www.alaicartagena2013.com/index.php/congress/papers (last accessed 08.10.13).

11 The "absolute right to exclude others from using the intellectual property [...] and not just a right to 'reasonable' royalties" (Stothers (2012)) underpins copyright as we know it and as such this statement appears provocative insofar as it would indicate that the rightholder is only entitled to limited, appropriate remuneration. However, according to Stothers, this part of the ruling should be read as the Court simply meaning that remuneration should not "go beyond what is necessary to safeguard the specific subject-matter of the intellectual property concerned". See UsedSoft at para. 62-63 and Stothers, C. (2012), at p. 790.

12 See the slides of Ficsor, M. (2013), 'Slides: Relevance of Exhaustion of Rights in the Digital Environment', ALAI Conference on Dissemination and Management of Works of Authorship on the Internet, in Cartagena, September 2013, available at http://www.alaicartagena2013.com/index.php/congress/papers (last accessed 08.10.13).

13 As is detailed in Part C, the WCT does not block the resale of a download on the medium on which it is stored.

14 Ibid., at para. 44.

15 UsedSoft at para. 44.

16 This is clear from the conditions for resale at paras. 70 and 78 where the Court talks of avoiding infringing the exclusive right of reproduction.

17 This is the '*ReDigi*' scenario, examined in Section D.III.

18 As detailed in Part D.II.

19 On the considerable economic rationales behind the exhaustion doctrine, see Puig, A.R. (2013), 'Copyright Exhaustion Rationale and Used Software: A Law and Economics Approach to Oracle v. Usedsoft', 4 Journal of Intellectual Property, Information Technology and E-Commerce Law 3, pp. 159-178.

20 These were the first Treaties in the area of copyright to which the EU (then EC) acceded in its own right, using the procedure laid out in what is now Art. 218 of the TFEU (then Art. 200 TEC). Given that the substance of copyright law is a shared competence between the EU Member States and the EU itself, both Treaties were equally signed by all Member States. See Von Lewinski, S. and Reinbothe, J. (2002), 'The WIPO Treaties 1996: Ready to Come into Force', 24 European Intellectual Property Review 4, pp. 199-208

21 Arts. 6 and 8 WCT respectively.

22 Ficsor, M. (2002), The Law of Copyright and the Internet: The 1996 WIPO Treaties, Their Interpretation, and Implementation (Oxford; New York: Oxford University Press 2002) at p. 203.

23 Art. 8 WCT.

24 UsedSoft at para.25. On fitting this type of posting on the Internet/download situation 'squarely' into the 'making available' right, see Ginsburg, J.C. (2004), 'The (New?) Right of Making Available to the Public', in W. R. Vaver D. Bently Lionel Cornish (ed.), Intellectual Property in the New Millennium: Essays in Honour of William R. Cornish (Cambridge, UK: Cambridge University Press 2004), pp. 234-247 at p. 238-241.

25 UsedSoft at para.84.

26 Moon, K. (2013), 'Resale of Digital Content: Usedsoft v. *ReDigi*', 24 Entertainment Law Review 6, pp. 193-195 For a detailed overview of the WCT framework and the compliance of UsedSoft and the US rulings in Kirtsaeng and *ReDigi* with this, see Ficsor, M. (2013). In *ReDigi*, the US Court does mention the making available right, although it finds that "[i]n any event, because the Court concludes that actual sales on *ReDigi*'s website infringed Capitol's distribution right, it does not reach this additional theory of liability" (*ReDigi* at p.8). In the context of the EUCD, the CJEU has determined that the separate rights of communication to the public and making available "belong to the author"; see for example C-277/10 Martin Luksan v. Petrus van der Let, [2012] ECR I-00000, para. 86.

27 Council Directive 91/250/EEC on the legal protection of computer programs OJ L 122 , 17/05/1991, pp.42-46. The 2009 CPD codification was enacted under an expedited procedure on the basis of Inter-institutional Agreement of 20 December 1994 on an accelerated working method for official codification of legislative texts (OJ C 102, 04.04.1996, pp.2–3; see point 4 of the Commission Proposal for a Directive of the European Parliament and of the Council on the legal protection of computer programs (Codified Version), COM(2008) 23 final of 28.01.2008.

28 See the European Parliament legislative resolution of 17 June 2008 on the proposal for a directive of the European Parliament and of the Council on the legal protection of computer programs (codified version) COM(2008) 0023, OJ C 286 E , 27.11.2009 p.61.

29 See Moon, K. (2013), at p. 194.

30 The original 1991 CPD placed a reporting duty on the Commission. The report was due in 1996, but was delayed given that only three Member States had implemented the Directive by that point. At the time of the 2000 report, implementation was complete in all Member States.

31 Report from the Commission to the Council, the EP and the ECSOC on the implementation and effects of Directive 91/250/EEC on the legal protection of computer programs, COM(2000) 199 final, 10.04.2000, p. 15.

32 The CJEU has itself laid out the relationship between EU secondary legislation and international agreements on multiple occasions. In Commission v. Germany, it stated that "the primacy of international agreements concluded by the Community over provisions of secondary Community legislation means that such provisions must, so far as is possible, be interpreted in a manner that is consistent with those agreements." Regardless of the intention of the legislator, international agreements are hierarchically superior to secondary Community law. From the above, it is evident that the constraints of the WCT should have been given due consideration by the Court when examining the limitations of exhaustion. Indeed, it would have been possible to read the CPD in line with the WCT – largely as the AG set out – but the Court seemingly had different ideas. The CJEU later held that that "in particular where [Community legislation is] intended specifically to give effect to an international

agreement concluded by the Community [it] must, so far as possible, be interpreted in a manner that is consistent with international law." This citation is in fact given by the CJEU in the context of the EUCD, but is notably absent when it talks of the CPD, Ficsor, M. (2002) at p. 500. Citing Case C 341/95 Bettati [1998] ECR I 4355, paragraph 20, and Case C-306/05 SGAE [2006] ECR I-11519, paragraph 35

33 See ibid., at 496.

34 That the right is intended to be freely categorised as communication or distribution as decided upon by the contracting parties themselves is made clear by an uncontested statement made by the US delegation at the Diplomatic conference which "stressed the understanding—which had never been questioned during the preparatory work and would certainly not be questioned by any Delegation participating in the Diplomatic Conference—that those rights might be implemented in national legislation through application of any particular exclusive right, also other than the right of communication to the public or the right of making available to the public, or combination of exclusive rights, as long as the acts described in those Articles were covered by such rights". See WIPO, 'Summary Minutes, Main Committee I, Document CRNR/DC/102' (1996), Diplomatic Conference on Certain Copyright and Neighbouring Rights Questions, Geneva, 2 to 20 December 1996 at p. 41, para. 301; Ficsor, M. (2002), Chapter 4.

35 Ficsor writes of the Communication right being the 'favourite' candidate in the run up to the EUCD; Ficsor, M. (2002)at p. 504-506. An argument against digital transmissions being categorised as distributions could be made on the basis of the need for a systematic, coherent interpretation of the Directives covering the copyrightable subject matter. In relation to the EUCD, the 'making available' right appears under 'communication' and with the view of establishing a coherent acquis communautaire, the intent expressed in relation to the EUCD could be transferrable to the CPD also. This argument towards a coherent acquis communautaire is not a new one, and has previously been argued by von Lewinski, albeit in the context of a lack of international exhaustion in all the EU instruments.

36 The communication right can be 'infinitely repeated'; see Case 282/81 Coditel v. Ciné Vog Films II [1982] ECR 3381.

37 See European Commission Green Paper of 27 July 1995 on Copyright and Related Rights in the Information Society COM (95) 382 Final, not published in the Official Journal, pp.56-60. However, categorization as a type of rental is still not convincing; the CJEU has clarified that exhaustion does not apply after the first rental. See Case C-61/97 Foreningen af danske Videogramdistributører v. Laserdisken [1998] ECR I-5171.

38 Note 26 above. This statement is not without basis, but is founded in the response by (then) Commissioner for Competition Mario Monti to a question from the European Parliament: Answer by Commissioner Monti to Oral Question H-0436/95 by Arthur Newens, MEP (11.7.1995), Debates of the EP (EN ed.) No. 466, p. 174.

39 Some commentators would disagree with this statement: For example, Linder and Shapiro state at p. 21 that "where the making available right is implemented as an online distribution right, the exhaustion principle cannot apply". See Lindner, B. and Shapiro, T. (2011), Copyright in the Information Society: A Guide to National Implementation of the European Directive (Cheltenham, UK; Northampton, MA: Edward Elgar 2011) at p. 21. For a contrasting view in line with that of the present author, see Chapter 4 in Walter, M.M. and Von Lewinski, S. (2010), European Copyright Law: A Commentary (Oxford; New York: Oxford University Press 2010) at p. 1010.

40 See Reinbothe, J. and Von Lewinski, S. (2002), The WIPO Treaties 1996: The WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty: Commentary and Legal Analysis (London: Butterworths LexisNexis), p. 87, footnote 32.

41 The Berne Convention allows exceptions and limitations to the reproduction right, providing they meet the conditions of the 'three step test'. Art. 5(b) of the EUCD permits MS to provide for an exception to the reproduction right for "reproductions on any medium made by a natural person for private use and for ends that are neither directly nor indirectly commercial, on condition that the rightholders receive fair compensation". Reproductions for resale purposes, as were at issue in UsedSoft, would clearly not fall within the scope of this exception.

42 See in more detail Linklater, E. (2013), 'E-Books Distinguished, Not Exhausted', 8 Journal of Intellectual Property Law & Practice 9, pp. 685-686

43 Batchelor, B. and Keohane, D. (2012), at p. 546.

44 UsedSoft at para.49.

45 Westkamp, G. (2007), 'Intellectual Property, Competition Rules and the Emerging Internal Market: Some Thoughts on the European Exhaustion Doctrine', 11 Marquette Intellectual Property Law Review 2, pp. 291-335, 335.

46 UsedSoft at para.62.

47 For an excellent and detailed reading of the ruling as "a clear example of the application of the continuing discussion of "online/offline equivalence", see Nicholson, A. (2013), 'Old Habits Die Hard?: Usedsoft v. Oracle', SCRIPTed, 10(3), pp. 389-408, published online 07.10.13, available at http://script-ed.org/?p=1167, accessed 9/10/13 at p 389. Note that in this paper, the terminology 'tangible-intangible' rather than 'online-offline' is used. This is because the latter terms remain imprecise; downloads of content are always digital, but so, technically, are distributions of physical CD-ROMs; physical CD-ROMs can equally be purchased online through e-commerce channels or offline in stores. E-books and downloaded software are 'pure digital', however they may be transferred online or offline (e.g. a computer bought with the books pre-loaded). The author would like to thank Prof. Zsolt Balogh (University of Pécs) for pointing out this distinction.

48 UsedSoft at para. 61.

49 UsedSoft at para. 61.

50 On online-offline equivalence, see in particular: Reed, C. (2010), 'Online and Offline Equivalence: Aspiration and Achievement', 18 International Journal of Law and Information Technology 3, pp. 248-273; Schellekens, M. (2006), 'What Holds Off-Line, Also Holds on-Line?', in Bert-Jaap Koops et al. (eds.), Starting Points for ICT Regulation: Deconstructing Prevalent Policy One-Liners (The Hague: TMC Asser Press 2006), pp. 51-75.

51 However, to this it adds "in a situation such as that at issue in the main proceedings" (UsedSoft at para. 47). We could therefore see this as a qualified sentiment of equivalence, related to the structure of Oracle's own distribution, whereby "at the customer's request, the programs are also supplied on CD-ROM or DVD" UsedSoft at para. 21

52 UsedSoft, at para. 47. For some authors the requirement that the right of use be permanent limits the impact of the ruling (see Torremans, P. (2013) and Batchelor, B. and Keohane, D. (2012)).

53 UsedSoft at para. 79.

54 For example, a distinguishing feature between digital and physical situations that is not considered is that insofar as physical goods are concerned we, as consumers, are given the tools to judge for ourselves whether the copy is an original or not, and then make our decision to purchase. In the online world, we are devoid of this capacity by the fact that copied

digital files are exact replicas of the original: "This is not about second-hand bookshops and CDs in jumble sales" (Batchelor, B. and Keohane, D. (2012), at p. 545.). While for a pirated book, CD or DVD the quality difference is obvious from the very packaging, even if this does not affect the actual content, we essentially know what we are buying into. Legal certainty is jeopardized if this line becomes blurred, although as noted by Tragosz this counter argument to digital exhaustion is not 'insurmountable' and can be overcome by use of metadata or "a clear rule placing the burden of proof of the legality of the transaction on the parties to it, who would be obligated to provide evidence confirming that they complied with all the requirements necessary for digital exhaustion."(Targosz, T. (2010), 'Exhaustion in Digital Products and the "Accidental" Impact on the Balance of Interests in Copyright Law', in L. Bently, U. Suthersanen, and P. Torremans (eds.), Three Hundred Years since the Statute of Anne, from 1709 to Cyberspace (Cheltenham: Edward Elgar Publishing 2010), at p. 350-351.) Although his solution predates the UsedSoft ruling, it appears that this logic is what the Court had in mind when it stated that "it is permissible for the distributor – whether 'classic' or 'digital' – to make use of technical protective measures such as product keys (UsedSoft at para. 79)".

55 Opinion of AG JÄÄSKINEN , delivered on 29 March 2012 in Case C-5/11 Criminal proceedings against Titus Donner [2012] ECR I-00000.

56 Tridimas, T. (1999), The General Principles of EC Law (Oxford: Oxford University Press 1999) at p. 44-48.

57 Ibid., at p. 48.

58 Directive 2006/115/EC of the European Parliament and of the Council of 12 December 2006 on rental right and lending right and on certain rights related to copyright in the field of intellectual property, OJ L 376 p.28 of 27.12.2006.

59 The reference is not yet listed on the Curia website, however the case has been confirmed by the Nederlands Uitgeversverbond (Dutch Publishers Association). See also the EBLIDA Newsletter, October 2013, p. 3, available at http://www.eblida.org/Newsletter%20folder%20(uploaded%20files)/Newsletters-2013/2013_10_October.pdf.

60 Case C-319/81 Commission of the European Communities v Italy [1989] ECR 601 at para.16: "even where it is impossible to perceive a sufficient degree of similarity between the products concerned, there are nevertheless characteristics common to all those spirits which are sufficiently marked for it to be said that they are at least partly or potentially in competition".

61 From a comparative perspective, the technical processes that were taking place in the UsedSoft and *ReDigi* cases differed somewhat. In *ReDigi* – which concerned the resale of music downloaded from iTunes – the original downloaded file was 'migrated' from the first user's computer to *ReDigi*'s cloud-based server (*ReDigi* a p.2). This word choice is significant because the sense is that at the end of the process, the file no longer exists on the user's computer but only on the server. The user can then choose to keep it stored there to be accessed via streaming (whereby no copy would be downloaded) or to offer it for resale. If resold, access by the first user is blocked and the second user can download the file onto his or her device. In the *ReDigi* resale scenario the Court found there to be two breaches of the reproduction right: when the upload to the cloud takes place and when the new owner re-downloads the file. In the UsedSoft scenario, the CJEU found there to be none.

62 *ReDigi* at p. 5.

63 *ReDigi* at p. 6.

64 UsedSoft at para. 83.

65 Opinion of Advocate General Bot of 24 April 2012 in C-128/09 UsedSoft at point 100: "in the event of resale of the right to use the copy of a computer program, the second acquirer cannot rely on exhaustion of the right to distribute that copy in order to reproduce the program by creating a new copy, even if the first acquirer has erased his copy or no longer uses it".

66 Torremans, P. (2013), at p. 7.

67 Article I, Section 8, Clause 8 of the United States Constitution.

68 *ReDigi* at p.13.

69 Torremans, P. (2013), at p. 3.

70 Looking at the CJEU's ruling in Nintendo (Case C-355/12 Nintendo v PC Box, not yet reported), the role of the CPD is even more belittled. The Court found that "the special nature of the Software Directive means that its provisions take precedence over those of Directive 2001/29/EC, but only where the protected material falls entirely within the scope of the former" (see IP Kat blog post, 'Nintendo ruling confirmed lex specialis nature of Software Directive: Implications for UsedSoft exhaustion?', published online 26.01.2014, http://ipkitten.blogspot.co.uk/2014/01/nintendo-ruling-confirmed-lex-specialis.html (last accessed 10.02.2014)). Thus, video games, for example – which are in part computer programs but also contain images, sound and video that can be subject to copyright protection – would be covered by the EUCD not the CPD.

71 Batchelor, B. and Keohane, D. (2012), at p. 545.

Open Innovation: Legal Hurdles in the Creation of Contractual Arrangements Governing Idea Competitions?

by **Christian Czychowski, Julian Waiblinger***, Ph.D., Attorneys-at-law with the law firm BOEHMERT & BOEHMERT, Berlin, Christian Czychowski is a Honorary Professor at the University of Potsdam

Abstract: The phenomenon of Open Innovation has been gaining prominence over the last decade. Idea competitions have been used in a variety of industrial sectors. Nevertheless, the legal issues raised by this topic have not been broadly addressed, yet. These arise from the adverse interests of the actors. The company which organizes an idea competition would usually like to have the opportunity to comprehensively use the solutions, ideas or products submitted by the competition entrants. For the company it is important to obtain all intellectual property rights in the idea, in the product created as a result and, thus, in the rights to be exploited in the future, in particular, patents, utility models, trademarks, copyrights and registered designs as well as other industrial property rights. The participant would like to participate to the greatest extent possible in the success of the submitted solution. This affects, firstly, the question of fair remuneration or further participation in any profits earned as well as, secondly, any personal rights such as being named as inventor or author. The article aims to show the contractual difficulties which have to be addressed tailoring the terms of an idea competition.

Keywords: Open Innovation, General Terms and Conditions of Business, Employee Inventions

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A. Background

1 Over the last decade, a new phenomenon in innovation management has been developed, known as ***Open Innovation***, a phenomenon which seems to be gaining in prominence. The term *Open Innovation*, which can be traced back to *Chesborough*,[1] refers to the opening of a company's internal innovation processes to external third-party contributors. *Open Innovation* is seen as a contrasting approach to the traditional closed innovation models in which companies exclusively develop and commercialise ideas which originate from within their own organisation, in particular the in-house research and development (R&D) department.[2] In the *Open Innovation* model, firms commercialise third-party innovations, in addition to internally generated innovations, whilst also undertaking innovation in cooperation with start-ups, independent research institutes or other organisations.[3] Relevant business literature overwhelmingly concludes that *Open Innovation* represents a great opportunity for companies to develop products and services more efficiently, more effectively and in a shorter time whilst increasing financial returns. Flop-rates of between 50% and 90% across all new products, the increasingly competitive pressures caused by globalisation as well as ever shorter production cycles coupled with decreasing R&D budgets are cited.[4] *Reichwald* and *Piller* point out, in particular, that in-house R&D departments frequently lack the ability to appreciate the "wider picture" and that innovation proposals from within the company are often – unfairly – favoured in the idea evaluation phase.[5]

B. Open Innovation through idea competitions

2 Today, companies employ a wide variety of *Open Innovation* techniques. In the so-called ***outside-in*** process, ideas, knowledge and know-how from external parties, such as suppliers, customers, other firms from the same or a different industry and research institutes, are integrated into the company's innovation process. In the so-called ***inside-out*** process, knowledge generated in-house is commercialised externally, for instance through an active patent management system with out-licensing of technologies in other markets. In addition, the term ***coupled process*** is used to describe mixed forms of the two aforementioned models, which are applied, in particular, in alliances, cooperations and joint ventures.[6]

3 A typical example of an *outside-in* model is the **idea competition** (or "idea contest", "innovation competition" or "innovation challenge") under discussion in this paper. In such a competition, a company, non-profit organisation or public body sets the public – either directly or through an intermediary specialised in organising idea competitions – one or more tasks to be solved in the scope of the competition. The best responses or solutions are awarded prizes.

4 Idea competitions have developed into a popular instrument of open innovation and are used in the most diverse industries, such as the automobile industry, chemical-pharmaceutical industry or in the general consumer goods sector. Audi, Bayer, BMW, Henkel, Lufthansa, VW and Wella are just a few of the companies that have organised idea competitions in the last few years or are currently running them.[7] Examples of intermediaries specialising in organising idea competitions are the Internet portals *Innovationskraftwerk* and *Hyve*; the company which is probably best known internationally in this area is *InnoCentive*.

5 The spectrum of idea competitions is broad and encompasses continuously available, open platforms and concentrated actions aimed at solving specific problems.[8] The aim of any idea competition is to integrate customers or users into the various phases of the innovation process and thus obtain input from people who were previously unknown to the company concerned.[9] The constituent characteristics of idea competitions are the closed time period for the solution of the task set as well as the awarding of prizes to the entries which are adjudged to be the best by the respective jury or assessment panel.[10] The rewards on offer to the participants of an idea competition can be material prizes but are, in the main, monetary awards which sometimes, in the case of major idea competitions, even exceed €100,000.

6 Whilst idea competitions have received quite a measure of attention in business literature,[11] there have so far only been a few, isolated publications in legal literature which have addressed open innovation generally and idea competitions specifically.[12] This is quite astounding, especially when one considers that the topic raises numerous legal issues. The legal construction of idea competitions is subject to, in particular, intellectual property and contractual law issues, and it is these which will be examined in the following.

C. Legal issues related to contractual arrangements governing idea competitions

I. Interests involved

7 Probably the most pressing questions regarding the organisation of idea competitions relate to the granting of **(exploitation) rights** in the solutions created by the participants, the related issues surrounding the possibility of registration of intellectual property rights by the company running the competition and questions on the duty to remunerate the respective participants.

8 The relative interests of the parties involved illustrates the situation: the "**idea seeker**", namely the company which organises the competition, would usually like to have the opportunity to comprehensively use the solutions, ideas or products submitted by the competition entrants, the "**idea providers**". For the idea seeker, it is important to obtain all intellectual property rights in the idea, in the product created as a result and thus in the rights to be exploited in the future, in particular, patents, utility models, trade marks, copyrights and registered designs as well as other industrial property rights.

9 In order to be able to utilise fully the competition solutions of the idea providers, the idea seeker will also be keen to obtain the aforementioned rights in exclusive and transferable form. The idea seeker also wants to be entitled – if possible without any involvement of the idea provider and at its own discretion – to apply for protection rights such as trade marks, patents or utility models on the relevant ideas/products and to exploit these without restriction. Finally, it would usually be in the interests of the idea seeker where possible not to have to name the idea provider or pay them remuneration beyond the initial prize money when further exploiting the idea/product in the future.

10 The idea provider for his or her part would like to participate to the greatest extent possible in the success of the submitted solution. This affects, firstly, the question of fair remuneration or further participation in any profits earned as well as, secondly, any personal rights such as being named as inventor or author.

11 In the following, the legal scope for discretion within the respective regulations will be examined as well as their boundaries – in particular in light of the specific legal provisions governing general terms and conditions of business.

II. Inclusion of competition terms and conditions

12 As the respective competition terms and conditions are contractual conditions pre-formulated for a variety of contracts and thus constitute **general terms and conditions of business (T&Cs)**, it is first crucial that the competition terms are effectively included in the contractual relationship between idea provider and idea seeker. T&Cs are fundamentally only a constituent element of a contractual agreement if the user expressly refers the other contracting party to them at the point of conclusion of the agreement and provides the other party with the opportunity to acknowledge their content in a reasonable way and thus to signal their consent to their applying (Sec. 305 (2) German Civil Code, *BGB*).

13 In the case of purchase contracts concluded in the online retail sector, a reference to the T&Cs above the "order button" (or similar) which is separated from the other details of the order would suffice;[13] alternatively, it is sufficient for the T&Cs to be displayed immediately prior to the order button being clicked or at another point in the order process which every customer must complete.[14]

14 In the same way, the reference to the T&Cs in relation to innovation competitions must be displayed prior to the conclusion of the registration process. It must also be ensured that each participant acknowledges the terms before submitting their binding application.

15 **Reasonable acknowledgement** as the second requirement of an effective incorporation (as per Sec. 305 (2) No. 2 BGB) is specified in respect of e-commerce transactions in Sec. 312g (1) No. 4 BGB. According to that provision, the participant must have the opportunity to access the terms and conditions at the point the agreement is entered into and to store them in a form which allows for their reproduction.[15] This condition is not satisfied by a simple reference to the T&Cs at the bottom of the screen on the webpage. For the party using T&Cs, it is thus advisable to employ the so-called **clickwrap method** in which customers can only confirm their consent after they have viewed the terms by clicking on the corresponding link. Using this method, the information requirement is also fulfilled and the consent of the customer with the incorporation of the T&Cs is obtained.[16]

16 The aforementioned requirements must be fulfilled "**at the point of entering into the agreement**". Working on the assumption that in the case of innovation competitions, there already exists a binding offer on the part of the idea seeker, the aforementioned requirements must already be

met at the point this offer is made, thus usually at the point the competition is published on the Internet. In any case, the possibility of reasonable acknowledgement must be provided before the customer submits a binding acceptance of an offer which incorporates the T&Cs.[17]

III. Granting of rights

17 In light of the relative interests laid out above, the idea seeker crucially requires the possibility of acquiring comprehensive **rights** in all of the work results and input of the idea provider. For the idea seeker, this often means obtaining all rights in any patentable inventions (and/or those which are eligible for a utility model) produced by the idea provider, as well as rights in any development results which qualify for intellectual property rights including in copyrighted works (as well as neighbouring rights). In respect of the required rights acquisition clauses, a distinction must be drawn between industrial protection rights (and know-how) on the one side and copyright exploitation rights (and neighbouring rights) on the other.

18 **a)** As far as the technical protection rights of **patents and utility models** are concerned, one must take into account that it is possible to license a right in an invention which does not yet exist. For this to occur, the invention must be sufficiently definable at the time the respective agreement is concluded.[18] It is certainly conceivable that an idea provider could submit material which is already protected by technical protection rights – held either by the idea provider itself or a third party. These various constellations must be accommodated when constructing the competition terms. If the idea provider includes material for which it holds protection rights itself, it should be stipulated that the idea provider must inform the idea seeker of this. Where such rights already exist, an exclusive license should be granted to the idea seeker in the scope of the rights acquisition clause.

19 However, care should be taken if the idea provider has already granted third parties **licenses** in the existing protection rights prior to participation in the competition. The competition terms should thus also include a provision requiring the idea provider to disclose the existence of such licenses as well as the possibility of excluding the idea provider from further participation in the competition in the case of such third-party licenses. The aim is to prevent any conflict with third-party licensees during the future exploitation of the idea in question.

20 Furthermore, even a technical teaching for which protection has not yet been sought can be made the object of an exploitation agreement between idea seeker and idea provider.[19] In cases where an idea provider has not yet filed a patent application for the respective invention, the competition terms should provide for the express entitlement of the idea seeker to file such an application in its own name. In this context, the idea provider should also be obligated to provide all necessary assistance during the application and registration procedure.

21 **b)** If the contribution of the idea provider includes **copyright-protected works**, such as written works, computer programs, photographs or illustrations of a scientific or technical nature, the idea seeker will also be interested in obtaining exploitation rights from the idea provider in as comprehensive a form as possible (so-called buy-out agreements). Buy-out agreements are intrinsically designed to grant the exploiter the most rights and greatest degree of flexibility in the exploitation process.[20]

22 When designing this type of comprehensive rights-granting clause in the terms and conditions, numerous factors – some of which are the subject of much debate in related case law and literature – must be taken into account.

23 **aa)** The starting point is the **principle of purpose-oriented transfer** as codified in Sec. 31 (5) sentence 1 German Copyright Act (*UrhG*).[21] This stipulates, in essence, that in order to protect authors, the granting of exploitation rights shall only be, in case of doubt, to the extent "absolutely" necessary according to the purpose of the agreement.[22] This is intended to prevent an excessive surrender of exploitation rights to the exploiter through comprehensive and generally formulated grants of rights by aligning the scope of the license to the specific purpose of the agreement. Sec. 31 (5) UrhG is, however, merely an interpretation rule which no longer applies if a specific agreement is made on the scope of the granting of rights.[23] In light of the principle of purpose-oriented transfer, if a company – such as the idea seeker – wishes to acquire exploitation rights in the greatest scope possible, it is generally necessary for each individual exploitation right to be expressly listed in precisely formulated clauses.[24]

24 **bb)** The only question is whether and to what extent such far-reaching grants of exploitation rights are subject to a **test of reasonableness of contents** in respect of the law governing T&Cs as per Sec. 307 et seq. German Civil Code (*BGB*). Provisions in terms and conditions are effective only if they do not unreasonably disadvantage the contracting partner of the party employing them. An unreasonable disadvantage is to be assumed to exist if a provision within the terms is incompatible with the fundamental principle behind the statutory provision from which it deviates or if essential rights or obligations inherent in the nature of the contract are limited such that the attainment of the purpose of the contract is jeopardised.[25]

25 **cc)** The extent to which the principle of purpose-oriented transfer constitutes a fundamental principle – a **legislative guiding principle** – as per Sec. 307 (2) No. 1 BGB, has proved a contentious issue in case law and related literature. In an old case, the German Federal Court of Justice (BGH) did not cite the principle of purpose-oriented transfer as a legislative guiding principle for the test of reasonableness of the content of T&Cs because the court was of the opinion that it was a mere interpretation rule.[26] Consequently, Sec. 307 BGB could not be used to counter the practice of many copyright exploiters of using pre-formulated standard contracts to have exploitation rights granted to them in the greatest possible scope, exceeding the purpose of the specific contract being agreed. Since the copyright contract law reform of 2002, there seemed to be convincing arguments to justify the consideration of the principle of purpose-oriented transfer in the test of reasonableness of the content of T&Cs.[27] This is due to the fact that the copyright contract law reform was designed, amongst other things, to protect the author from detrimental grants of rights on the basis of general terms and conditions.[28] Hence, in several most recent decisions by lower courts, the principle of purpose-oriented transfer has been termed an "essential content rule" which can also be cited in the scope of the test of reasonableness of content of T&Cs.[29] Other courts have continued to adhere to the older BGH case law and are of the opinion that the principle of purpose-oriented transfer cannot be applied in the scope of the test of reasonableness of content of T&Cs.[30]

26 In 2012, however, the BGH clarified the situation: in its ***Honorarbedingungen Freie Journalisten***[31]("fee conditions for freelance journalists") decision, the BGH confirmed its earlier decision and declared that the purpose-oriented transfer principle[32] in Sec. 31 (5) German Copyright Act (*UrhG*) is no basis for a test of reasonableness of content of T&Cs. The BGH stressed that the legislator had left the content and scope of the granting of copyright exploitation rights to the discretion of the contracting parties at the outset; Sec. 31 (5) UrhG thus, from its nature as an interpretation rule, applies only in the absence of an express contractual agreement or if a lack of clarity exists as to the scope of exploitation rights granted.[33]

27 **dd)** Thus, the following applies when **designing clauses governing the granting of exploitation rights** in T&Cs for idea competitions: provided the individual types of use are specified in the rights-granting clause, the clause cannot be deemed invalid as a result of a test of reasonableness of the content of T&Cs. If the idea provider grants the idea seeker more rights than are required according to the purpose of the agreement, this is permitted under personal autonomy (on the question of fair remuneration, see section 4 below).

28 It is important to consider, however, that the interpretation provision in Sec. 31 (5) German Copyright Act (*UrhG*) does apply if the types of use are not individually designated. If the terms and conditions of an idea competition only generally grant exploitation rights, without being more specific, this means that the grant of exploitation rights would be limited to the extent required to fulfil the purpose of the agreement. Whether or not this type of granting of exploitation rights ultimately suffices will depend on the individual case and the interpretation of the competition terms as a whole.

29 **ee)** In order to obtain as comprehensive a legal position as possible, it is advisable for the idea seeker to have rights in **unknown types of use** granted by the idea provider (Sec. 31a UrhG). The written form requirement provided for in Sec. 31a (1) sentence 1 UrhG can also be satisfied through general business terms; no separate signature of the author is required. Broader, abstract wording, such as "rights are also granted in types of use unknown at the time of entering into the agreement", is also considered permissible.[34]

IV. Remuneration of the idea provider

30 There are also numerous special factors which have to be observed in respect of the **remuneration agreement** regulated in the competition terms. It is evident from the practice of idea competitions that in general cash or material prizes are offered in return for the work submitted by the idea provider. In some cases this can amount to considerable five- or six-figure sums; usually, however, the amount involved is quite modest and can possibly be considered unfair in relation to the revenues later earned by the idea seeker. This possible imbalance between work and reward raises the question of whether the idea provider's work can be "fobbed off" – as is often the case – with an extremely low level of compensation or a small material prize.

31 From a legal perspective, there also exist special considerations under copyright law. Unlike the area of patent or utility patent law, in copyright law the "**principle of fair remuneration**" applies.[35]

32 If it transpires, for example, that compensation agreed in the scope of the granting of exploitation rights is conspicuously disproportionate to the revenues and benefits from the use of the work, the author can demand the contractual agreement be adjusted to include an additional, fair compensation.[36] The author's aforementioned entitlement to fair remuneration and additional participation are mandatory provisions which cannot be derogated from through contractual agreement. If it turns out that the idea seeker obtains earnings and other benefits from the exploitation

rights granted by the idea provider which are conspicuously disproportionate to the original remuneration paid, the idea provider can assert a right to an amendment to the contractual agreement and additional participation. A conspicuously disproportionate relationship can be assumed if the agreed remuneration is half or less than half of a fair share – that is to say, just half of the fair level of compensation.[37]

33 The effectiveness of a lump sum and possibly unfair remuneration agreement is not diminished if this is formulated in the general terms and conditions. This is due to the fact that contractual agreements on compensation are, as price determination/prize-setting provisions, not subject to the test of reasonableness of content of T&Cs as per Sec. 307 et seq. German Civil Code (*BGB*). According to the aforementioned recent decision of the German Federal Court of Justice (*BGH*), this area remains exclusively governed by the individual assessment of equitability as per Sec. 32, Sec. 32a German Copyright Act (*UrhG*).[38] The BGH has stated that the mere fact that a lump sum remuneration has been agreed between the parties does not necessarily lead to the conclusion that this remuneration unfairly disadvantages the author or originator. Referring to the legislative texts on copyright contract law reform, the BGH stressed that the agreement of lump-sum payments in so-called buy-out agreements is not generally excluded.[39]

V. Characteristics specific to inventions by employees

34 In many cases, individuals who are in employment will participate in idea competitions.[40] If a person who is an employee submits inventions which qualify for patent and/or utility patent protection, conflicts of interest could arise involving the employer concerned. In such cases, the provisions in the German Act on Employee Inventions (*ArbnErfG*) become relevant.[41] As far as service inventions ("tied inventions") as defined in Sec. 4 (2) ArbnErfG are concerned, the rule is that the employer can claim these inventions as stipulated in Sec. 6 of the Act. In the case of a so-called unlimited claim by the employer, all rights in the service invention are transferred to the employer (Sec. 7 (1) ArbnErfG). However, free inventions of an employee as per Sec. 4 (3) of the Act are also restricted in that they are subject to the duty of notification and the duty to offer towards the employer (Sec. 18, Sec. 19 ArbnErfG).

35 In the terms and conditions of an idea competition, a provision should thus be included which forbids idea providers who are employees from submitting inventions which the employer has a right to as per the provisions of the aforementioned Act or of which the employer must be notified. Furthermore, it is advisable to include a release clause which releases the idea seeker from claims which could be asserted on the basis of legal action instituted by the employer against the idea seeker under Sec. 7 (1) ArbnErfG.

36 Another solution for avoiding the above conflict situations could be to involve the employer in the idea competition. This could be achieved through a declaration of the employer releasing the employee from their obligations under the Employee Inventions Act in respect of the object of the idea competition, in particular from the duty to notify and the possibility of taking legal action. The American Open Innovation platform, *InnoCentive*, requires, in this context, that the idea provider's employer submit a release declaration covering all intellectual property rights which could apply in respect of the idea provider's submissions.[42]

VI. Are semi-closed innovation competitions prejudicial to novelty?

37 Numerous idea competitions are designed such that the registered participants are able to comment on, evaluate and discuss each others' submitted ideas.[43] If, however, patentable inventions are exchanged amongst competition participants, the question arises as to whether this could hinder a later patent application due to a **lack of novelty**. A further issue is whether an invention has been made available to the public as per the legal definition in Sec. 3 (1) sentence 2 German Patent Act (*PatG*), and thus forms part of the prior art.

38 The **public** as referred to in Sec. 3 (1) PatG is interpreted as an open, unrestricted group of people which has the possibility of gaining knowledge in such a way that a skilled person would be able to perform the technical teaching using his expert knowledge.[44] Public disclosure is deemed to have occurred if an unrestricted group of people – therefore including experts in the field – have or have had the possibility to obtain knowledge of a fact or facts which are prejudicial to novelty; it is not necessary for the prejudicial fact to be available to the whole of the public.[45] According to the case law of the German Federal Court of Justice, the condition is met if a large number of interested persons, beyond a narrow, select group, have access to the relevant information.[46]

39 Disclosure is not considered public disclosure as far as **a strictly limited group of people** is concerned and provided it can be proven that any knowledge cannot leak out beyond that group.[47] The group of people can also be limited due to a common purpose

– such as the exchange of scientific information or the promotion of scientific discussion.[48] Provided the group of people can be limited through this common purpose, then this will not satisfy the definition of "public" as per Sec. 3 German Patent Act (*PatG*) as the relevant information is not available to any person at will; this shall also apply if, in a particular case, the group of people is comparably large.[49]

40 Consequently, it must be ascertained whether the participants of an idea competition constitute an unrestricted or a narrowly limited group of persons and thus not the "public" as per Sec. 3 (1) PatG.

41 Idea competitions which are organised through the Internet are generally directed at the public. Anyone who wants to attempt a solution to the task set can and – from the perspective of the idea seeker – should participate in the idea competition. An idea competition is thus generally aimed at an unrestricted, large and open group of people. Instinctively, therefore, one would assume that this meets the definition of disclosure to the public. In fact, however, it is the participants who actually register for the respective idea competition – the **competition community** – who actually make up the relevant group. Only the registered participants have the possibility of obtaining sufficient knowledge of facts prejudicial to novelty. Where certain idea competitions allow discussions between competition participants on the respective proposals or ideas, provided these discussions are for the purposes of debating the advantages and disadvantages of individual solutions, it is likely, according to the case law mentioned above, that this would constitute a common purpose which restricts the extent of public involvement. Thus, it can certainly be argued that the registered competition community constitutes a closed and restricted group of people which does not fall within the definition of the "public" as mentioned in Sec. 3 PatG.

42 Nevertheless, given that one cannot completely rule out competitions inherently carrying a **risk of prejudice to novelty**, the question arises whether steps can be taken to eliminate or minimise this risk. According to the case law of the German Federal Court of Justice (*BGH*), a situation will generally not constitute public disclosure if a non-disclosure obligation has been expressly or implicitly agreed or if such an obligation otherwise arises on a good faith basis from the circumstances of the specific case.[50] In such cases, one would normally be able to expect that whoever were to obtain knowledge of the invention would act in accordance with any contractual agreement and not disclose that knowledge to third parties.[51] All participants in an idea competition should thus be expressly obligated, through a respective clause in the competition terms, to maintain **confidentiality** in respect of all information which they obtain in the course of the idea competition.

43 As far as confidentiality clauses within the general terms and conditions of an orderer of goods are concerned, the BGH has clarified that it is valid for this type of non-disclosure obligation to be agreed within general terms and conditions.[52] The BGH stated in this context that this type of clause accommodates the fact that technical know-how which needs to be kept secret will also be kept secret by the contracting partner. The question as to whether non-disclosure clauses can be included within general terms and conditions of idea competitions in which numerous people can participate has not yet – as far as we are aware – been the subject of court rulings. The assessment of the BGH in the aforementioned decision can, in our opinion, also be applied to idea competitions. The idea seeker, who in some cases has to invest considerable sums in the organisation of the competition, has a legitimate interest in securing the patentability of the solutions submitted by idea providers. The non-disclosure obligation imposed upon the competition participants surely does not constitute an unreasonable disadvantage for the idea providers as it ultimately serves the patent-protected exploitation of the invention from which – depending on the design of the remuneration rules – the idea provider could also benefit. In any case, there is no apparent reason to suggest that a loss of patentability could be in the interests of competition participants.

44 However, confidentiality clauses **are not able to afford absolute protection** against inventions being disclosed to the public and thus damaging their novelty. If the confidentiality obligation is not complied with – even if only by one individual competition participant – public disclosure has already occurred.[53] One must take into account, however, that the mere possibility that a third party could gain knowledge of the invention is not sufficient; rather, there must be certainty that the invention has been disclosed to third parties, despite the existence of a duty of confidentiality.[54]

D. Conclusion

45 As is clear from the above, it is indeed quite possible to regulate open innovation idea competitions whilst taking into account the particular issues regarding the protection of rights and contract law. In order that the idea seeker is able comprehensively to use and exploit the submitted ideas, particular attention must be paid, especially in light of legal issues peculiar to general terms and conditions, to the form of the respective rights-granting clauses. In respect of copyright-protected works, it is important for organisers of idea competitions to be aware that

not all claims of authors – in particular if the idea can be especially lucratively exploited at a later point – can be settled with a flat-rate compensation agreement. The principle of equitable remuneration which dominates copyright law cannot be negated through provisions within general terms and conditions. There also exist certain patent law issues in relation to employee inventions and questions of detriment to novelty in the case of semi-closed competition models. However, it should be possible to reduce the existing risks to a manageable level through the use of suitable release clauses and non-disclosure obligations.

* The authors are attorneys-at-law with the law firm BOEHMERT & BOEHMERT in Berlin; Christian Czychowski is also a specialist attorney for copyright law and media law as well as a specialist attorney for information technology law and a honorary professor at the University of Potsdam

1 See *Chesbrough*, The Era of *Open Innovation*, MIT Sloan Management Review, Vol. 44, No. 3, 2000.

2 In contrast to the *closed innovation* model, on the *open innovation* model, see *Reichwald/Piller*, Interaktive Wertschöpfungen, 2nd edition, Wiesbaden 2009, pp. 146 et seq.

3 See *Reichwald/Piller*, Interaktive Wertschöpfung, loc. cit., p. 148.

4 See *Enkel/Gassmann*, Neue Ideenquellen erschließen – Die Chancen von Open Innovation, Marketing Review St. Gallen, 2-2009, pp. 6 et seq. with further refs.

5 See *Reichwald/Piller*, Interaktive Wertschöpfung loc. cit., p. 147.

6 See, on the various "core processes" of open innovation, *Enkel/Gassmann*, Neue Ideenquellen erschließen – Die Chancen von Open Innovation, loc. cit., pp. 6, 8 et seq.; *Gassmann/Enkel*, Towards a Theory of Open Innovation; Three Core Process Archetypes, Proceedings of the R&D Management Conference (RADMA) 2004, p. 6 et seq.; *Söbbing*, Open Innovation and Crowd Sourcing, ITRB 2011, 206 et seq.

7 E.g. Audi: "Automobilproduktion der Zukunft - Audi Production Award 2013" [Automobile production of the future], see www.audi.de/de/brand/de/unternehmen/wissenschaft/initiativen/audi_production_award.html; Bayer Material Science: "Wie verhindern wir die Ausbreitung von Wüsten?" [How can we avoid desertification?], see www.innovationskraftwerk.de/Wettbewerb/Bayer/Help-to-avoid-desertification; BMW Group: "Tomorrow's Urban Mobility Services", see www.bmwgroup-ideacontest.com/jury-prizes-contest/contest/; Henkel: "Innovation Challenge", see www.henkel.de/presse/dossier-henkel-innovation-challenge2-17778.htm; Lufthansa Cargo: "Air Cargo Innovation Challenge", see https://innovation.lufthansa-cargo.com/start.php; VW: "App my ride", see www.app-my-ride.com/jury-prizes-contest/contest/; Wella: "Wie sehen Friseursalons der Zukunft aus?" [What will hair salons of the future look like?], see www.innovationskraftwerk.de/Wettbewerb/wella/Friseursalons-der-Zukunft.

8 See *Reichwald/Piller*, Interaktive Wertschöpfung, loc. cit., p. 199 with futher refs.

9 See *Reichwald/Piller*, loc. cit., p. 198.

10 *Reichwald/Piller* apparently critical in the sense that both assessment panels and benchmarks are often unsystematic and arbitrary, Interaktive Wertschöpfung, loc. cit., pp. 204 et seq.

11 See *Walcher*, Der Ideenwettbewerb als Methode der aktiven Kundenintegration, Wiesbaden 2007; *Reichwald/Piller*, Interaktive Wertschöpfung, loc. cit., pp. 197 et seq.. with further refs.

12 For example, *Söbbing* ITRB 2011, 206; *Wurzer*, MittdtschPatAnw 2010, 520, 521.

13 See District Court Essen NJW-RR 2003, 1207.

14 See Court of Appeal Hamburg ZUM 2002, 833.

15 Ulmer/Brandner/Hensen/*Ulmer/Habersack*, AGB-Recht, 11th edition 2011, § 305 BGB, marg. no. 149a.

16 See Ulmer/Brandner/Hensen/*Ulmer/Habersack*, AGB-Recht, 11th edition 2011, § 305 BGB, marg. no. 149a.

17 Ulmer/Brandner/Hensen/*Ulmer/Habersack,* AGB-Recht, 11th edition 2011, § 305 BGB, marg. no. 155, 156.

18 See *Mes*, Patentgesetz Gebrauchsmustergesetz, 3rd edition 2011, Munich 2005, § 15 PatG, marg. no. 29.

19 See *Bartenbach*, Patentlizenz und Know-how-Vertrag, 7th edition, Cologne 2013, marg. no. 193 et seq. with further refs. and references to the competition law limitations of such licensing constructions.

20 See Fromm/Nordemann/*J.B. Nordemann*, Urheberrecht, 10th edition, § 34 marg. no. 15.

21 Sec. 31 (5) sentence 1 UrhG reads: "If the types of use to which the exploitation right extends have not been specifically designated when the right was granted, the types of use covered shall be determined in accordance with the purpose envisaged in making the grant."

22 See BGH-GRUR 2002, 248, 251 - *Spiegel-CD-ROM.*

23 See Fromm/Nordemann/*J. B. Nordemann*, Urheberrecht, 10th edition, § 31 marg. no. 109 with further refs.

24 See Dreier/Schulze/*Schulze*, Urheberrechtsgesetz, 3rd edition, § 32 marg. no. 54.

25 § 307 (2); this paper will not address the specific prohibited clauses in Sec. 308, 309 German Civil Code as one can assume that the author will usually be a business person as per Sec. 14 German Civil Code so that the test of reasonableness of T&Cs as per Sec. 310 (1) German Civil Code only applies in a limited extent; see Fromm/Nordemann/*J. B. Nordemann*, loc. cit, before Sec. 31 et seq. UrhG, marg. no. 202.

26 BGH GRUR 1984, 45, 49 – *Honorarbedingungen.*

27 See comprehensive explanation in Fromm/Nordemann/*J. B. Nordemann*, loc. cit, § 31 par. 180 et seq.

28 See Grounds RegE UrVG - BT-Drucksache 14/6433, p. 11.

29 See Court of Appeal Hamburg, AFP 2011, 385; based on that ruling: District Court Braunschweig ZUM 2012, 66, 72, see also *Gialeli/von Ohlenhusen* ZUM 2012, 389.

30 See KG ZUM 2010, 799, Court of Appeal Munich GRUR-RR 2011, 401, 403.

31 BGH, judgement of 31 May 2012, I ZR 73/10 - *Honorarbedingungen Freie Journalisten.*

32 Now also referred to by the BGH as the "purpose-oriented transfer principle" ("Übertragungszwecklehre" instead of "Zweckübertragungslehre"); see BGH loc. cit, part. no. 15 - *Honorarbedingungen Freie Journalisten.*

33 See German Federal Court of Justice, loc. cit, part. no. 17 – *Honorarbedingungen Freie Journalisten;* for in-depth analysis on this decision, *J.B. Nordemann* NJW 2012, 3121.

34 See Fromm/Nordemann/*J. B. Nordemann*, loc. cit., § 31a marg. no. 53, with further refs.

35 Through the reform of copyright contract law in 2002, the legislator added a second sentence to the provision of Sec. 11, according to which the copyright "shall also serve to ensure equitable remuneration for the exploitation of the work". This principle has been reflected in numerous regulations (in particular Sec. 32, Sec. 32a German Copyright Act).

36 "Fairness compensation", Sec. 32a (1) sentence 1 German Copyright Act

37 See Dreier/Schulze/*Schulze*, Urheberrechtsgesetz, § 32a, marg. no. 37 with further refs.

38 German Federal Court of Justice, loc. cit., part. no. 29 - *Honorarbedingungen Freie Journalisten.*

39 German Federal Court of Justice, loc. cit., part. no. 31 - *Honorarbedingungen Freie Journalisten.*

40 A provision should also be included in the T&Cs which stipulates that only natural persons of full age may participate; it is also advisable to exclude employees or other staff of the idea seeker from participating.

41 German Act on Employee Inventions (ArbnErfG) of 25 July 1957, last amended by Art. 7 G of 31 July 2009.

42 See www.innocentive.com/faq/seeker.

43 See, for example, the idea competition of Evonik Industries "Wie sehen die Werkstoffe der Zukunft aus und welche neuen Anwendungswelten eröffnen sie?" ("What will the composites of the future look like and what new worlds of applications will they open?"), www.innovationskraftwerk.de.

44 See BPatG GRUR 1994, 107 - *Tauchcomputer II*; *Mes*, PatG, loc. cit., § 3 PatG marg. no. 17 with further refs.

45 See *Münch* in Fitzner/Lutz/Bodewig, Patentrechtskommentar, 4th edition, § 3 PatG marg. no. 35.

46 See BGH GRUR 1970, 214 - *customer prints.*

47 See only BGH GRUR 1993, 466, 468 - *Preprint-Versendung;* see only *Münch* in Fitzner/Lutz/Bodewig, loc. cit., § 3 PatG marg. no. 38.

48 See BGH GRUR 1993, 466, 469 - *Preprint-Versendung.*

49 See *Münch* in Fitzner/Lutz/Bodewig, loc. cit., § 3 PatG marg. no. 38 with the comment that the risk of an explicitly or implicitly defined purpose not being adhered to increases, the larger the group of people is.

50 BGH GRUR 1996, 747, 752 - *Lichtbogen-Plasma-Beschichtungssystem.*

51 BGH, loc. cit.

52 BGH GRUR 2002, 609, 612 – *Drahtinjektionseinrichtung*; see only Court of Appeal Düsseldorf, judgement of 25 January 2008, file ref.: I-2 U 137/99, marg. no.: 20 et seq., cited from juris.

53 See *Mes*, PatG, loc. cit., § 3 marg. no. 18.

54 See BGH GRUR 1996, 747, 752 - *Lichtbogen-Plasma-Beschichtungssystem.*

Missing Links in the Proposed EU Data Protection Regulation and Cloud Computing Scenarios: A Brief Overview

by **Iheanyi Samuel Nwankwo***, LL.M, Research Assistant, Institute for Legal Informatics, Leibniz University Hannover

Abstract: Applying location-focused data protection law within the context of a location-agnostic cloud computing framework is fraught with difficulties. While the Proposed EU Data Protection Regulation has introduced a lot of changes to the current data protection framework, the complexities of data processing in the cloud involve various layers and intermediaries of actors that have not been properly addressed. This leaves some gaps in the regulation when analyzed in cloud scenarios. This paper gives a brief overview of the relevant provisions of the regulation that will have an impact on cloud transactions and addresses the missing links. It is hoped that these loopholes will be reconsidered before the final version of the law is passed in order to avoid unintended consequences.

Keywords: Cloud computing, Data Protection Regulation, Data Transfer, Controller, Processor Measures, DRM

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A. Introduction

1 Although the concept of "cloud" is metaphorical, cloud computing currently represents another big innovation in the IT industry that tends to maximize the use of the Internet. This is not only seen in its concentration of large computing power in a single space, but also in its functionality as an always available, unlimited tool to store and access data no matter the location.[1] However, like some other technical innovations before it, it has not been easy to determine how to append a precise legal definition to the concept as well as to bring its uses within a legal framework. This conundrum is easily appreciated when analyzing data protection laws within the context of cloud computing, for instance, because data represents the main raw material upon which cloud technology thrives. The fact that more data is constantly linking to individual persons, of course, plausibly triggers debates concerning data protection requirements in cloud transactions (requirements relating to privacy, security, transparency, accessibility, and rights and freedoms of data subjects). Such requirements could, for example, restrict personal data from being transferred from one country to another for jurisdictional purposes.[2] Cloud computing, on the other hand, depends on automated data movement around several data centers located in different parts of the world, and relies on the Internet for access to such data. This location-agnostic feature of cloud computing potentially has several data protection implications because of the multiple jurisdictions that may be involved.

2 European data protection law, for instance, is location-focused, assuming physical movement of data from one place to another.[3] This fact is reflected in the current Data Protection Directive 95/46/EC ("DPD") which predates the Internet boom, making it difficult to reconcile some of its provisions with the operations of Internet-enabled technologies such as cloud computing.[4] However, in a bid to reflect the traditional reasoning in a cloud framework, the Article 29 Working Party (WP29) has opined that mirroring personal data from a server in the EU to a US-located server constitutes a data transfer.[5] While this may appear convenient for the WP29, it fails to solve the complexities in applying the data export rules in cloud transactions.

3 Having recognized this state of affairs, the European Commission has published a draft proposal for a Data Protection Regulation ("draft regulation") that will replace the DPD.[6] Though the draft regulation is still undergoing parliamentary amendments, this paper seeks to examine some of its salient provisions as applicable to cloud computing models. In particular, it will focus on the controller-processor roles and data export provisions in the draft regulation that may potentially impact cloud transactions. At the end, it will show some of the missing links in the proposal that need to be addressed before the final version is passed.

B. Cloud Computing and Its Operations

4 Like most technical concepts, defining cloud computing is fraught with difficulties and controversies, especially due to the evolving nature of the technology. It is, however, not the intention of this paper to go into those controversies. For the purpose of this paper, cloud computing describes a set of technologies and service models that focus on the Internet-based use and delivery of IT applications, processing capability, storage and memory space.[7] A more technical and widely cited definition has been offered by the United States National Institute of Standardization and Technology (NIST).[8]

5 Cloud computing services can be offered in various forms, three of which are most prominent: SaaS, PaaS and IaaS. *Software as a Service (SaaS)* refers to providing the cloud consumer with the capability to use the cloud service provider's applications (software) running on a cloud infrastructure.[9] These applications are configured to suit the consumer's preferences and are accessible from various client devices through the Internet (e.g. web-based email or electronic health records). *Platform as a Service (PaaS)* is another service offering where the service consumer is provided with the capability to deploy onto the cloud infrastructure, applications created using programming and support tools from the cloud service provider (e.g. centralized analysis of MRI scans or X-rays built on Microsoft Azure, for example). *Infrastructure as a Service (IaaS)* refers to the capability provided to the service consumer to provision processing, storage, networks, and other fundamental computing resources on an infrastructure of the cloud service provider. One fundamental consequence of these service models is that the service consumer does not manage or control the underlying cloud infrastructure, including the network, servers, operating systems or storage,[10] but may have control over the deployed applications and possibly configuration settings for the application-hosting environment.[11]

6 The above-mentioned services can be deployed in four possible ways:

- *Private cloud* where the cloud infrastructure is provisioned for exclusive use by a single organization. It may be owned, managed and operated by the organization, a third party, or some combination of them, and the data center may be hosted on or off premises of the cloud consumer.[12] This model is comparable to buying, building and managing your own infrastructure. It is more beneficial for security purposes and may not bring much in terms of cost efficiency.[13]

- *Community cloud* where the cloud infrastructure is provisioned for exclusive use by a specific community of consumers (organizations that have shared concerns due to their mission, security requirements, policy, compliance considerations, among others). It may be owned, managed and operated by one or more of the organizations in the community, a third party, or some combination of them, and the data centre may be hosted on or off premises of the cloud consumer.

- *Public cloud* where the cloud infrastructure is provisioned for open use by the general public. It may be owned, managed and operated by a business, academic, or government organization, among others, and the data centers exist on the premises of the cloud provider.

- *Hybrid cloud* where the cloud infrastructure is a composition of two or more distinct cloud infrastructures (private, community or public) that remain unique entities but are bound together by technology that enables data and application portability (e.g. cloud bursting for load balancing between clouds).[14]

7 The cloud supply chain could be a combination of many components or services from different suppliers or providers. Multiple services are involved in the layers of the stack of the cloud ecosystem,

each of which could be managed by a different party. These could range from third parties who are involved in the provisioning of physical space for the data centers to those who maintain the data centers and even cloud brokers. A good illustration has been provided by Hon and Millard (2013),[15] and diagrammatically represented in Kate's blog.[16] It is significant to note, however, that cloud end users see the services they are using as an integrated service, and do not bother with the underlying components. Regrettably, this has the tendency of depriving the legally defined data controller the actual control of the data in factual understanding.[17] As we will see below, this state of affairs is yet to be addressed in the draft regulation.

C. Provisions of the Draft Regulation that Are Significant for Cloud Transactions

8 The draft regulation retains the core concepts and basic principles enshrined in the DPD, such as technology neutrality, controller-processor dichotomy and legal bases for data transfer to third countries, among others. This means that there are no specific provisions for cloud computing *per se*, and the data controller remains responsible for data processed on its behalf, no matter the means. At the same time, however, there are significant improvements in the draft regulation. Importantly, it will have direct application in the Member States, which will eliminate the fragmentation seen in national implementation of the DPD to a large extent.[18] Another significant change is the amendment of the extra-territorial application of Article 4(1)(c) of the DPD. In effect, this amendment will exempt the application of data export rules during a re-transfer of data that had originally been collected from a third country (involving non-EU residents) but transferred to an EU-based processor (e.g. cloud provider) for processing.[19] The French *Commission nationale de l'informatique et des libertés* (CNIL) has already initiated this exemption, thereby removing cumbersome procedures during such data re-transfer.[20] Non-EU data controllers will be regulated only where their processing activities relate to the offering of goods or services to EU subjects or monitoring their behavior.[21]

9 The draft regulation further provides additional rights to data subjects; increases the obligations of data controllers; and imposes some direct obligations on data processors (a category that most cloud service providers will possibly belong to). This will inevitably affect the relationship between cloud providers and their customers. For instance, data subjects' rights to data portability may force cloud customers to use only service providers that have portable facilities in order to comply with the law. Similarly, cloud customers will favor providers who are more proactive in their internal controls, which reflect increased accountability as envisaged in the regulation.[22]

10 A data protection certification seal has also been introduced in the draft regulation.[23] In effect, a cloud provider could voluntarily apply to the Data Protection Authorities (DPAs) to be audited and given a European Data Protection Seal as a certification mark indicating its compliant status with EU data protection law.[24] Furthermore, data controllers wishing to use cloud services for certain types of data processing such as sensitive health data will have to conduct a data protection impact assessment before sending data to the cloud. This will be the necessary implication of Article 33 of the draft regulation.[25] Mandatory notification of data breaches (by data controllers with the help of processors where necessary) will equally be given due consideration in cloud relationships when the regulation becomes effective.[26]

11 While retaining the current approach for third-country data transfer, the regulation still introduces remarkable changes:

1. An adequacy assessment of a third country's level of data protection will be made by the Commission on a territorial or sector-specific basis, or for the country as a whole, as well as for international organizations.[27]

2. Where no adequacy decision has been made, appropriate safeguards by way of a legally binding instrument could be relied upon by data controllers or processors for data export through the use of any of the following:

   Binding Corporate Rules (BCRs);

   Standard data protection clauses adopted by the Commission;

   Standard data protection clauses adopted by a regulator; and

   Contractual clauses authorised by a regulator.[28]

   The compromise parliamentary text has included an additional legal basis in the form of "European Data Protection Seals", which would enable certified organizations to rely on privacy seals as an adequate basis for transfer outside the EEA.[29]

3. No further authorization will be imposed by a supervisory authority once a positive assessment has been made by the Commission, or where the standard data protection clauses adopted by the Commission or a Member State's supervisory authority are used to effect data transfer.[30]

4. The draft regulation now recognizes BCR for data processors and lays down its framework.[31]

5. The derogations in Article 26 of the DPD were maintained with some minor modifications, such as conducting an impact assessment before a transfer where the purpose is in pursuit of the legitimate interest of the controller or processor.[32]

12 Another remarkable provision in the draft regulation is the adoption of 'one-stop-shop' or general recognition of a lead authority in cases where the controller or processor is established in more than one Member State. This will be a time- and cost-saving mechanism for obtaining authorization where necessary. It is hoped that the delegated acts in the draft regulation will not create more red tape in this regard.[33] Additionally, fines of up to 500,000 EUR, or 1% of its annual worldwide turnover in the case of an enterprise, could be imposed as an administrative sanction for a violation of the regulation.[34]

13 It is believed that these provisions will make international transfer restrictions easier to navigate.[35] However, it is not certain how these reforms will look in the final version of the regulation, since recent parliamentary amendments have modified a lot of the initial provisions. The Committee on Civil Liberties and Home Affairs ("LIBE"), for instance, has rejected the adequacy finding for a processing sector, insisting that such an approval would increase legal uncertainty in international data transfers.[36] For example, this could have the effect that it would not be possible for the Commission to decide that cloud providers who are Health Insurance Portability and Accountability Act (HIPAA)-compliant in the US would provide adequate protection to host health data from the EU. The LIBE Committee also rejected the use of non-legally binding instruments for international data transfers, and additionally proposes a two-year transition period for all authorizations by DPAs on the basis of Article 26(2) or Article 26(4) of the current DPD to elapse.[37] A new provision meant to address the issue of access request by public authorities or courts from a third country has also been included in both the LIBE Committee's report and the compromise text from Parliament. This provision requires that such a transfer shall only be on the basis of a mutual assistance treaty or international agreement in force between the requesting third country and the Union or the Member State involved. A prior authorization from the supervisory authority should also be obtained before effecting the transfer, and a notification given to the data subject. A new default position has also been created by the Parliament's compromise text to the extent that where there is more than one controller or processor involved in the processing, each controller or processor will be jointly and severally liable for the damage (unless they have an appropriate written agreement establishing liability in the determination of their responsibilities), and in the case of a group of undertakings, the entire group shall be liable as a single economic entity.[38]

14 What the effect of these parliamentary amendments will be for cloud services is yet to be fully understood, except to say that obtaining new approvals after the transition period will have cost implications to data controllers and processors. Second, where no mutual assistance treaty or international agreement exists between the countries involved, there is a potential risk that this may put the cloud provider in an awkward position as to which rule to follow. In essence, because of the lack of clarity about jurisdictional boundaries, this provision would prohibit organizations from complying with governmental orders, and this makes them vulnerable to criminal penalties.

D. The Draft Regulation and Cloud Realities: Missing Links

15 While the draft regulation and various amendments to it are being debated, it is important to point out some other issues that have not yet been addressed in the proposal, especially in relation to cloud computing. First, as pointed out earlier, cloud computing involves various layers and intermediaries of actors for which a strict application of the data controller-processor dichotomy may be ambiguous and misleading.[39] This can be seen in the use of intermediaries such as cloud brokers and integrators who act as a conduit between the cloud customer and the provider but in fact have no infrastructure to process data. Some other actors in the cloud stack, such as those who provide the physical infrastructure, may be so remote from the actual data processing that regarding them as either a joint controller or a processor may make no sense. So far, the draft regulation has not taken proper cognizance of these sets of actors. The closest attempt at recognizing this gap is in a new provision in the LIBE Committee's report that introduced a new party defined as "producers".[40] Though by a stretch of argument the definition of "data producer" may include some cloud intermediaries, this may be an ambiguous way of describing all of them, since some of the intermediaries do not have any infrastructure for producing or processing data but only provide monitoring services. Of course, making every party in the chain of transaction joint controllers will not solve the problem as purported in Article 24 of the draft regulation. Hert and Papakonstantinou (2012) have opined as follows:

> *... the distinction between data controllers and data processors, that was perhaps clear at the time the Directive was introduced, is increasingly disputed in the contemporary complex business environment. [...] The distinction between the two data processing actors is becoming increasingly blurred in an interconnected world of ubiquitous computing. In view of the above, perhaps the preferable way forward would be*

for the Commission to boldly abolish the notion of "data processors" from its Regulation altogether, and vest the data controller title, rights and obligations upon anyone processing personal information, regardless of its means, conditions or purposes.[41]

16 While this stand may appear extreme, it goes to show the frustration at reconciling the inadequate nature of the binary division of actors in the data processing chain, where collaborating but autonomous entities are involved, and whose mutual relationships can no longer be characterized as a simple 'relationship of command' or 'principal-delegate' relationship.[42] Not clarifying these relationships in the draft regulation may have unintended consequences, such as creating legal uncertainty as to the status of actors and the allocation of responsibility in the data processing chain.[43] A number of opinions have called for a rethinking in the classification of actors in view of modern data processing possibilities, of which cloud computing is a ready example.[44] The draft regulation, as well as the various parliamentary amendments, has not devoted significant attention to this issue.

17 Second, the regulation has retained the use of the model contractual clauses. However, in their present form these clauses do not adequately cover all the constellations of cloud transactions. For instance, there are no model contractual clauses for an EU processor to transfer data to a controller in a third country, or for an EU processor to transfer data to a sub-processor in a third country.[45] These cases are possible as more data processors in the EU are transacting with many data controllers and sub-processors who are outside the EU.[46] Furthermore, certain clauses in the model do not reflect and may not fit into the technical and organizational frameworks of cloud services. For instance, the assumption that the data controller is the strong, controlling party that has the actual ability to instruct and control the processor (cloud providers, for example) may be illusory.[47] Provisions requiring the processor to submit its facilities for audit by the controller and supervisory authorities are less feasible in the cloud, in view of the millions of customers a cloud provider may have.[48] It is also less likely that a cloud service provider will first obtain prior written consent from all of its customers before engaging in every support service, where those are regarded as sub-processing.[49] As Svantesson (2012) rightly observes, "the power-balance in cloud computing agreements is typically different to the power-balance between data controllers and data processors anticipated in the data protection regulation."[50] This calls for an amendment of these clauses in view of emerging structures in modern data processing realities.

18 Third, some of the provisions of the draft regulation on international data transfer raise fresh questions.[51] In spite of the controversies surrounding the use of "onward transfer" in the EU-US Safe Harbor framework, it has been recognized in the regulation without any definition or mechanism for its application.[52] The concept entails that after EU personal data is transferred to a Safe Harbor-certified US entity, further transfers from the importer to a third party (onward transfers) are possible, subject to restrictions under the Safe Harbor.[53] It is not clear how this concept will apply to other entities that are not subject to the Safe Harbor framework, since the original concept has been limited to the US. There is a need for more clarity in the application of the concept if it is intended to have a general application, so that it does not serve as a tool to circumvent data protection requirements.[54]

19 Fourth, although the draft regulation has recognized the use of BCRs, its application only within the same group of companies or organization will still limit its potential impact. The inability to transfer data between two different processors or controllers, who both have duly approved BCRs but not belonging to the same group, is not logical. This appears to be contrary to the case where two third countries that have adequacy status are allowed to transfer EU data between them on that basis. A similar facility should be accorded to BCR-approved entities since it represents a binding obligation.

E. Conclusion

20 It is encouraging that the draft regulation will bring a level of harmonization in the data protection regime within the EU. However, cloud realities show that much still needs to be done in order to reap the full potential of cloud computing in Europe. There is a need for legislators to understand cloud architecture, features and business models. Hon, *et al* (2012) argue that some of the current difficulties in the legal aspects of the cloud arise not necessarily because contract terms are poor, but because data protection laws assume certain things which are not true in the cloud.[55] If the present reform is not holistic, it may lead to unintended consequences. Reflecting privacy in a pragmatic way without disproportionately interfering with technological advancements is essential in this e-age.[56] It is hoped that the outlined missing links in the draft regulation will be addressed while the proposal is still debated.

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1 E. Ustaran, *The Future of Privacy*, (DataGuidance, UK, 2013) p.10.

2 E. Yoran, "Cloud Computing and Data Residency Laws", *Sys-con Media*, (available at: http://www.sys-con.com/node/2660874).

3 D. Svantesson, "Data Protection in Cloud Computing – The Swedish Perspective", *Computer Law & Security Review*, Vol. 28, Issue 4, 2012, pp. 476-480.

4 P. De Hert and V. Papakonstantinou, "The Proposed Data Protection Regulation Replacing Directive 95/46/EC: A Sound System for the Protection of Individuals", *Computer Law & Security Review,* Vol. 28, Issue 4, 2012, pp. 130 -142.

5 See Article 29 Working Party Opinion 10/2006 on the processing of personal data by the Society for Worldwide Interbank Financial Telecommunication (SWIFT), WP128 (2006).

6 European Commission, A proposal on the protection of individuals with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation), COM (2012) 11 final. This paper will take into account some of the amendments to the original draft such as the EU Parliament's Committee on Civil Liberties, Justice and Home Affairs ("LIBE") report of January 2013 (available at: https://www.huntonprivacyblog.com/wp-content/files/2013/01/Albrecht-Report-LIBE.pdf), and European Parliament Compromise Text published on October 21, 2013: (available at: https://www.huntonprivacyblog.com/files/2013/12/EUCompromise-Text.pdf).

7 Article 29 Working Party, Opinion 05/2012 on Cloud Computing, p. 4.

8 NIST defines it thus: "Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction." P. Mell and T. Grance, *The NIST Definition of Cloud Computing*, 2011 (available at: http://csrc.nist.gov/publications/nistpubs/800-145/SP800-145.pdf).

9 *Ibid.*

10 This is the case in public clouds but may vary in other deployment models.

11 Mell and Grance, *op. cit.,* note 8.

12 *Ibid.*

13 N. Metha, "The 4 Primary Cloud Deployment Models", 2012 (available at: http://www.cloudtweaks.com/2012/07/the-4-primary-cloud-deployment-models/).

14 Mell and Grance, *op. cit*, note 8.

15 W. Hon and C. Millard, "Cloud Technologies and Services" in C. Millard (ed), *Cloud Computing Law,* (Oxford University Press, United Kingdom, 2013) pp. 13-16.

16 (Available at: http://www.katescomment.com/iaas-paas-saas-definition/)

17 See the Article 29 Working Party, Opinion 05/2012, op cit, note 7.

18 For instance, a Regulation will also abolish certain flexible approaches by DPAs such as the ability of a data controller to make a self-assessment of the adequacy level for data export in the UK. See "The New EU Data Protection Regulation - Revolution or Evolution?", (available at: http://www.slaughterandmay.com/media/1844766/the-new-eu-data-protection-regulation-revolution-or-evolution.pdf) p. 6.

19 See Art. 3 of the Proposed Regulation. See also W. Hon and C. Millard, "How Do Restrictions on International Data Transfer Work in Clouds?" in C. Millard (ed), *Cloud Computing Law,* (Oxford University Press, United Kingdom, 2013) p. 255.

20 See L. de Souza, "CNIL Simplifies Formalities for Non-EU Companies Using Data Processors in France", (available at: http://www.hldataprotection.com/2011/03/articles/international-eu-privacy/cnil-simplifies-formalities-for-noneu-companies-using-data-processors-in-france/).

21 Art. 3(2) of the Draft Regulation.

22 "How Proposed EU-Wide Data Protection Regulation Will Affect U.S. Based Businesses", (available at: http://www.cooley.com/showalert.aspx?Show=66023).

23 Art. 39 of the Draft Regulation.

24 The compromise parliamentary text has provided more detail on the mechanism for certification.

25 See also the new Art. 32a of the compromise parliamentary text.

26 Art. 31 of the Draft Regulation.

27 Art. 41 of the Draft Regulation.

28 Art. 42 of the Draft Regulation.

29 Art. 42(2)(aa) of the Draft Regulation as amended in the compromise parliamentary text. See also N. McBride, L. Sotto and B. Treacy, "Privacy and Data Security: The Future of the US-EU Safe Harbor", *Practical Law*, (available at: https://www.huntonprivacyblog.com/files/2013/12/Privacy-Data-Security-The-Future-of-the-US-EU-Safe-Harbor.pdf).

30 Art. 42 (3) of the Draft Regulation.

31 See Arts. 42 and 43 of the Draft Regulation.

32 See Art. 44 of the Draft Regulation.

33 "Impact of the draft EC data protection Regulation on data transfers," (available at: http://www.taylorwessing.com/globaldatahub/article_impact_draft_regulation_data_transfers.html).

34 See Art. 79 of the Draft Regulation. Note however that the compromise parliamentary text has increased the figure to 5% of annual worldwide turnover of an enterprise or €100 m.

35 *Op. cit,* note 33.

36 European Parliament, Committee on Civil Liberties, Justice and Home Affairs, 2012/2011 (COD).

37 Note that the compromise parliamentary text extended the transition period to five years. See Art. 41(8) of the Draft Regulation as amended in the compromise parliamentary text.

38 See the amendment of Art. 77 in the compromise parliamentary text. See also Hunton & William Executive briefing paper update 3 on the proposed General Data Protection Regulation, December 2013.

39 P. Blume, "Controller and Processor: Is There a Risk of Confusion?", *International Data Privacy Law,* Vol. 3, No 2, 2013, pp.140-145. See also B. Alsenoy, "Allocating Responsibility Among Controllers, Processor, and 'Everything in Between': The Definition of Actors and Roles in Directive 95/46/EC", *Computer Law and Security Review,* Vol. 28, Issue 1, 2012, pp. 25-43.

40 'Producer' means a natural or legal person, public authority, agency or any other body which creates automated data processing or filing systems designed for the processing of personal data by data controllers and data processors. See Art. 4 – (point 6 a (new)) of the LIBE Report. Similarly, the compromise parliamentary text has included a definition for "third parties", but this appears not to cover cloud intermediaries. See Art. 4(7a) of the compromise parliamentary text.

41 Hert and Papakonstantinou, op cit, note 4, p. 134.

42 B. Alsenoy, op. cit, p. 39.

43 P. Blume, op. cit, note 39.

44 See P. Blume, op. cit, B. Alsenoy, op. cit, W. Hon and C. Millard, op cit, Hert and Papakonstantinou op. cit.

45 See J. Hartung, "Germany's New Rules on Processor Agreement," (available at. http://wn.com/Germany%27s_new_rules_on_international_processor_agreements).

46 W. Hon and C. Millard, "Data Export in Cloud Computing – How Can Personal Data Be Transferred Outside the EEA? The Cloud of Unknowing, Part 4", 2011, (available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2034286).

47 W. Hon, C. Millard and I. Walden, "Who is Responsible for Personal Data in the Clouds?" in C. Millard (ed), *Cloud Computing Law,* (Oxford University Press, United Kingdom, 2013) pp. 193 -219.

48 See clauses 5(f), 8(2), 12(2) of the controller to processor standard clauses 2010.

49 See clauses 5(h) and 11, *ibid.*

50 D. Svantesson, *op. cit.*, note 3.

51 See, for instance, C. Kuner, "The European Commission's Proposed Data Protection Regulation: A Copernican Revolution in European Data Protection Law", *Bloomberg BNA Privacy and Security Law Report*, 2012, p. 9.

52 Art. 40 of the Draft Regulation.

53 N. McBride, *op. cit,* note 29.

54 See C. Kuner, "Onward Transfer of Personal Data under the U.S. Safe Harbor Framework", *Privacy and Security Law Report,* 2009, pp.1-2.

55 W. Hon, C. Millard and I. Walden, "Negotiating Cloud Contracts - Looking at Clouds from Both Sides Now," 2012, (available at: http://ssrn.com/abstract=2055199), p. 40.

56 E. Pyykko, "Data Protection at the Cost of Economic Growth?" *ECRI Commentary*, No. 11, November 2012, p. 2.

U.S. Patent Reform Act of 2011 ("America Invents Act"): The Transition from First-to-Invent to First-to-File Principle

by Shuba Haaldodderi Krishnamurthy

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A. Introduction

1 In September 2011, the America Invents Act – an extensive and wide-ranging patent reform law – was enacted in the United States of America. The adoption of these reforms was an attempt to (i) improve the efficiency of the patent system itself and the patent protection offered by it, and (ii) harmonize and bring the patent system of the United States into closer proximity with the systems of the rest of the world. Consistent with this objective of harmonization, the America Invents Act introduced a major change by replacing the existing "first-to- invent" principle with the "first-(inventor)-to-file" principle.

2 This article will begin with a brief overview of the history of patent reform in the United States leading up to the America Invents Act in section II. Section III will describe the two systems of first-to-invent and first-to-file in view of their merits and flaws. Section IV will focus on the first-inventor-to-file principle that has been adopted with the America Invents Act. In section V, this article will discuss the reasons rendering the transition necessary and the grounds of opposition to it. Section V reviews what the transition to first-inventor-to-file entails and the possible impacts and repercussions. Other main areas of change will be mentioned and outlined in section VI. The last section of the article, section VIII, contains the conclusion.

B. A Brief History of Patent Reform in the United States

I. Pre-20th century

3 The first patent laws in the United States were enacted in 1790 by President George Washington and constitute the basis of the US patent system. The statute was titled "An Act to Promote the Progress of Useful Arts" and is significant for pioneering, in the United States, the conferment by law of rights of inventors to their creations. It established a Patent Board, whose members were given absolute authority to grant a patent.[1]

4 The years leading up to 1836 saw several changes in the system (1793, 1800 and 1832) and culminated in a revision of the patent laws, subsequently requiring applications to be examined for novelty before a patent could be granted. The latter part of the 19th century saw many developments, including (i) in the patent law itself, owing to the establishment of international organizations like the Paris Convention for the Protection of Industrial Property of 1883,[2] which the US joined in 1887;[3] and (ii) also indirectly, due to the creation of the Circuit Courts of Appeals in 1893 after which "appeals from the Patent Office were transferred to the newly created Court of Appeal for the District of Columbia".[4] In 1952, major amendments were made, laying down the foundation for contemporary law and the patent system

of the last six decades. This was the last significant change prior to the adoption of the US Patent Reform Act of 2011.

II. 21st century

5 In recent years, especially since the year 2000, there have been repeated attempts to improve and harmonize patent law, e.g. the Patent Reform Acts of 2005, 2007 and 2009. The Reform Act of 2005 was in part based on and supported by reports by the Federal Trade Commission in 2003 and the National Academy of Sciences in 2004. Though the overall system was thought to work well, several modifications were considered necessary in light of the granting of questionable business-method patents, complications regarding the scope and impact of software patents, increasing and expensive patent litigation and the lack of harmonization on international levels.[5]

6 Among other changes, the Act also proposed a shift from the first-to-invent system.[6] However, any change in the patent system would have various far-reaching impacts on most industries, owing to the technical, economic and legal significance of patents. This ensured the existence of intense scrutiny from many industry giants, undeniably looking to protect their interests.[7] Accordingly, heavy lobbying, an absence of consensus and the existing socio-political setting all led to a failure to enact the proposed reform. The bulk of the amendments contained in the 2005 proposal were carried over into the Reform Act of 2007 when another attempt at changing the patent system was initiated.[8]

7 Although the bill passed the House of Representatives, it failed to clear the Senate and met with an end similar to its predecessors as a result of heavy opposition from various sectors and influential lobbying.[9] The last amendment endeavour prior to the America Invents Act was the Reform Act of 2009. While closely resembling the previous proposals, the institution of derivation proceedings was also recommended for the first time. In a culmination of the efforts and attempts of the previous decade, in 2011 the latest Patent Reform Act – known as the Leahy-Smith America Invents Act or, popularly, the America Invents Act – was passed by the United States Congress and signed into law on 16 September 2011 by President Barack Obama.[10] One very significant change brought about by the Act was the cessation of the first-to-invent system in favour of the first-to-file system, as a step towards being "consistent with patent laws throughout most of the world".[11] Other major changes include the authority accorded to the United States Patent and Trademark Office to determine fee structure and an overhaul of opposition and review proceedings after grant.[12]

8 The America Invents Act stipulates that the provisions will be effective upon expiration of a one-year period unless otherwise provided in the Act. Some changes were effective immediately, e.g. the Pro-Bono Program and the Human Organism Prohibition. Many provisions had already come into effect by 16 September 2012, e.g. inventor's oath or declaration, third-party submission of prior art in a patent application and post-grant review. All changes, including the significant first-inventor-to-file, will be effective as of 16 March 2013.[13]

C. First-to-Invent and First-to-File

I. First-to-invent

9 Now obsolete, this is arguably the one change which has generated the most controversy and attracted the most opposition and criticism. In this context, it is crucial to understand the concept underlying the first-to-invent rule in order to competently evaluate the impact and ramifications of the changes brought about by the America Invents Act.

10 The United States previously upheld the date of an invention as a rule of priority to determine the rights to a patent over the date of filing of the patent application. First-to-invent is a rule that deals with solving the key question of entitlement or ownership of the property rights to an invention. If the first person to develop an invention is given priority or precedence over all others, it may be described as a first-to-invent system. This fundamental rule shaped the nature and workings of the patent system in the United States.

> Example 1: For instance, Inventor A invents product P on 1 March and files a patent application on 10 March. Inventor B independently invents the same product P on 1 February, develops it and files a patent application on 20 March. Under the first-to-invent principle, Inventor B gets the patent.

11 Although not a *prima facie* right to the grant of a patent, when multiple parties or individuals claimed the right to the same invention, the dispute would be investigated under interference proceedings, and the first-to- invent would be the factor that determined precedence and priority over other parties involved. In other words, it was possible to rely on the date of invention to eliminate prior art. A significant point to be understood is that the right of the first inventor under first-to-invent is not a *prima facie* or an absolute right to the grant of a patent. There is no onus on the issuing authority, here the United States Patent and Trademark Office, to verify whether an applicant is the first inventor. In the event that more than one person claimed the right to the same invention, an investigation was conducted and the per-

son proven to be the first inventor of the invention would be given priority over the others even if the first inventor was not the first to file the patent application, subject, of course, to all patenting requirements being met.[14] In reality, this can be problematic and it involves expensive and long-drawn-out administrative proceedings.[15] The party claiming the right to the invention or claiming to be the first inventor is required to substantiate this claim by producing evidence of (i) 'conception' of the invention or the mental act of envisaging the invention and its application and (ii) its 'reduction to practice' or the subsequent efforts put into the actual implementation and fulfillment of the intended purpose of the conceived invention.[16] This could also alternatively be proven by the filing of a patent application.[17] Hence, it is very important to maintain meticulous records at every step, stage and process, beginning with the mental act of conceiving the invention and leading up to the final working of the invention as intended. The dates, times and circumstances surrounding the invention all take on influential or even crucial significance in the first-to-invent system.

12 However, it is also pertinent to note that as established by judicial precedent and United States case law, instances where the first inventor failed to obtain rights to the patent exist. There are court rulings which state that if an inventor initially sought prolonged protection of his invention as a trade secret, this act could be construed as abandonment, concealment or suppression and lacking due diligence on the part of the inventor. Consequently, the second inventor may be conferred with the rights to the patent. The rationale behind such a ruling is that the patent statute encourages prompt public disclosure, and in case of failure to do so, favours the other party who accomplishes what is intended by law.[18]

13 It may be concluded that the first-to-invent system assures protection to the first inventor and therefore allows the inventor time to develop the invention and conduct further research. However, in most cases it imposes no obligation of quick disclosure; this somewhat defeats the purpose of the patenting system, which is to provide protection in exchange for revealing technical developments. This can be seen as frustrating the objective of and the rationale behind the patent system.[19] And although the system may seem simple and straightforward, its application can be complicated, or at least difficult.[20]

II. First-to-file

14 Most industrialized nations and all major countries across the world (other than the United States) – including European countries, Japan and Canada – apply the 'first-to-file' rule of priority. Contrary to the first-to-invent rule, when patent rights to an invention are granted to the person who filed a patent application ahead of all other contenders, it falls under the 'first-to-file' system. The date of the application, by default, determines which person is entitled to the grant of a patent to an invention. Using the same example, a different outcome is achieved.

> Example 2: Inventor A invents product P on 1 March and files a patent application on 10 March. Inventor B independently invents the same product P on 1 February, develops it and files a patent application on 20 March. Unlike the previous scenario, Inventor A gets the patenunder first-to-file.

15 Hence, there is the provision of an objective, clear means of determining priority which dispenses with any obligation on the part of the patent office to conduct time-consuming and cumbersome investigations to establish facts revolving around the invention. In addition, scope for dispute and litigation, or seeking redress in courts is narrow and reduced, owing to the clear method of determining priority.[21]

16 Most first-to-file patent systems also follow absolute prior art rules which stipulate that any disclosure before the date of filing, even by the inventors themselves, is to be considered prior art and would essentially be a bar to obtaining a patent.[22] The Japanese Patent Office is a notable exception to this practice and provides for a six-month window of disclosure in aid of universities and research institutions.[23]

17 The first-to-file system spurs early disclosure and contributes to the development of technology. It provides the applicant with an incentive to apply as soon as possible and thereby 'disclose' the invention on the one hand, and also simultaneously acts as a deterrent to hiding or keeping the invention secret.[24] However, it acts a disincentive to undertake research or to spend time developing the invention prior to filing or disclosing it. In the same vein, first-to-file can be considered more favourable and advantageous to large corporations which possess manifold resources to bring an invention faster from the inventor's table to the patent office in comparison to individual inventors and small businesses that mostly lack financial and manpower support.[25]

18 However, with the adoption of the America Invents Act, the United States has now adopted a first-inventor-to-file regime, which will be discussed in the next section of this article.

D. First-Inventor-to-File under the America Invents Act

19 With the passage of the America Invents Act into law, the patent system in the United States has figuratively undergone a tectonic shift. This law endorsed

the conversion to a first-inventor-to-file regime, bidding adieu to the two-century-old first-to-invent tenure. Most countries of the world currently conform to the first-to-file principle. The United States was one of the last countries that still adhered to the first-to-invent system.[26]

20 Although the first-inventor-to-file system is not identical to other systems around the world – in fact, it is claimed to be superior to the other first-to-file systems of other countries –[27] it is an advance towards harmonization. Prior to this recent development, this rule had consistently been successful in resisting attempts towards change and revision.[28] In fact, this has been one of the main focal points, if not the focal point, of the censure and opposition that was directed at the America Invents Act during its journey through the United States Senate and the House of Representatives before being signed into law by the President.

21 With the shift to first-inventor-to-file, the date of filing of a patent application assumes primary importance, though not to the exclusion of other patentability requirements. Consequently, fast disclosure and filing of an application after an invention has been conceived is of paramount importance. The effective filing date is the earliest priority date or the actual filing date in the absence of a priority claim to an earlier application.[29]

Example 3: For instance, Inventor A invents product P on 1 March and files a patent application on 10 March. Inventor B independently invents the same product P on 1 February, develops it and files a patent application on 20 March. Under the new system, Inventor A gets the patent.

22 However, as has been mentioned above, the patent system of the United States has shifted to what is now known as a first-inventor-to-file system and not a strict first-to-file regime. The presence of certain features and exceptions has led to the majority opinion that it concerns a hybrid system with aspects borrowed from both existing concepts, but nevertheless identical to neither the previously followed first-to-invent nor the globally dominant first-to-file.[30]

23 *Grace period*: First, it is pertinent to note the exception under the so- called grace period provided for under 35 U.S.C. § 102(b)(1), for disclosures of own inventions made during the first year prior to the effective filing date. § 102(b)(1) states

"Disclosures made 1 year or less before the effective filing date of the claimed invention - A disclosure made 1 year or less before the effective filing date of a claimed invention shall not be prior art to the claimed invention under subsection (a)(1) (...)"[31]

Example 4: To illustrate, Inventor A invents product P on 1 October and files a patent application on 10 October. Inventor B independently invents the same product P on 1 January, publishes in a scientific journal on 10 January, and files a patent application on 20 October. The publication of 10 January is prior art for Inventor A and takes away novelty of the invention. However, B's own disclosure is exempt because of the grace period and Inventor B gets the patent in spite of a later filing date.

24 Hence, the retention of the one-year grace period still affords a measure of protection to inventors in the form of a gestation period. The establishment of such a concept seems to be an attempt to look out for the interests of the academic world – research institutions, scientific publications and universities. The provision of this grace period distinguishes the first-inventor-to-file that has now been adopted in the United States from other strict first-to-file systems, e.g. the European system.

25 Derivation proceedings: Another distinct feature of the first-inventor-to- file system is the institution of derivation proceedings to cover an exception for cases where the first party to file unauthorizedly derived the invention from the second party.[32] § 135. states

"Derivation proceedings -

(a) INSTITUTION OF PROCEEDING - An applicant for patent may file a petition to institute a derivation proceeding in the Office. The petition shall set forth with particularity the basis for finding that an inventor named in an earlier application derived the claimed invention from an inventor named in the petitioner's application and, without authorization, the earlier application claiming such invention was filed (...)"[33]

26 Example 5:- Inventor A invents product P and files a patent application on 10 October. Inventor B, who works with A in the same room, has already filed a patent application for the same product P on 1 October. Inventor A alleges and proves that Inventor B derived product P from A, without authorization. Inventor A gets the patent despite having a later filing date.

27 "Thus, the second party may nonetheless obtain a patent on the invention despite the first party's earlier filing date".[34] Derivation proceedings supplant the former interference proceedings. The objective behind the formulation of such a hybrid system is suggestively to ensure a balance between the interests of all the affected parties across an array of fields and industries.[35]

E. From the United States' Perspective: Support for Change and Opposition to Change

I. Why first-inventor-to-file?

28 During its pendency, the America Invents Act had been subject to considerable criticism from various sectors of society. Nevertheless, the necessity for reform was not the point of contention. In fact, it was almost uniformly acknowledged as imperative for the following reasons.

29 The most important factor under consideration was harmonization. Modifying the US patent system to keep abreast of other international patent systems was deemed to be the key to global collaboration. This would result in mitigation of burdens straining all intellectual property systems because of the existence of disparate systems. Harmonized systems would also enhance job growth and encourage innovation by opening up business avenues in new markets and simultaneously enabling the possibility of protection across jurisdictions. As a combined consequence, this would ensure the prevention of devaluation of the currency of innovation.[36] Consequently, a shift from the first-to-invent rule to the first-inventor-to-file rule was considered essential.

30 Another important factor under consideration was that the patent system prior to the adoption of the America Invents Act, i.e. the first-to-invent system, was not considered to have kept pace with the astounding growth and development of technology. An outdated system implies inefficiency, and proponents of the Act argued that this was reflected in the workings of the United States Patent and Trademark Office, which perpetually combated excessive backlogs and furthermore resulted in inordinate amounts of delay in the granting of patents.[37] The need to change to an efficient patent system which would aid in expediting the patent examination and grant processes was therefore considered imperative.

31 Supporters of this reform also contended that inequities and uncertainties in the patent system act as threats to the growth of innovation and may have devastating consequences on the economy. Shielding innovators against economic and other exploitation of their inventiveness and efforts is one of the main functions of a patent system. But these uncertainties in the system were leading to the exploitation of the system, and inappropriate use of said protection for financial gain. Said flaws were also alleged to have increased the risk and cost of litigation–for instance, by fostering qualitatively inferior patents and encouraging speculators and patent 'trolls'.[38] The positive changes addressing these issues in the reform act lead to establishment of new, inexpensive and fast procedures to deter and defeat weak patents.[39] Also, uncertainties would be avoided and questions regarding the rightful entitlement to a patent would no longer rise under the first-inventor-to-file system.

II. Why not?

32 On the other hand, as previously mentioned above, the America Invents Act was also on the receiving end of vehement opposition. Although the need for reform in specific areas was recognized, the proposed nature of the amendments was extensively debated upon in an unfavourable light.

33 One of the major grounds of opposition was the prospective change from the unique first-to-invent system of the United States to the first-to file system followed by most countries of the world. This was mostly seen as the result of lobbying by giant corporations and alleged to favour "large businesses and in particular, well-financed, large foreign businesses over innovators",[40] individual inventors and small businesses in particular.[41] The competence and efficiency of the 'first-to file' system was questioned in light of revealing and unfavourable results upon comparison with the first-to-invent practiced in the United States.[42]

34 Furthermore, claims as to the unconstitutional nature of the change were propounded, and its constitutionality has been subsequently challenged in court.[43] In the United States, the first-to-invent has long been considered and regarded as an ideology as opposed to a mere rule that has been applied to determine priority. Its origins are considered directly traceable to the Constitution of the United States.[44] The "natural law theory of rights" and "the need to accommodate the dual sovereignty of states and federal government"[45] influenced the adoption of this system in the 18th century. As early as 1793, the United States Congress amended the Patent Act to state in Sec 3 as follows:

> *"(...)that every inventor, before he can receive a patent, shall swear or affirm that he does verily believe, that he is the true inventor or discoverer of the art, machine, or improvement, for which he solicits a patent (...)"*[46]

35 Since then, the law has consistently been interpreted as requiring very specifically "that patents be granted only to first inventors".[47] It has therefore long been considered an integral part of the patent system, and even believed to be one of the principal reasons enabling and realizing innovation in the United States. The withdrawal of the first-to- invent in favour of the first-inventor-to-file has therefore been vehemently opposed.

36 Opponents also took issue with the claimed creation of jobs,[48] and expressed scepticism, especially since the majority opinion was that the reform would favour large corporations which outsource jobs against small businesses and start-ups, which are one of the major employment generators.[49]

37 Another reason for resistance against harmonization was the resulting loss of the occasional edge that domestic applicants wielded over foreign applicants. This was seen as a justifiable and equitable measure that helped balance the economic and resource dominance of large corporations over small businesses and individual inventors.[50] In addition, general concerns about the cost effectiveness, the weakness of protection and the continued existence of sufficient incentive to innovate subsisted among individual inventors and small companies.

F. Impact of the Transition

38 This section will discuss the potential impact of the transition from the first-to-invent to the first-inventor-to-file system and the patent reforms from various perspectives. The transition of the United States patent system is set to happen in less than two months. At this point, 'educated guesses' may be made on the ramifications; this is 'polite-speak' to say that the actual impacts of the transition can only be speculated upon.

I. On inventors

39 The segment of society that is mostly affected by the changes in the patent system and the transition to first-inventor-to-file is the inventor or the patent applicant. As the effects on different sectors are divergent, this segment has been further classified into (i) individual inventors and small businesses, (ii) corporations and (iii) foreign applicants.

1. Individual inventors and small businesses: Negative

40 There has been very significant opposition to the shift to first-inventor- to-file by small businesses. The prevalent perception among these inventors is that abandoning the first-to-invent rule puts them at a distinct disadvantage when compared to larger corporations. The presumption is that in a race to the patent office, the tortoise would never win against the hare in the real world. To be able to judge whether and to what extent this is true, a direct comparison between the two systems is required.

41 Time: The contention is that the first-inventor-to-file does not allow an inventor sufficient time to develop his invention to a patentable stage. Seen on a stand-alone basis, this may seem untrue. However, the concept of time is relative, and in light of the practice followed up to now under the first-to-invent regime, the claim takes on realistic and high significance. Since individual inventors and small businesses have lesser manpower and lesser financial and technical resources at their disposal, it is logical to conclude that in actuality, they require more time to bring the invention to completion and file a patent application on it. Nevertheless, with the transition, two avenues in the form of the grace period and the provisional application will be available to inventors to grant an extended window of time to facilitate completion of their invention. Although not identical to the previous procedure, it does negate the protestations with regard to the provision of sufficient time.

42 Money: Another important area that is affected is money. Small businesses and especially single inventors are dependent on investors to fund their inventions and applications. Since timing is crucial under the first-inventor-to-file, there is not much scope for exploring investment possibilities.

43 Although not directly relevant, the fact that the transition is accompanied by significant fee reductions for micro entities is noteworthy and should at least be considered as a step to help offset the disadvantage borne by the 'little guy'.

44 Considering the above, it would be realistic to imagine that it would be hardest to cope with any change in the system for the people running a one-man show and for small businesses. However, whether the percentage it represents is large enough to justify change or resist it, as in this case, is another question.

45 Awareness about the transition and what it means to the inventor, adopting a policy of early filing, abandoning and amending practices that are now rendered obsolete and utilizing any available fee exemptions or financial advantages would contribute to mitigating the disadvantages and ensuring a smoother transition.[51]

2. Corporations and Co.: Positive

46 This is the sector that has a lot riding on this transition and patent reform. For big companies, patents today are less about innovation and more about other things, including legal defence and certainty, market dominance, negotiating power and, of course, monetary value. Pharmaceutical companies and, in the last decade and a half, technology corporations are the companies which most aggressively build and defend their patent portfolios. It is not uncommon for a company's patent portfolio to

be valued higher than the company itself. Hundreds of millions of dollars have been spent on lobbying the America Invents Act and this transition through the United States Congress. At first glance, the transition indeed seems suggestive of being beneficial to large companies. Upon reflection, this impression is reinforced.

47 Harmonization: Considering that most of the companies mentioned above are multi-national giants with a literal presence all over the globe, a harmonized system would make allowance for convenient internal coordination to strengthen or maintain their patents. Similar patent laws and patent systems would make strategies for investment in inventions and patents easier to plan and implement. Having said that, it is also pertinent to note that most big corporations already pursue practices that are geared to maximum optimization, and will be the sector least inconvenienced by the need to overhaul the existing procedural framework.[52]

48 Legal certainty: The transition to first-inventor-to-file can also be expected to benefit companies in another significant manner. Due to the high monetary investments and the economic significance of patents to companies, the legal certainty that the first-inventor-to-file brings with it is highly welcome. The priority rule of determination is now the date of filing the application – a straightforward, easily proven fact. In fact, a measure like this that helps avoid or at least narrow down the scope for litigation was desired and actively pushed for.

49 Prior art: The impact of the post-transition prior art provisions actually has dual connotations. One, it may have a restrictive, if not really negative impact from the perspective of such large multi-national companies. Previously, prior use or disclosure outside the United States was not a bar to patentability inside the United States. Therefore, companies must now follow up applications based on foreign inventions or products in a timely manner to avoid being barred from patenting their own inventions or products. However, there is a second, positive effect of the new prior art rules. Domestic companies or other competitors can no longer exploit foreign inventions or products of another company since any prior art or usage, foreign or not, may now be novelty-destroying and a bar to patentability. In the context of disclosure, the transition will demand complex strategies to be put in place. Companies would be inclined to pre-empt competitors' disclosure by resorting to 'defensive disclosures'. However, they must be cognizant of the effect of this disclosure as a bar to patenting in some strict first-to-file systems.[53]

50 Security concerns: One impact of the transition to first-inventor-to-file that is less evident and unlikely to be positive is an increase in the threat to intellectual property security. With the option of swearing behind or proving the origins of the invention now eliminated, there is an increased risk of intellectual property theft. This risk is elevated, especially in the case of big corporations where correspondence of a sensitive or valuable nature is exchanged across the globe.[54]

51 Hence, it is quite apparent that corporations will mostly reap benefits and be subject to impacts of a positive nature from the transition. In a lighter vein, it would not be surprising to shortly see a Wikileaks publication of 'money well spent' emails exchanged between these corporations.

3. Foreign inventors: Positive

52 The first-inventor-to-file has mostly been predicted to benefit multinational and non-US companies,[55] by virtue of moving a step closer to the foreign patent systems. International companies and investors will definitely need to acquaint themselves with the new patent laws and system in order to facilitate smooth navigation. In particular, the prior art provisions will be highly relevant. Mostly, non-US companies may choose to seek an expansion of protection internationally, subsequent to pursuit or acquisition of domestic patent protection.[56]

53 Although the transition will benefit such overseas entities by bringing clarity and higher certainty, it cannot claim to singlehandedly result in dramatic consequences. Other factors such as the efficient working of the Patent and Trademark Office and external economic factors may be expected to play a bigger role on such a level.[57]

II. Academic world: Open

54 An atypical entity in the patenting sphere is the world of academia – universities, scholars and research bodies – since the dissemination and interchange of research findings and information is a fundamental objective of their vocation. In the post-transition United States, publishing or disclosing materials – for instance, at academic gatherings and conferences – will not be lent with immunity against a patentability bar.[58]

55 Nevertheless, the first-inventor-to-file continues to furnish armour in the form of a one-year grace period. And there is something to be said for defensive disclosure as a deterrent to third parties procuring protection. Only, the problem here will be the possibility of complications ensuing divergent interpretations of what exactly constitutes prior art and what disclosures are covered by exemptions from the Patent and Trademark Office, courts and the universities themselves.[59]

56 Furthermore, it is relevant to record that in the pre-transition world, overseas rights would have been jeopardized anyway under the above- mentioned circumstances. From that perspective, it has always been prudent to precede such disclosures with patent applications.

57 It is probably unlikely that the level of restriction imposed by the new system on this sector of patenting society will have enough of an intimidating effect as to actually be an insurmountable impediment or hindrance.

III. United States Patent and Trademark Office and courts: Positive and Dual

58 The United States Patent and Trademark Office has been publicly endorsing the patent reforms and, in particular, the adoption of the first-inventor-to-file principle. To an organization bogged down by tremendous backlogs – as of September 2012, over 600,000 unexamined patent applications were in pendency –[60] any changes that bring forth a possible ease in administrative requirements and complexities would be highly welcome, and rightly so.

59 A caveat must be added that it would be incorrect to deduce that the previous first-to-invent system was the sole or even primary reason for this sorry state of affairs. Ergo, any expectations that the shift to first-inventor-to-file would magically eliminate the problems faced by the Patent and Trademark Office would be highly flawed and misinformed. In fact, the opposite is true, at least initially. Patent examiners will be forced to simultaneously juggle both systems over several years, a situation that is certain to be fraught with complexity.

60 But the important thing is that the transition proffers something long term – the laying of a policy and legislative foundation that changes the trend and can be built upon or added to.

61 The transition to the first-inventor-to-file indeed provides a higher level of certainty by removing subjective elements, and this can reasonably be expected to result in achieving higher efficiency levels and a lower scope for disputes at the Patent and Trademark Office.

62 The same can be said of courts in a manner. The certainty brought by the institution of objective factors to determine patent priority can be expected to be received favourably by courts. However, the United States is a nation of court precedent. Unlike the Patent and Trademark Office, the courts will be dealing with the interpretation of highly complex and intricate questions of both the old and the new laws for an extended period. This could prove costly, especially in light of the fact that a reduction in litigation was a much desired consequence expected from the transition.

63 It is therefore presently unclear whether the positive impacts will outweigh the accompanying necessary evils.

G. Other changes

64 The transition to first-inventor-to-file will not be able to singlehandedly render all the desired changes possible. A supporting framework dealing with other aspects of patent process and litigation is necessary. Accordingly, the range of policy and statutory changes effected by the America Invents Act is extensive. Some important changes are mentioned below.

65 Prior art changes: Previously, third-party use or foreign sales did not automatically preclude patent protection in the United States. However, novelty provisions in the America Invents Act have been broadened to implicitly include foreign public use, foreign sales and foreign offers for sale as prior art by effectively abolishing the so-called Hilmer doctrine.[61] "The Hilmer doctrine disadvantaged non-U.S. inventors who filed an application in their home country prior to filing in the U.S. under the Paris Convention, because the foreign application was not effective prior art against any other U.S. application under § 102(e) as it was not 'filed in the U.S.'"[62]

66 USPTO authority Re. Fees: "Subject to public hearings and Congressional oversight",[63] the USPTO may now fix its own fee schedule. The America Invents Act does not give the United States Patent and Trademark Office either full control of its funds or full immunity from fee diversion. Instead, a Patent and Trademark Fee Reserve Fund has been established to collect excess fees.[64]

67 Filing by other than inventor: With the adoption of the first-inventor-to- file, the patent system now permits an assignee, for instance, an employer, to file and prosecute a patent application, i.e. to be the applicant. "The term 'applicant' is no longer synonymous with 'inventor'".[65]

68 Pre-issuance Submissions of prior art may be made by third parties during prosecution. Restrictions which were imposed previously on the number and nature of such submissions have now been amended to make such filings more viable and attractive.[66]

69 Reexamination: Previously, *ex parte* and *inter partes* re-examination and litigation upon infringement were the avenues for challenging validity of patents. *Ex parte* re-examination procedures have

mostly been retained, but *inter partes* re-examination has been replaced by the new *Inter Partes*[67] Review as a way of providing parties with enhanced tools.

70 Addition of Post-Grant Review as a new mechanism to challenge a patent. These proceedings are similar to opposition proceedings in other countries and have a broader scope in comparison to re-examination proceedings. Post-Grant Review may only be triggered in the nine-month window after the grant of a patent.[68] Any person other than the patent owner may initiate the petition by raising any premise of invalidity, but this action may only be initiated if no redress in the form of a civil action has been sought.[69]

71 Supplemental Examination is another new addition. The America Invents Acts has furnished patent owners with the opportunity for consideration and correction of errors or omissions.[70]

72 Patent Trial and Appeal Board replaces the existing Board of Patent Appeals and Interferences. Its duties will include "reviewing decisions and appeals of re-examinations, conducting derivation proceedings and inter partes- and post grant reviews".[71]

73 Other changes:

- No tax strategy patents deemed to be within prior art.[72]
- Human organisms not patentable.[73]
- Best-Mode no longer constitutes basis for invalidity, albeit remaining a technical requirement.[74]
- Significant amendments made to patent marking law – requirements for lawsuits aimed at limiting qui tam cases; also, "only the United States may sue for penalty".[75]
- Prior commercial use: prior use rights as a defence to infringement have been expanded in scope under Sec. 5 of the America Invents Act.[76]

H. Conclusion

74 The America Invents Act has introduced extensive and long overdue changes to the patent system of the United States. As is common to the introduction of any major legislation, it has simultaneously been acclaimed as the change that will drive economic growth in the 21st century and denounced as being the downfall of innovation.

75 The purpose of introducing sweeping changes to the patent system was the stimulation of 'economic growth' – two words which take on a whole new meaning in current times, considering that 'stagnation' and 'slump' are possibly the most positive adjectives being used to describe the condition of economies the world over. The implementation of the first-inventor-to-file rule was expected to contribute to and act as a stimulus to growth in multiple ways: accelerate the patent process, help innovators commercialize their inventions faster and thereby generate employment opportunities, prevent needless and expensive dispute and litigation and primarily shift the focus from procedural red-tape to innovation.[77] A tall order indeed for any legislation.

76 There has been continuous and ongoing speculation as to the ramifications since the first-inventor-to-file is yet come into effect.

77 The purpose is laudable, but it is evident that transitioning the system to a first-inventor-to-file regime will neither be able to satisfy all the different parties affected by it nor will it alone suffice to fulfil the ambitious aims that effected the change. It requires additional fortification and support in the form of a robust legal framework that provides

- additional certainty – e.g. in the form of a predictable damages award,
- improved patent quality rendered possible by continued court assistance and regulation,
- and an efficient Patent and Trademark Office to enforce and implement the above.[78]

78 However, it is premature to conclude that the transition is doomed to disappoint. At present, the transition promises to pave the way for more objectivity in patent law.[79] It is also reasonable to be optimistic about the predictions as to the positive impacts the change is hoped to bring about. Together with the other supporting changes brought about by the America Invents Act, the change to first-inventor-to-file may be expected to make significant inroads towards progress.

79 In conclusion, it is justifiable to describe this transition as a historical milestone for the United States. As a cog in the patent wheel, it is sure to roll the patent world into interesting or shall we say, innovative times.

I. Bibliography

I. I. Literature:

David S. Abrams and R. Polk Wagner, Poisoning the Next Apple: How the America Invents Act Harms Inventors (28 Feb 2012). Stanford Law Review, Vol. 65, 2012; U of Penn, Inst for Law & Econ Research Paper No. 11-29, http://ssrn.com/ abstract=1883821, accessed 30 Jan 2013.

Robert Armitage: The America Invents Act: One Year Later, http://ip.law.indiana.edu/wp-content/uploads/2012/10/Indiana-University-Center-for-Intellectual-Property-Research-The-Ameri-

ca-Invents-Act-One-Year-Later-Armitag1.pdf, accessed 30 Jan 2013.

Erika H. Arner, Esther H. Lim, Rebecca M. McNeill, Christopher S. Schultz, Linda J. Thayer, and E. Robert Yoches, How Will Patent Reform Affect the Software and Internet Industries?, The Computer & Internet Lawyer, Dec 2011, http://www.finnegan.com/resources/articles/articlesdetail.aspx?news-=345b9502-13f7-4dbe-b40d-dcb671ff3c44, accessed 30 Jan 2013.

Emily Berger, Richard Esguerra, Patent Reform Act Stalls in the Senate, Electronic Frontier Foundation, 2 May 2008, https://www.eff.org/deeplinks/2008/05/patent-reform-act-stalls-senate, accessed 29 Jan 2013.

David Boundy, Esq. Cantor Fitzgerald, COMMENTARY: Why the America Invents Act Is Bad for Entrepreneurs, Startups and for America, Westlaw Journal Expert Commentary Series, http://www.mofo.com/files/Uploads/Images/120206-Patents-21st-Century.pdf, accessed 30 Jan 2013.

Art Brodsky, Consumer Groups Ask Senate to Take Up Patent Bill, http://www.publicknowledge.org/news-blog/press-release/consumer-groups-ask-senate-take-patent-bill, accessed 30 Jan 2013.

Dan L. Burk, From "First to Invent" to "First to File": Changing Lanes in U.S. Patent Procedure?, IIC 2011.

Mark Chandler, The America Invents Act: One Year Later, What Did The AIA Accomplish? What Did It Omit?, Indiana University Maurer School of Law, http:// ip.law.indiana.edu/wp-content/uploads/2012/10/The-America-Invents-Act-One-Year- Later-CHANDLER-AND-ZADO.pdf, accessed 30 Jan 2013.

Ned L. Conley, First-to-Invent: A Superior System for the United States, 22 St. Mary's L.J. 779 (1990-1992).

CQPress, First Street Report: Lobbying The America Invents Act, http:// firststreetresearch.files.wordpress.com/2011/11/first-street-report-lobbying-the-america- invents-act.pdf, accessed 29 January 2013.

Dennis Crouch, Library of Congress Issues Report on Proposed Patent Reform, 19 July 2005, http://patentlaw.typepad.com/patent/2005/07/library_of_cong.html, accessed 29 Jan 2013.

The Economist, Many patents, still pending: Congress tweaks, but does not overhaul, America's patent system, 10 Sep 2011, http://www.economist.com/node/21528643, accessed 30 Jan 2013.

European Patent Convention as revised 13 Dec 2007, http://www.epo.org/law-practice/legal-texts/html/epc/1973/e/contents.html, accessed 30 Jan 2013.

Federal Trade Commission, Oct 2003, To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy, A Report by the Federal Trade Commission, http://www.ftc.gov/os/2003/10/innovationrpt.pdf, accessed 29 Jan 2013.

Marian T. Flattery and William B. Raich of Finnegan, Henderson, Farabow, Garrett & Dunner LLP, Strategic planning in the wake of the new prior art provisions in the America Invents Act, L e x o l o g y, 1 D e c 2 0 11, http://www.lexology.com/library/detail.aspx?g=2d49fa8a-95b9-4ee4-95a4-1b3d82adfb94, accessed 30 Jan 2013.

Michael A. Glenn and Peter J. Nagle, Article i and the First Inventor to File: Patent Reform or Doublespeak?, IDEA, The Intellectual Property Law Review, vol. 50, no. 3, http://docs.piausa.org/Article%20I%20and%20the%20First%20Inventor%20to%20File-%20Patent%20Reform%20or%20Doublespeak_%20=%20IDEA-vol50-no3-glenn-nagle.pdf, accessed 30 Jan 2013.

Gary L. Griswold and F. Andrew Ubel, "Prior User Rights: A Necessary Part of a First-to-File System", 26 John Marshall Law Review, 1993.

Carl E. Gulbrandsen, Wisconsin Alumni Research Foundation, http://www.warf.org/uploadsmediaWARFHR_1249_DisfavorsInnovators_06-01-11.pdf, accessed 30 Jan 2013.

Higher Education Associations, Comments to USPTO, 5 Oct 2012, http://www.uspto.gov/patents/law/comments/hea_20121005.pdf, accessed 30 Jan 2013.

Ron D. Katznel, Downhill Patent Law Harmonization with What? Presentation at The Overhaul of U.S. Patent Forum, 30 Aug 2011, http://www.lauderpartners.com/PatentReform/RonKatznelson-Pres-PatentReform110830.pdf, accessed 30 Jan 2013.

Ron D. Katznelson, Much Patent Reform Has Already Taken Place. Any Further Reforms Must Be Directed At U.S. Patent Office Operations, Presented at "The Perfect Storm of Patent Reform?" Fenwick & West Lecture Series Inaugural Symposium, UC Davis School of Law, 7 Nov 2008, http://works.bepress.com/cgi/viewcontent.cgi? article=1053&context=rkatznelson, accessed 30 Jan 2013.

Kauffman Foundation, The Importance of Startups in Job Creation and Job Destruction, July 2010, http://www.kauffman.org/what-we-do/research/firm-formation-and-growth-series/the-importance-of-startups-in-job-creation-and-job-destruction accessed 30 Jan 2013.

Thomas J. Kowalski, Deborah L. Lu, Vedder Price, Leahy-Smith America Invents Act, The National Law Review, 19 Sep 2011, http://www.natlawreview.com/article/leahy-smith-america-invents-act, accessed 30 Jan 2013.

Ladas & Parry LLP, A Brief History of the Patent Law of the United States, http://www.ladas.com/Patents/USPatentHistory.html, accessed 30 Jan 2013.

Gary Lauder, New Patent Law Means Trouble For Tech Entrepreneurs, 20 Sep 2011, http://www.forbes.com/sites/ciocentral/2011/09/20/new-patent-law-means-trouble-for-tech-entrepreneurs/, accessed 30 Jan 2013.

Letter from Gary Locke, The Secretary of Commerce to Senator Patrick Leahy, 2009, http://www.uspto.gov/aia_implementation/locke-letter-oct-05-2009.pdf, accessed 30 Jan 2013.

Letters from Unions to senate opposing patent reform bill, http://www.bustpatents.com/unions.pdf, accessed 29 Jan 2013.

Shih-tse Lo and Dhanoos Sutthiphisal, Does it Matter Who Has the Right to Patent: First-to-Invent or First-to-File? Lessons From Canada, National Bureau of Economic Research, Working Paper No. 14926, April 2009, http://www.nber.org/papers/w14926, accessed 30 Jan 2013.

Steve Lohr Inventor Challenges a Sweeping Revision in Patent Law, New York Times, 26 Aug 2012, http://www.nytimes.com/2012/08/27/technology/mark-stadnyk-challenges-sweeping-revision-in-patent-law.html?pagewanted=all&_r=0, accessed 30 Jan 2013.

Deborah L. Lu, Smitha B. Uthaman, Ph.D., Thomas J. Kowalski, Summary of the America Invents Act, The National Law Review, 12 Apr 2012 http:// www.natlawreview.com/article/summary-america-invents-act, accessed 30 Jan 2013.

Michael F. Martin, The End of the First-to-Invent Rule: A Concise History of Its Origin, IDEA, The Intellectual Property Law Review, vol. 49, no. 3, http://www.fed- soc.org/docLib/20110707_Inventrulemartin.pdf, accessed 30 Jan 2013.

Ann McCrackin, Stephen Brodsky, and Amrita Chiluwal, Comparison of the Current U.S. First-to-Invent System with the First-Inventor-To-File System Proposed in the Patent Reform Act of 2011 (S.23), PatentlyO, 2 Mar 2011, http://www.patentlyo.com/patent/2011/03/mccrackinpatentreform.html, accessed 30 Jan 2013.

Rebecca C.E. McFadyen, The "First-to-File" Patent System: Why Adoption is NOT an Option!, 14 RICH. J.L. & TECH. 3 (2007), http://law.richmond.edu/jolt/v14i1/article3.pdf, accessed 30 Jan 2013.

John Merline, Patent Reform A Jobs Plan? Not So Fast, 25 Aug 2011, http://news.investors.com/082511-582790-will-patent-reform-spark-jobs-.aspx, accessed 30 Jan 2013.

Stephen A. Merrill, Richard C. Levin, and Mark B. Myers, Editors, A Patent System for the 21st Century, 2004, http://judiciary.house.gov/hearings/pdf/NASSummary070906.pdf, accessed 29 Jan 2013.

Kyle Meziere, The "America Invents Act" to Improve and Harmonize the U.S. Patent Filing System, http://smiplaw.wordpress.com/2012/06/20/the-america-invents-act-to- improve-and-harmonize-the-u-s-patent-filing-system/#_ednref4, accessed 30 Jan 2013.

Gerald J. Mossinghoff, The U.S. First-To-Invent System Has Provided No Advantage to Small Entities, 84 Journal of the Patent & Trademark Office Society, 2002.

Thomas R. Nicolai, First-to-File vs. First-to-Invent: A Comparative Study Based on German and United States Patent Law, 3 IIC 103, 1972.

Douglas Norman, Vice President -General Patent Counsel Eli Lilly and Company, THE AMERICA INVENTS ACT: One Year Later Corporate Practice Impact, http:// ip.law.indiana.edu/wp-content/ uploads/2012/10/AIA_One_Year_Later-_Indiana- University_Norman_14Sep2012.pdf, accessed 30 Jan 2013.

Brad D. Pedersen, US Patent Reform: What Really Changes? A Patterson Thuente IP White Paper, http://www.ptslaw.com/PatentReformSummaryOverviewWhitepaper.pdf, accessed 30 Jan 2013.

Brad Pedersen and Justin Woo, The "Matrix" for changing first-to-invent: An experimental investigation into proposed changes in U.S. patent law, http://web.wmitchell.edu/cybaris/wp-content/ uploads/2010/05/01.Pedersen.05-12-10-vFINAL.WITHAPPENDIX.pdf, accessed 30 Jan 2013.

Wendy H. Schacht and John R. Thomas, Patent Reform: Innovation Issues, CRS Report for Congress, The Library of Congress, 15 Jul 2005, http://patentlaw.typepad.com/patent/RL32996.pdf, accessed 29 Jan 2013.

J.C. Stedman, The First-to-Invent Concept in United States, International Review of Intellectual Property and Competition Law 2.

John R. Thomas and Wendy H. Schacht, Patent Reform in the 110th Congress: Innovation Issues, CRS Report for Congress, The Library of Congress, 10 Jan 2008, http:// anticipatethis.files.wordpress.com/2008/01/crspatentreformrpt.pdf, accessed 29 Jan 2013.

John D. Vandenberg, Klarquist Sparkman LLP, Immediate and Near-Term Practical Impacts of the America Invents Act, p. 2, 7 Dec 2011, http://www.klarquist.com/Articles/28_Immediate%20and%20Near-Term%20Practical%20Impacts%20of%20the%20America%20Invents%20Act.pdf, accessed 30 Jan 2013.

John Villasenor, How Universities Can Protect Their Next Bright Idea Under the America Invents Act, 6 Nov 2011 http://www.brookings.edu/research/opinions/2011/11/06-patents-villasenor, accessed 30 Jan 2013.

John Villasenor, Untangling The Real Meaning Of "First-To-File" Patents, 6 Mar 2012, http://www.fastcompany.com/1822846/untangling-real-meaning-first-file-patents, accessed 30 Jan 2013.

The Washington Post, Editorial, How to encourage American innovation, 15 Aug 2011, http://www.washingtonpost.com/opinions/how-to-encourage-american-innovation/2011/08/05/gIQApACjFJ_print.html, accessed 30 Jan 2013.

II. The White House:

The White House: Office of the Press Secretary, 16 Sep 2011, http:// www.whitehouse.gov/the-press-office/2011/09/16/president-obama-signs-america-invents-act-overhauling-patent-system-stim, accessed 30 Jan 2013.

The White House, Press Release, 16 Sep 2011, http://www.whitehouse.gov/the-press-office/2011/09/16/president-obama-signs-america-invents-act-overhauling-patent-system-stim, accessed 30 Jan 2013.

III. USPTO:

David Kappos, WIPO Symposium of IP Authorities, 22 Sep 2011, http://www.uspto.gov/news/speeches/2011/kappos_wipo.jsp, accessed 30 Jan 2013.

David J. Kappos, A Patent System for the 21st Century, Indiana Maurer School of Law

2012 Patents Conference, 14 Sep 2012, http://ip.law.indiana.edu/wp-content/ uploads/2012/10/DK-Indiana-Maurer-School-of-Law-IP-Conference-September-14-2012.pdf, accessed 30 Jan 2013.

Memorandum from Robert W. Bahr, Tax Strategies are Deemed to Be Within the Prior Art, 20 Sep 2011, www.uspto.gov/aia_implementation/tax-strategies-memo.pdf, accessed 30 Jan 2013.

USPTO explains the America Invents Act, Webinar, 6 Sep 2012, http://www.oppedahl.com/cle/aia/20120904-presentation.pdf, accessed 30 Jan 2013.

USPTO Press Release, 9 Apr 2002, http://www.uspto.gov/news/pr/2002/02-26.jsp, accessed 30 Jan 2013.

USPTO, http://www.uspto.gov/aia_implementation/aia-effective-dates.pdf.

IV. WIPO:

WIPO, http://www.wipo.int/treaties/en/ip/paris/trtdocs_wo020.html, accessed 30 Jan 2013.

WIPO, http://www.wipo.int/treaties/en/ShowResults.jsp?

country_id=ALL&search_what=B&bo_id=5&bo_id=6, accessed 30 Jan 2013.

V. List of cases:

Eaton v. Evans, 204 F.3d 1094, 1097 (Fed. Cir. 2000).

Hyatt v. Boone, 146 F. 3d 1348 (Fed. Cir. 1998).

Del Mar Engineering Labs. v. United States, 524 F2d 1178 (Ct. Cl. 1975).

Brunswick Corp. v. United States, 34 532, 584 (Fed. CI. 1995).

USPTO press release, 9 Apr 2002, http://www.uspto.gov/news/pr/2002/02-26.jsp, accessed 30 January 2013.

WIPO, http://www.wipo.int/treaties/en/ip/paris/trtdocs_wo020.html, accessed 30 January 2013.

WIPO, http://www.wipo.int/treaties/en/ShowResults.jsp?country_id=ALL&search_what=B&bo_id=5&bo_id=6, accessed 30 January 2013.

A Brief History of the Patent Law of the United States, http://www.ladas.com/Patents/USPatentHistory.html, accessed 30 January 2013.

Federal Trade Commission, October 2003, To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy, A Report by the Federal Trade Commission, http://www.ftc.gov/os/2003/10/ innovationrpt.pdf, accessed 29 Jan 2013. *See also* Stephen A. Merrill, Richard C. Levin, and Mark B. Myers, Editors, A Patent System for the 21st Century, 2004, http://judiciary.house.gov/hearings/pdf/NASSummary070906.pdf, accessed 29 Jan 2013.

Wendy H. Schacht, John R. Thomas, Patent Reform: Innovation Issues, CRS Report for Congress, The Library of Congress, 15 July 2005, http://patentlaw.typepad.com/patent/RL32996.pdf, accessed 29 Jan 2013. See also Dennis Crouch, Library of Congress Issues Report on Proposed Patent Reform, 19 July 2005, http://patentlaw.typepad.com/patent/2005/07/library_of_cong.html, accessed 29 Jan 2013.

CQPress, First Street Report: Lobbying The America Invents Act, http:// firststreetresearch.files.wordpress.com/2011/11/first-

street-report-lobbying-the-america-invents-act.pdf, accessed 29 Jan 2013.

John R. Thomas, Wendy H. Schacht, Patent Reform in the 110th Congress: Innovation Issues, CRS Report for Congress, The Library of Congress, 10 Jan 2008, http://anticipatethis.files.wordpress.com/2008/01/ crspatentreformrpt.pdf, accessed 29 Jan 2013.

Emily Berger, Richard Esquerra, Patent Reform Act Stalls in the Senate, Electronic Frontier Foundation, 2 May 2008, https://www.eff.org/deeplinks/2008/05/patent-reform-act-stalls-senate, accessed 29 Jan 2013. See also Letters from unions to senate opposing patent reform bill, http://www.bustpatents.com/unions.pdf, accessed 29 Jan 2013.

The White House: Office of the Press Secretary, 16 Sep 2011, http://www.whitehouse.gov/the-press- office/2011/09/16/president-obama-signs-america-invents-act-overhauling-patent-system-stim, accessed on 30 Jan 2013.

Thomas J. Kowalski, Deborah L. Lu, Vedder Price, Leahy-Smith America Invents Act, The National Law Review, 19 Sep 2011, http://www.natlawreview.com/article/leahy-smith-america-invents-act, accessed 30 Jan 2013.

Brad D. Pedersen, US Patent Reform: What Really Changes? A Patterson Thuente IP White Paper, p. 3, http://www.ptslaw.com/PatentReformSummaryOverviewWhitepaper.pdf, accessed 30 Jan 2013.

USPTO, http://www.uspto.gov/aia_implementation/aia-effective-dates.pdf, accessed 30 Jan 2013.

Michael F. Martin, The End of the First-to-Invent Rule: A Concise History of Its Origin, IDEA, The Intellectual Property Law Review, vol. 49, no. 3, pp. 438-440, http://www.fed-soc.org/docLib/20110707_Inventrulemartin.pdf, accessed 30 Jan 2013.

Gerald J. Mossinghoff, The U.S. First-To-Invent System Has Provided No Advantage To Small Entities, 84 Journal of the Patent & Trademark Office Society, 2002, p. 428, http://heinonline.org/HOL/Page?handle=hein.journals/jpatos84&div=62&g_sent=1&collection=journals, accessed 30 Jan 2013.

Eaton v. Evans, Federal Circuit Court 2000.

Hyatt v. Boone, Federal Circuit Court 1998.

Del Mar Engineering Labs. v. United States. See also Brunswick Corp. v. United States Fed. CI. 1995. See also John R. Thomas, Wendy H. Schacht, Patent Reform in the 110th Congress: Innovation Issues, CRS Report for Congress, The Library of Congress, 10 Jan 2008, pp. 15-17, http:// anticipatethis.files.wordpress.com/2008/01/crspatentreformrpt.pdf, accessed 30 Jan 2013.

Shih-tse Lo and Dhanoos Sutthiphisal, Does It Matter Who Has the Right to Patent: First-to-Invent or First-to-File? Lessons From Canada, National Bureau of Economic Research, Working Paper No. 14926, April 2009, pp. 2-4, http://www.nber.org/papers/w14926, accessed 30 Jan 2013.

1 Stedman, J.C., The First-to-Invent Concept in United States, International Review of Intellectual Property and Competition Law 2, pp. 241-259, accessed 30 Jan 2013.

2 Thomas R. Nicolai, First-to-File vs. First-to-Invent: A Comparative Study Based on German and United States Patent Law, IIC 1972, p. 112.

3 Kyle Meziere, The "America Invents Act" to Improve and Harmonize the U.S. Patent Filing System, http:// smiplaw.wordpress.com/2012/06/20/the-america-invents-act-to-improve-and-harmonize-the-u-s-patent-filing- system/#_ednref4, accessed 30 Jan 2013. See also European Patent Convention Art. 55, 5 Oct 1973, 1065 U.N.T.S. 254 as revised 13 Dec 2007, http://www.epo.org/law-practice/legal-texts/html/epc/1973/e/contents.html, accessed 30 Jan 2013.

4 Tokkyo Ho [Japanese Patent Law], Law No. 121 of 1959, Arts. 29-30 (Japan). See also 22 above.

5 Thomas R. Nicolai, First-to-File vs. First-to-Invent: A Comparative Study Based on German and United States Patent Law, IIC 1972, p.108.

6 Shih-tse Lo and Dhanoos Sutthiphisal, Does it Matter Who Has the Right to Patent: First-to-Invent or First-to-File? Lessons From Canada, National Bureau of Economic Research, Working Paper No. 14926, April 2009, pp. 3-4, http://www.nber.org/papers/w14926, accessed 30 Jan 2013.

7 Shih-tse Lo and Dhanoos Sutthiphisal, Does it Matter Who Has the Right to Patent: First-to-Invent or First-to-File? Lessons From Canada, National Bureau of Economic Research, Working Paper No. 14926, April 2009, p. 2, http://www.nber.org/papers/w14926, accessed 30 Jan 2013.

8 David Kappos, WIPO Symposium of IP Authorities, 22 Sep 2011, http://www.uspto.gov/news/speeches/2011/kappos_wipo.jsp, accessed 30 Jan 2013.

9 Michael F. Martin, The End of the First-to-Invent Rule: A Concise History of Its Origin, IDEA, The Intellectual Property Law Review, vol. 49, no. 3, p. 437, http://www.fed-soc.org/docLib/20110707_Inventrulemartin.pdf, accessed 30 Jan 2013.

10 Brad Pedersen and Justin Woo, The "Matrix" for changing first-to-invent: An experimental investigation into proposed changes in U.S. patent law, p.15, http://web.wmitchell.edu/cybaris/wp-content/uploads/2010/05/01.Pedersen.05-12-10-vFINAL.WITHAPPENDIX.pdf, accessed 30 Jan 2013.

11 Dan L. Burk, From "First to Invent" to "First to File": Changing Lanes in U.S. Patent Procedure?, IIC 2011, p. 629.

12 35 U.S.C. § 102(b)(1).

13 35 U.S.C. § 135. See also Brad Pedersen and Justin Woo, The "Matrix" for changing first-to-invent: An experimental investigation into proposed changes in U.S. patent law, p. 15, http://web.wmitchell.edu/cybaris/wp- content/uploads/2010/05/01.Pedersen.05-12-10-vFINAL.WITHAPPENDIX.pdf, accessed 30 Jan 2013.

14 AIA Sec. 3 § 135(a).

15 Prof. Ann McCrackin, Stephen Brodsky, and Amrita Chiluwal, Comparison of the Current U.S. First-to-Invent System with the First-Inventor-To-File System Proposed in the Patent Reform Act of 2011 (S.23), PatentlyO, 2 Mar 2011, http://www.patentlyo.com/patent/2011/03/mccrackinpatentreform.html, accessed 30 Jan 2013.

16 See e.g. Letter from Gary Locke, The Secretary of Commerce, to Senator Patrick Leahy, 2009, http://www.uspto.gov/aia_implementation/locke-letter-oct-05-2009.pdf, accessed 30 Jan 2013.

17 David Kappos, WIPO Symposium of IP Authorities, 22 Sep 2011, http://www.uspto.gov/news/speeches/2011/kappos_wipo.jsp, accessed 30 Jan 2013.

18 The Washington Post , Editorial, How to encourage American innovation, 15 Aug 2011, http:// www.washingtonpost.com/opinions/how-to-encourage-american-innovation/2011/08/05/ gIQApACjFJ_print.html, accessed 30 Jan 2013.

19 Consumer Groups Ask Senate to Take Up Patent Bill, http://www.publicknowledge.org/node/1258, accessed 30 Jan 2013.

20 Many patents, still pending: Congress tweaks, but does not overhaul, America's patent system, The Economist, 10 Sep 2011, http://www.economist.com/node/21528643, accessed 30 Jan 2013.

21 Carl E. Gulbrandsen, Wisconsin Alumni Research Foundation, p. 1, para 3, http://www.warf.org/uploads/media/WARFHR_1249_Disfavors_Innovators_06-01-11.pdf, accessed 30 Jan 2013.

22 David S. Abrams and R. Polk Wagner, Poisoning the Next Apple: How the America Invents Act Harms Inventors, 28 Feb

2012, Stanford Law Review, Vol. 65, 2012; U of Penn, Inst for Law & Econ Research Paper No. 11-29, http://ssrn.com/abstract=1883821, accessed 30 Jan 2013.

23 Forbes.com, New Patent Law Means Trouble For Tech Entrepreneurs, 20 Sep 2011, http://www.forbes.com/sites/ciocentral/2011/09/20/new-patent-law-means-trouble-for-tech-entrepreneurs/, accessed 30 Jan 2013.

24 Inventor Challenges a Sweeping Revision in Patent Law, New York Times, 26 Aug 2012, http:// www.nytimes.com/2012/08/27/technology/mark-stadnyk-challenges-sweeping-revision-in-patent-law.html? pagewanted=all, accessed 30Jan 2013.

25 Rebecca C.E. McFadyen, The "First-to-File" Patent System: Why Adoption is NOT an Option!, 14 RICH. J.L. & TECH. 3 (2007), http://law.richmond.edu/jolt/v14i1/article3.pdf, accessed 30 Jan 2013. See also US CONST. Art. 1, § 8, cl. 8. See also Michael A. Glenn and Peter J. Nagle, Article I and the First Inventor to File: Patent Reform or Doublespeak?, IDEA, The Intellectual Property Law Review, vol. 50, no. 3, p. 443, http://docs.piausa.org/Article%20I%20and%20the%20First%20Inventor%20to%20File-%20Patent%20Reform%20or%20Doublespeak_%20=%20IDEA-vol50-no3-glenn-nagle.pdf, accessed 30 Jan 2013.

26 Michael F. Martin, The End of the First-to-Invent Rule: A Concise History of Its Origin, IDEA, The Intellectual Property Law Review, vol. 49, no. 3, p. 440, http://www.fed-soc.org/docLib/20110707_Inventrulemartin.pdf, accessed 30 Jan 2013.

27 §3, Patent Act of 1793, http://ipmall.info/hosted_resources/lipa/patents/Patent_Act_of_1793.pdf, accessed 30 Jan 2013.

28 Ned L. Conley, First-to-Invent: A Superior System for the United States, 1991, p. 781, http:// heinonline.org/HOL/Page?handle=hein.journals/stmlj22&div=33&g_sent=1&collection=journals, accessed 29 Jan 2013.

29 Patent Reform Problems Presentation, 30 Aug 2011, p. 3, http://www.lauderpartners.com/PatentReform/ RonKatznelsonPres-PatentReform110830.pdf, accessed 30 Jan 2013. See also Patent Reform A Jobs Plan? Not So Fast, 25 Aug 2011, http://news.investors.com/082511-582790-will-patent-reform-spark-jobs-.aspx, accessed 30Jan 2013.

30 Job Growth in U.S. Driven Entirely by Startups, Kauffman Foundation Study, 7 Jul 2010, http://www.kauffman.org/newsroom/u-s-job-growth-driven-entirely-by-startups.aspx, accessed 30 Jan 2013.

31 Gary L. Griswold & F. Andrew Ubel, "Prior User Rights - A Necessary Part of a First-to-File System", 26 John Marshall Law Review 1993, p. 568.

32 Marian T Flattery and William B. Raich of Finnegan, Henderson, Farabow, Garrett & Dunner LLP, Strategic planning in the wake of the new prior art provisions in the America Invents Act, Lexology, 1 Dec 2011, http://www.lexology.com/library/detail.aspx?g=2d49fa8a-95b9-4ee4-95a4-1b3d82adfb94, accessed 30 Jan 2013.

33 Douglas Norman, Vice President, General Patent Counsel Eli Lilly and Company, THE AMERICA INVENTS ACT: One Year Later Corporate Practice Impact, http://ip.law.indiana.edu/wp-content/uploads/2012/10/AIA_One_Year_Later-_Indiana-University_Norman_14Sep2012.pdf, accessed 30 Jan 2013.

34 JOHN VILLASENOR, Untangling The Real Meaning Of "First-To-File" Patents, 6 Mar 2012, http://www.fastcompany.com/1822846/untangling-real-meaning-first-file-patents, accessed 30 Jan 2013.

35 See 53 above.

36 David Boundy, Esq. Cantor Fitzgerald, COMMENTARY: Why the America Invents Act is Bad for Entrepreneurs, Startups and for America, Westlaw Journal Expert Commentary Series, http:// www.mofo.com/files/Uploads/Images/120206-Patents-21st-Century.pdf, accessed 30 Jan 2013. See also Gary L. Griswold & F. Andrew Ubel, "Prior User Rights: A Necessary Part of a First-to-File System", 26 John Marshall Law Review, 1993, p. 568.

37 John Villasenor, Untangling The Real Meaning Of "First-To-File" Patents, 6 Mar 2012, http://www.fastcompany.com/1822846/untangling-real-meaning-first-file-patents, accessed 30 Jan 2013.

38 Ron D. Katznelson, Much Patent Reform Has Already Taken Place. Any Further Reforms Must Be Directed At U.S. Patent Office Operations, Presented at "The Perfect Storm of Patent Reform?" Fenwick & West Lecture Series Inaugural Symposium, UC Davis School of Law, November 7, 2008 - http://works.bepress.com/cgi/viewcontent.cgi?article=1053&context=rkatznelson, accessed 30 Jan 2013.

39 John Villasenor, How Universities Can Protect Their Next Bright Idea Under the America Invents Act, 6 Nov 2011, http://www.brookings.edu/research/opinions/2011/11/06-patents-villasenor, accessed 30 Jan 2013.

40 Higher Education Associations, Comments to USPTO, 5 Oct 2012, http://www.uspto.gov/patents/law/comments/hea_20121005.pdf, accessed 30 Jan 2013.

41 David J. Kappos, A Patent System for the 21st Century, Indiana Maurer School of Law 2012 Patents Conference, 14 Sep 2012, http://ip.law.indiana.edu/wp-content/uploads/2012/10/DK-Indiana-Maurer-School-of-Law-IP-Conference-September-14-2012.pdf, accessed 30 Jan 2013.

42 AIA Sec 3 (b)(1).

43 Marian T Flattery and William B. Raich of Finnegan, Henderson, Farabow, Garrett & Dunner LLP, Strategic planning in the wake of the new prior art provisions in the America Invents Act, Lexology, 1 Dec 2011, http://www.lexology.com/library/detail.aspx?g=2d49fa8a-95b9-4ee4-95a4-1b3d82adfb94, accessed 30 Jan 2013.

44 Brad D. Pedersen, US Patent Reform: What Really Changes? A Patterson Thuente IP White Paper, p. 3, http://www.ptslaw.com/PatentReformSummaryOverviewWhitepaper.pdf, accessed 30 Jan 2013.

45 AIA Sec 22.

46 USPTO explains the America Invents Act - Webinar - September 6, 2012 - slide 5 - slides retrieved from http://www.oppedahl.com/cle/aia/20120904-presentation.pdf, accessed 30 Jan 2013.

47 Erika H. Arner, Esther H. Lim, Rebecca M. McNeill, Christopher S. Schultz, Linda J. Thayer, and E. Robert Yoches, How Will Patent Reform Affect the Software and Internet Industries?, The Computer & Internet Lawyer, December 2011, http://www.finnegan.com/resources/articles/articlesdetail.aspx?news=345b9502-13f7-4dbe-b40d-dcb671ff3c44, accessed 30 Jan 2013.

48 Deborah L. Lu, Smitha B. Uthaman, Ph.D., Thomas J. Kowalski, Summary of the America Invents Act, The National Law Review, 12 Apr 2012, http://www.natlawreview.com/article/summary-america-invents-act, accessed 30 Jan 2013.

49 Brad D. Pedersen, US Patent Reform: What Really Changes? A Patterson Thuente IP White Paper, p. 4, http://www.ptslaw.com/PatentReformSummaryOverviewWhitepaper.pdf, accessed 30 Jan 2013.

50 See 67 above. See also AIA Chapter 32 / 35 U.S.C. § 321.

51 See 67 above. See also AIA Sec 12.

52 AIA Sec 7 / 35 U.S.C. § 6 (b).

53 Brad D. Pedersen, US Patent Reform: What Really Changes? A Patterson Thuente IP White Paper, p. 9, http://www.ptslaw.com/PatentReformSummaryOverviewWhitepaper.pdf, accessed 30 Jan 2013. See also AIA Sec. 14. See also Memorandum from Robert W. Bahr, Tax Strategies are Deemed to be

Within the Prior Art, 20 Sep 2011, www.uspto.gov/aia_implementation/tax-strategies-memo.pdf, accessed 30 Jan 2013.

54 AIA Sec 33.

55 AIA Sec 15. See also John D. Vandenberg, Klarquist Sparkman LLP, Immediate and Near-Term Practical Impacts of the America Invents Act, p. 2, December 7, 2011, http://www.klarquist.com/Articles/28_Immediate%20and%20Near-Term%20Practical%20Impacts%20of%20the%20America%20Invents%20Act.pdf, accessed 30 Jan 2013.

56 AIA Sec 16 (b) (1).

57 Erika H. Arner, Esther H. Lim, Rebecca M. McNeill, Christopher S. Schultz, Linda J. Thayer, and E. Robert Yoches, How Will Patent Reform Affect the Software and Internet Industries?, The Computer & Internet Lawyer, December 2011, http://www.finnegan.com/resources/articles/articlesdetail.aspx, accessed 30 Jan 2013.

58 The White House, Press Release, 16 Sep 2011, http://www.whitehouse.gov/the-press-office/2011/09/16/president-obama-signs-america-invents-act-overhauling-patent-system-stim, accessed 30 Jan 2013.

59 Mark Chandler, The America Invents Act: One Year Later, What Did The AIA Accomplish? What Did It Omit?, Indiana University Maurer School of Law, http://ip.law.indiana.edu/wp-content/uploads/2012/10/The-America-Invents-Act-One-Year-Later-CHANDLER-AND-ZADO.pdf, accessed 30 Jan 2013.

60 Robert Armitage: The America Invents Act: One Year Later, http://ip.law.indiana.edu/wp-content/uploads/2012/10/Indiana-University-Center-for-Intellectual-Property-Research-The-America-Invents-Act-One-Year- Later-Armitag1.pdf, accessed 30 Jan 2013.

Google Books and Fair Use: A Tale of Two Copyrights?

by **Raquel Xalabarder,** Chair Professor of Intellectual Property, Universitat Oberta de Catalunya, Barcelona

Abstract: On 14 November 2013, the US District Court of the Southern District of New York issued a major ruling[1] in favour of the Google Books project, concluding that Google's unauthorized scanning and indexing of millions of copyrighted books in the collections of participating libraries and subsequently making snippets of these works available online through the "Google Books" search tool qualifies as a fair use under section 107 USCA.[2] After assuming that Google's actions constitute a *prima facie* case of copyright infringement, Judge Chin examined the four factors in section 107 USCA and concluded in favour of fair use on the grounds that the project provides "significant public benefits," that the unauthorized use of copyrighted works (a search tool of scanned full-text books) is "highly transformative" and that it does not supersede or supplant these works. The fair use defence also excluded Google's liability for making copies of scanned books available to the libraries (as well as under secondary liability since library actions were also found to be protected by fair use): it is aimed at enhancing lawful uses of the digitized books by the libraries for the advancement of the arts and sciences. A previous ruling by the same court of 22 March 2011 had rejected a settlement agreement proposed by the parties, on the grounds that it was "not fair, adequate, and reasonable".[3]

The Authors Guild has appealed the ruling.

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A. The case

1 In 2004, Google launched the "Google Books" project. The project includes the massive scanning of books, the storage and indexation of all the digitized contents and the making available to the public of "snippets" of these works online through the search engine "Google Books". The scanning is done in cooperation with several public and private libraries throughout the United States and other countries.[1] Google provides participating libraries with a digital copy of all scanned books in their collections.

2 Users can view only snippets of copyrighted books; the full contents are available (and can be downloaded) only when the works are in the public domain. Therefore, unless there is a malfunctioning (or a hacking) of the database, users cannot download the full contents of works that are not in the public domain.

3 On 20 September 2005, the Authors Guild – the biggest association of writers in the US – filed a lawsuit against Google.[5] Shortly after, so did the Association of American Publishers.[6] The authors sought damages and injunctive relief; the publishers sought only the latter. Both actions were consolidated on December 2006. Google's main defence was fair use in section 107 USCA. In 2006 the parties began negotiations to settle the lawsuit and avoid a ruling which would entail high risk for both of them.

4 After an initial 2008 settlement agreement which raised many objections, an amended settlement agreement (ASA) was submitted and preliminarily approved by the District Court in November 2009. After a long period of hearings and *amicus briefs*, the Court denied its final approval on the grounds that the Agreement was "not fair, adequate and reasonable" and urged the parties to negotiate further.[7]

5 The publishers and Google finally reached a private agreement in October 2012,[8] but the Authors Guild did not and carried on with the claim.

6 On 31 May 2012, the District Court granted the lawsuit class-action status;[9] Google challenged this order on appeal, alleging that the plaintiffs did not adequately represent the interests of the class, or

at least, of some class members (for instance, academic authors may want their works to be included in Google Books, or some authors who might benefit from the Publishers Agreement or the Partner Program and oppose the Authors Guild's claim). On 17 September 2012, the Second Circuit issued an order[10] staying the proceedings pending the interlocutory appeal. On 1 July 2013, the Second Circuit vacated the District court's grant of class certification and remanded the case back for further consideration of the fair use defence.[11]

7 On 14 November 2013, Judge Chin granted Google's motion for summary judgment[12] and dismissed the Authors Guild's claim on the grounds of fair use. According to the judgment, the unauthorized use of works done in the Google Books search tool is "highly transformative" and it does not harm the market for the original works.

I. The Amended Settlement Agreement (ASA)

8 Despite not being the object of this comment, it is worth examining the ruling denying the approval of the Amended Settlement Agreement (hereinafter ASA).[13]

9 The ASA allowed Google to continue – on a non-exclusive basis – to digitize books, sell subscriptions to databases, sell online access to individual books, sell advertising on pages from books and make other uses. Rightholders could remove their books from the database or exclude specific uses. Google would split revenues with the rightholders, paying them 63% of all revenues received from these uses (and revenues were to be distributed according to an agreed plan). A Book Rights Registry was to be established to collect and distribute the revenues.

10 As for books digitized before 5 May 2009, Google would pay $45 million, and minimum amounts were set for its distribution ($60 for work, $15 for entire insert, $5 for partial insert).

11 The ASA also provided that access to the scanned books could also be available, through participating libraries as well as through institutional subscriptions for academic, corporate and government libraries and organizations.

12 The ASA was not approved because – according to Judge Chin – "it would simply go too far".

13 Among other issues,[14] copyright – including the problems raised by orphan works and out-of-print works – and antitrust were the main reasons for its denial. Judge Chin was not comfortable with the "opt-out" system set in the ASA:

> *[I]f copyright owners sit back and do nothing, they lose their rights. Absent class members who fail to opt out will be deemed to have released their rights even as to future infringing conduct. ... It is incongruous with the purpose of the copyright laws to place the onus on copyright owners to come forward to protect their rights when Google copied their works without first seeking their permission.*

14 Public domain works fell outside of the settlement, but orphan works and out-of-print works constituted a large part of it. The ASA granted Google a "default" right to display out-of-print books unless the rightholder expressly opposed it (again, the opt-out system). Orphan works would also be *de facto* left in Google's hands (since no one would be opposing their use or claiming any revenues from them). As Judge Chin explained, "The questions of who should be entrusted with guardianship over orphan works, under what terms, and with what safeguards are matters more appropriately decided by Congress than through an agreement among private, self-interested parties."

15 On the anti-trust front, the ASA would give Google "a significant advantage over competitors" and "a *de facto* monopoly over unclaimed works," basically rewarding Google for being the only one engaging in massive copyright infringement ("wholesale, blatant copying, without first obtaining copyright permissions").

16 For all these reasons, approval of the ASA was denied, but the judge urged the parties to negotiate a revised settlement agreement and specifically to revise the ASA from an "opt-out" settlement into an "opt-in" one.

II. The ruling on fair use

17 On 14 November 2013, the District Court granted Google's motion for summary judgment[15] and a judgment was entered in favour of Google dismissing the case on the grounds of fair use.

18 The judgment is based on a careful exam of the application of the fair use doctrine in the specific circumstances of the Google Books project. According to section 107 USCA:

> *Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—*
>
> > *(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;*

(2) the nature of the copyrighted work;

(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and

(4) the effect of the use upon the potential market for, or value of, the copyrighted work.

19 The fact that a work is unpublished shall not itself bar a finding of fair use if such finding is made upon consideration of all the above factors.

20 The Court first quoted several US Supreme Court rulings to remind us that "from the infancy of copyright protection, some opportunity for fair use of copyrighted materials has been thought necessary to fulfil copyright's very purpose, to promote the progress of sciences and useful arts". In this light, the four factors of the fair use doctrine were analysed – as a general guidance – and weighed together.

1. PURPOSE AND CHARACTER OF THE USE

21 The court took into account the project as a whole and found that the purpose of the use was "highly transformative". "Google Books digitizes and transforms expressive text into a comprehensive word index that helps .... find books." To that extent, it referred to *Perfect 10*[16] and *Arriba Soft*,[17] where the Ninth Circuit held the use of works as thumbnails to facilitate online searches to be "transformative". According to the District Court, Google Books has "transformed book text into data for purposes of substantive research.... Words in books are being used in a way that they have not been used before. Google Books has created something new." The court found this to be the key consideration of any finding of fair use.

22 Furthermore, the fact that a use is commercial tends to weigh against a finding of fair use (*Harper & Row,*[18] *Campbell*[19]) but does not necessarily prevent it (*Blanch,*[20] *Graham Archives,*[21] *Castle Rock*).[22] The court acknowledged that Google is a for-profit entity and obtains commercial gain from the project, but this was outweighed by the fact that it does not engage in the direct commercialization of copyrighted works ("Google Books does not supersede or supplant books because it is not a tool to be used to read books") and by considering the public interest ("important educational purposes") of the project.

23 The court concluded that the first factor "strongly favors" a finding of fair use.

2. NATURE OF THE COPYRIGHTED WORKS:

24 Highly creative works usually have stronger protection – in terms of fair use – than factual works (*Steward v. Abend*).[23] Many books used in the project are indeed fictional, but here the court took into account the fact that "the vast majority of the books in Google Books are non-fictional" and that they all are published and available to the public (*Arica,*[24] *New Era*)[25] to also "favour" a finding of fair use, on the second factor.

3. AMOUNT AND SUBSTANTIALBILITY OF PORTION USED

25 Google incurs in *verbatim* copying (scanning/digitizing, indexing and storing) of the full text of the whole work. The court pointed out that copying the entirety of a work might still be fair if it was necessary for the (transformative) purpose itself (*Sony,*[26] *Graham Archives*).[27] Because full-work reproduction is critical to the functioning of the search tool and the amount of text displayed in response to searchers was limited (only snippets), the court found the third factor to weigh "slightly against" a finding of fair use.

4. EFFECT OF USE UPON POTENTIAL MARKET OR VALUE

26 The Authors Guild argued that users could do multiple searches and access the entire work through multiple search terms and snippets, thus "replacing" for the work. The court simply dismissed this suggestion as unlikely and added that "Google does not sell its scans, and the scans do not replace the books".

27 On the contrary, the court considered the fact that the search tool

enhances the sales of books to the benefit of copyright owners. An important factor in the success of an individual title is whether it is discovered --- whether potential readers learn of its existence.... Google Books in particular helps readers find their work, thus increasing their audiences. Further, Google provides convenient links to booksellers to make it easy for a reader to order a book. In this day and age of online shopping, there can be no doubt but that Google Books improves books sales.

28 Accordingly, this factor was found to weigh "strongly in favor" of a finding of fair use.

29 As an overall assessment, the Court concluded that "Google Books provides significant public benefits. It advances the progress of the arts and sciences, while maintaining respectful considerations for the rights of authors and other creative individuals, without adversely impacting the rights of copyright holders." Furthermore, the Court found that Google Books advances the progress of arts and sciences by means of an invaluable research tool to efficiently identify and locate books (conducting, for the first time, full-text

searches); it preserves books (specially out-of-print and old books) and it gives them new life; it facilitates access to them from remote areas and by underserved or disabled populations; and it generates new audiences and creates new sources of income for authors and publishers.

30 The judgment also examined two other related grounds for infringement based on Google's actions towards the participating libraries. The District Court concluded that fair use could also exempt Google from providing the participating libraries with scanned copies of their books. According to the court, Google simply provides a means for these libraries to obtain a digital copy of a work they already own, to carry on lawful uses "consistent with copyright law" and even in other "transformative ways" such as preservation, full-text searchable indexes, access by disabled users, etc. The claim for secondary liability against Google also fails to the extent that library actions are protected by the fair use doctrine (here the court turned to the *HathiTrust*[28] case where massive scanning done by a library was deemed to be a fair use): "If there is no liability for copyright infringement on the libraries' part, there can be no liability on Google's part."

B. Comments

I. The fair use defence

31 Even though the result may look similar, fair use is not an exception or limitation to exclusive rights but rather a defence against a claim of copyright infringement. As a defence, fair use is an equitable rule of reason, which can only be examined and decided on the specific facts of each infringing case. No single factor will determine whether the use is fair or not, and all must be weighed together in light of the particular circumstances of each case. The fair use doctrine was codified for the first time in section 107 of the 1976 USCA adopting the set of standards historically developed by courts to balance equities in copyright infringement claims. Its statutory formulation was not intended to limit or otherwise alter the scope of the fair use doctrine, which remains a rule of equity. For this same reason, it continues to be a critical tool to accommodate copyright in the evolving technological markets, especially where copyright laws fail to envision exempted uses.

32 What is interesting in this ruling is, to my view, not so much the analysis of the fair use factors, which is quite orthodox, but rather the sound recognition of the public interest of the Google Book project and the reminder that fair use – as a defence to a claim of copyright infringement – is aimed at ensuring "copyright's very purpose: to promote the progress of science and useful arts". In other words: Fair use as a guarantor of copyright!

33 Any ruling in favour of fair use only allows for the specific circumstances of the case, as considered at the time of the judgment. For instance, the Court concludes that "Google does not sell its scans, and the scans do not replace the books", and it is on this basis that the finding of fair use was entered. If ever Google does sell its scans (and it is clear that Google would like to do that someday, as already agreed with the publishers) or do anything beyond/different from the specific circumstances now considered, it may need a license from the rightholders or a new shelter under the fair use doctrine. In fact, many of the claims raised by the plaintiffs were based more on eventual actions by Google or potential damages ("what if?") rather than on current circumstances.

34 And, last but not least, uses deemed fair are not compensated. The uncompensated nature of fair use severely trims down the scope and flexibility of this defence, but it helps preserve the very nature of the exclusive rights granted to authors. Balance must be struck somewhere, and the fair use doctrine has proven to be a flexible and useful tool to achieve it.

35 The finding of fair use in this case should not come as a surprise. First, because it follows from a very orthodox exam of the four statutory factors and the previous case law – Google was carefully advised on the contours of the fair use defence to design its powerful tool. Second, although some see a shift in position between the two rulings, the truth is that the ASA would have granted Google far more rights (and over more works) than the fair use ruling does.[29] Besides, Judge Chin already acknowledged in the ASA ruling that "the digitization of books and the creation of a universal digital library would benefit many".

36 Fair use or not, it is indeed hard to deny the public interest of Google Books, an amazing tool for the advancement of the arts and science, as the judge stated. Can anyone claim that this project should not be done when technologies make it possible and easy? Can anyone claim that society should not benefit from access to any published work, spreading knowledge and information at the click of the mouse? Can we afford copyright to become an obstacle for the spread of culture? This is precisely what the fair use doctrine is envisioned to do: to prevent copyright from becoming an obstacle for cultural development. Nothing more, nothing less!

II. Any similar outcome in the EU?

37 It is very unlikely that a similar result could be achieved under any EU law. Fair use does not exist in Europe on a general basis, and it is unlikely that any of the existing limitations or exceptions listed

in national copyright laws could exempt Google's actions in this project.

38 The quotation limitation in Article 5(3)(d) ISD[30] might allow for the showing of snippets resulting from searches. It covers both the rights of reproduction and communication to the public (including the making available online); it is open-ended as to beneficiaries, purposes (the wording "such as" means that "criticism or review" are listed as mere examples) and as to the extent and nature of the quoted works. Similar limitations exist in all national laws, albeit sometimes with a more restricted scope which could hamper (if not stall) the exemption of snippets at all.[31] However, quotation limitations would hardly ever allow for the whole scanning, indexing and storing of the book, which would fall under the wide scope of the exclusive right of reproduction in Article 2 ISD.

39 Of course, Article 5(1) ISD[32] exempts the temporary acts of reproduction which are transient or incidental and an integral and essential part of a technological process, whose sole purpose is to enable (a) a transmission in a network between third parties by an intermediary, or (b) a lawful use of a work, and which have no independent economic significance. Google might argue that the snippets and extracts shown on the Google Books search tool have been automatically generated by the search engine, have no independent economic significance (rather than perhaps fostering a subsequent purchase of the book identified which would ultimately benefit the copyright owners) and that they are a lawful use (despite not being licensed or directly allowed by a limitation or exception). Even in light of the ECJ rulings in the *Infopaq* case,[33] the display of snippets might qualify as temporary and transient act of reproduction; but once again, the scanning, indexing and storing done by Google is far from being temporary, transient or incidental.

40 One may then wonder whether there is also still room for "mere use"[34] and/or "non-substantial" reproduction online, or whether the only acts exempted from the broad scope of reproduction in Article 2 ISD are the restrictive "temporary, transient and incidental" derogation of Article 5(1) ISD. Perhaps Article 5(1) ISD could be interpreted more widely, aligning the requirement of "no separate economic significance" with the scope of the "lawful use," in the sense that "if a specific use of a work is lawful, technical reproductions necessary to enable such use should be deemed as not having independent economic significance".[35] The application and interpretation of any copyright statutory provisions must necessarily allow for some flexibility to take into account considerations of equity in the specific circumstances of the case, especially at a time of technological change and with copyright laws which fail to envision all the nuances of new technological uses and markets.

41 Otherwise, failing any equitable interpretation of the existing statutory limitations, the European copyright tale for Google Books is just the opposite of the one reached in the US. The French case *Les Éditions du Seuil*[36] is a good example. The Syndicat National de l'Édition (SNE) and several individual publishers sued Google for copyright infringement on the Google Books project; Google alleged in its defence the quotation limitation in the French IP Code, but the Court refused it because the works "are made available to the public in their entirety, even in reduced form, and the randomness of the choice of excerpts displayed denies any informatory purpose as required by Article 122-5-3 CPI".[37] Being a French case, it is at least surprising that the *Microfor*[38] ruling was not mentioned to support that Google's actions (both the scanning and the snippets) could be exempted as quotations for informatory purposes. Of course, this ruling was issued years before a restrictive reading of the exceptions and limitations (namely, through Article 5(5)ISD) was forced into European national laws, at the time when copyright limitations were interpreted (like any other provision in the copyright statute) according to general hermeneutical rules (such as the meaning of the words, the legislators' intent and the goal to be achieved).

42 Certainly, even though a limitation existed that could formally allow for the unauthorized acts done in the Google Books project, compliance with the three-step test as currently applied in the EU would likely defeat its exemption. The current three-step test in Article 5(5) ISD is nothing like the fair use doctrine. Perhaps the original three-step test in Article 9.2 Berne Convention was (and remains) an enabling tool addressed to national legislators to correctly balance and design the scope of new limitations and exceptions.[39] But as it has been enshrined in Article 5(5) ISD, the three-step test appears now to be a hermeneutic tool with the sole intent to further restrict the public interest (usually safeguarded by the statutory limitations and exceptions).[40] Fair use is aimed at allowing specific infringing uses; Article 5(5) ISD is aimed at reducing the scope of the statutory limitations and exceptions allowing for specific uses. One restricts the exercise of copyright to ensure the very goal of copyright (the advancement of culture); the other seems to restrict the scope of exempted uses (also at the expense of the very goal of copyright: the advancement of culture). Might the three-step test become the **nemesis** of copyright? Let's hope not.

43 One may, then, wonder whether something like fair use needs to be imported into European laws. But perhaps the general principles of the law – such as the abuse of right and good faith – may play the same role in the search for equity, which should not

be foreign to copyright law. This is precisely what the Spanish Supreme Court did in the *Google/Megakini* case: the lack of a statutory limitation or exception to allow for the use of works within the Google Search Engine was overcome by turning to the general principles of the law (such as good faith and prohibition of an abusive exercise of rights) and by means of a rather peculiar reading of the three-step test so as to impose on the copyright owner the property doctrine of *ius usus innocui* (a property must endure harmless uses done by third parties). [41]

III. The territoriality of copyright laws in a "global" Internet market

44 Copyright laws are territorial, and the rules for solving applicable law to cross-border infringement of copyrights have done very little (if anything at all) to overcome this territoriality. Hence, the traditional choice-of-law rule in Article 5.2 BC: the law of the country for which protection is being sought (*lex loci protectionis*).

45 In Europe, the choice-of-law rules in the Rome II Regulation[42] are slightly different:

- Article 8 (IP) would lead (like Article 5.2 BC) to the law of the country of protection (*lex loci protectionis*); that is, the country for which – not necessarily where – protection is sought.
- Article 4.1 (torts) would lead to the law of the country where the damage occurs (*lex loci damni*) "irrespective of the country in which the event giving rise to the damage occurred", unless it is clear that the tort is manifestly most closely connected with another country, in which case the law of this country will apply (Art. 4.3).

46 In the French lawsuit Éditions *du Seuil*, the court refused Google's argument that US law should apply, based on Article 5.2 BC, since the scanning, indexing and storing of the books took place in the US. Instead, the French court applied French law to the dispute because it was the one bearing the "most significant relationship" with the claim: French Internet users were accessing digitized French authors' books. In fact, if this was indeed the case at trial (protecting only French works within French territory), Article 5.3 BC would have already given the answer: protection in the country of origin is subject to its law.

47 Ultimately, whether under the *lex loci protectionis* or under the law closest to the case, several national IP laws will end up applying to Google Books claims in different countries, and with different outcomes. The *lex loci damni* (law where the damage occurs) would also fail to overcome the application of several national laws, since the authors and publishers (who suffer the damage) are nationals or residents in different countries. Even splitting the case in two – upload (scanning, indexing and storing) and download (searches by users) – the applicable laws (as well as the likely outcomes) would remain territorial and multiple.

48 In short, current choice-of-law rules may lead to several national laws to examine the Google Books project. And yet Google has relied only on US copyright law (and the fair use) to develop it and to market it all over the world. Google Books is a good example for questioning the legitimacy of territorial IP laws in the online environment. Lacking a system of harmonized national copyright laws (even within the EU market), choice-of-law rules based on one single applicable law (*lex loci originis*) instead of on multiple applicable territorial laws (*loci protectionis/loci damni/closest connection*) are an absolute necessity.

49 Legal uncertainty ultimately only benefits larger agents (such as Google) who can afford the economic costs of the copyright infringement claims resulting from developing new markets and permits *de facto* the extraterritorial reach of a few national laws (at the expense of other applicable laws). Technological changes offer an opportunity to improve – and fine tune – European copyright laws and make sure that they remain a powerful tool for the advancement of culture. Google Books is one of these opportunities.

1 Authors Guild v. Google Inc., 05 Civ. 8136 (DC) (S.D.N.Y. No. 14, 2013). Available at: http://docs.justia.com/cases/federal/appellate-courts/ca2/13-4829/2

2 US Copyright Act, Title 17 of Unites States Code. Available at: http://www.copyright.gov/title17/

3 Authors Guild v. Google Inc., 770 F. Supp.2d 666 (S.D.N.Y. 2011).

4 The first libraries to join the project were the University of Michigan, Harvard University, Stanford University, New York Public University and Oxford University. Many more libraries all over Europe and around the world soon followed.

5 The whole history of the case is available at: http://dockets.justia.com/docket/new-york/nysdce/1:2005cv08136/273913

6 Available at: http://dockets.justia.com/docket/new-york/nysdce/1:2005cv08881/275068

7 *Authors Guild v. Google Inc.*, 770 F. Supp.2d 666 (S.D.N.Y. 2011).

8 The private deal allows publishers to decide which out-of-print books are to be digitized and used by Google and provide them with a digital copy of it. In addition, the publishers allow Google to show 20% of the book through the Google Books tool and to sell the whole book through the Google Play store; Google shares its revenues with the publishers.

9 *Authors Guild v. Google Inc.*, 282 F.R.D. 384 (S.D.N.Y. 2012).

10 *Authors Guild v. Google Inc.*, Doc. No. 1063 (S.D.N.Y. 2012).

11 *Authors Guild v. Google Inc.*, 721 F.3d 132 (2d Cir. 2013).

12 *Authors Guild v. Google Inc.,* 05 Civ. 8136 (DC) (S.D.N.Y. No. 14, 2013).

13 *Authors Guild v. Google Inc.*, 770 F. Supp.2d 666 (S.D.N.Y. 2011).

14 Other concerns were privacy – Google would be able to collect data about the activities of the users, but Judge Chin did

not find this to be a basis itself to reject the ASA and mentioned that privacy protection could be incorporated while still accommodating Google's market efforts – and the violation of international law – despite Google's claim that the case is only about US Copyright and its scope within the US, Judge Chin mentioned that the ASA would certainly have an impact on foreign rightholders and concluded that "the fact that other nations object to the ASA ... is yet another reason why the matter is best left to Congress".

15 *Authors Guild Inc. v. Google Inc.*, 05 Civ. 8136 (DC) (S.D.N.Y. Nov. 14, 2013).

16 *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146 (9th Cir. 2007).

17 *Kelly v. Arriba Soft Corp.*, 336 F.3d 811 (9th Cir. 2003).

18 *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539 (1985).

19 *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994).

20 *Blanch v. Koons*, 467 F.3d 244 (2d Cir. 2006).

21 *Bill Graham Archives v. Dorling Kindersley Ltd.*, 448 F.3d 605 (2nd Cir. 2006).

22 *Castle Rock Entm't Inc. v. Carol Publ'g Grip., Inc.*, 150 F.3d 132 (2nd Cir. 1988). In fact, when citing *Castle Rock*, Judge Chin allowed himself a "wink" to the Second Circuit (which may be seeing the case on appeal), observing that the Second Circuit does "not give much weight to the fact that the secondary use was for commercial gain".

23 *Steward v. Abend*, 495 U.S. 207 (1990).

24 *Arica Inst. Inc. v. Palmer*, 970 F.2d 1067 (2nd Cir. 1992).

25 *New Era Publ'ns intern. ApS v. Carol Pub'l Grp.*, 904 F.2d 152 (2nd Cir. 1990).

26 *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984).

27 *Bill Graham Archives v. Dorling Kindersley Ltd.*, 448 F.3d 605 (2nd Cir. 2006).

28 *HathiTrust*, 902 F. Supp. 2d 445 (S.D.N.Y. 2012).

29 Google Books (as it is) may be a fair unlicensed and uncompensated use. Instead, what the ASA (as proposed) was granting Google was unfair towards competitors as well as regarding out-of-print and orphan works. Of course, publishers and authors are free to license Google further rights (beyond fair use) in their works.

30 Directive 2001/29/EC, of the European Parliament and of the Council, of 22 May 2001, on the harmonisation of certain aspects of copyright and related rights in the information society (hereinafter, ISD). Available at : http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0029:EN:NOT.

31 For instance, some expressly refer to *informatory* purposes (France and Luxembourg) or are restricted to specific purposes such as criticism, review, research, teaching or the like (Belgium, Netherlands, Spain).

32 According to recital 33 ISD, this exemption is intended to cover reproductions on Internet routers, reproductions created during web browsing or copies created in Random Access Memory (RAM) of a computer, copies stored on local caches of computer systems or copies created in proxy servers.

33 ECJ Judgement of 16 July 2009, *Infopaq International v. Danske Dagblades Forening*, (C-5/08), available at http://curia.europa.eu/): the scanning of whole works – within what they called a "data capture process" – for purposes of obtaining extracts qualifies under Art. 5(1) ISD; an act is transient "only if its duration is limited to what is necessary for the proper completion of the technological process in question" (*Infopaq* #64).

34 As explained by Professors Dreier and Hugenholtz, "[I]t is widely accepted that the *mere use* of a work does not fall within the scope of any exploitation right under copyright law. However, the more the scope of the right of reproduction is extended, the more it covers the *mere use* of a work." See Dreier T, Hugenholtz P B (2006) Concise European Copyright Law. Kluwer Law International, p 359 (emphasis added).

35 As proposed by the Institute for Information Law, see IVIR (2007) Study on the Implementation and Effect in Member States' Laws of Directive 2001/29/EC on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society. Available at http://www.ivir.nl, p 7.

36 See TGI Paris, 3e Ch., 18 Dec. 2009 JurisData n.2009-016553. Google appealed the ruling but started negotiations and over the years settled with all the publishers.

37 In addition, the court found an infringement of the moral right of integrity for the display of "random excerpts as torn paper pieces," and dismissed the claim for unfair competition on the grounds of free-riding (*parasitisme*) for lack of evidence.

38 Microfor created a database indexing ("*France actualités*") all the titles of news articles published in the printed editions of major French newspapers (notably, Le Monde and Le Monde diplomatique). In addition to the headlines, a short fragment of the indexed articles was also shown. Le Monde sued for copyright infringement. The first instance and appeal courts ruled in favour of the claimant. The *Cour de Cassation*, in two different rulings (9 Nov. 1983 and 30 Oct. 1987), concluded that indexation for information purposes does not require any authorization from the copyright owner of the referenced work since it is a short quotation allowed by the law, as long as it does not substitute for the original work, thus forfeiting the requirement that the quoted works be "incorporated" and commented or analyzed in the second work and stressing the "informatory" purpose of the database. See « *Microfor v. Le Monde* », Cass. 1re civ., 9 nov.1983, *JCP* G 1984, II, 20189; *Cass., Ass. plén.*, 30 Oct. 1987: JCP G 1988, II, 20932. Available at http://www.legifrance.gouv.fr/affichJuriJudi.do?oldAction=rechJuriJudi&idTexte=JURITEXT000007019548&fastReqId=615613219&fastPos=1 Last visited 28 February 2011.

39 Similarly, Art. 10 WCT. To that extent, in practice, its results (in terms of flexibility to encompass new uses that need be allowed without the owners' consent) might not be far from the fair use doctrine.

40 In an attempt to avoid such a result, the Declaration on a Balanced Interpretation of the "Three-Step Test" in Copyright Law aimed at avoiding an unnecessary restrictive interpretation of existing limitations and exceptions as well as at ensuring the introduction of appropriately balanced new ones. According to this Declaration, the three-step test constitutes an indivisible entirety, considering the three steps together and as a whole in a comprehensive overall assessment. The three-step test does not require limitations and exceptions to be interpreted narrowly; they are to be interpreted according to their objectives and purposes. Available at: https://www.jipitec.eu/issues/jipitec-1-2-2010/2621/Declaration-Balanced-Interpretation-Of-The-Three-Step-Test.pdf

41 See Xalabarder R (2012). Spanish Supreme Court Rules in Favour of Google Search Engine... and a Flexible Reading of Copyright Statutes?. jipitec, Vol. 3. Available at: http://www.jipitec.eu/issues/jipitec-3-2-2012/3445

42 Regulation (EC) 864/2007, of the European Parliament and the Council, of 11 July 2007, on the law applicable to non-contractual obligations (Rome II). Available at : http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:199:0040:0040:en:PDF

Victor Mayer-Schönberger/ Kenneth Cukier, Big Data

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Book Review

by **Thomas Dreier**, Director, Institute for Information and Economic Law, Karlsruhe Institute of Technology (KIT), Karlsruhe

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1 Every once in a while and at unpredictable intervals, books are published which sum up an emerging trend in digital technology and explain its future impact on society and the regulatory system. Amongst such books one might list Nicholas Negroponte's *Being Digital* (1995), Hal Varian's and Carl Shapiro's *Information Rules* (1999), Jeremy Rifkin's *Age of Access* (2000), Lawrence Lessig's *Code and Other Laws of Cyberspace* (also 2000) and now Victor Mayer-Schönberger's and Kenneth Cukier's *Big Data* (2013). Of course, to qualify a book as 'important' in the sense that it spots a major trend, correctly describes this trend's future impact upon society and makes an imprint on subsequent discussion is only possible in retrospect. The saying traditionally attributed to Nils Bohr according to which "prediction is very difficult, especially about the future" also holds true in this respect. After all, 'big data' might just be another one of those buzz-words succeeding the rather short-lived 'cloud computing' and already being supplanted, at the time of publication of Meyer-Schönberger's and Kenneth Cukier's book, by the term 'smart data'.[1] However, there is some credible evidence that big data does indeed "mark an important step in humankind's quest to quantify and understand the world", as the authors – the first a professor at the Oxford Internet Institute and author of *Delete: The Virtue of Forgetting in the Digital Age* (2009), the second *The Economist's* data editor – claim at the end of their introductory chapter.[2]

2 What are the reasons why 'big data' – which suggests a mere increase in the amount of data collected and processed – will lead to a fundamental change as the authors pretend? The answer is that rather than resulting in a quantum leap, the increase of data results in a qualitative change of data collection and analysis. This qualitative change is threefold. First, there is more – as a matter of fact, much more, and in some cases all – data relating to a particular phenomenon that can be analysed.[3] This represents a marked shift from earlier times when only samples of data were available that merely represented the total reality analysed. Second, in the authors' words, data will be "messier", i.e. "looking at vastly more data ... permits us to loosen up our desire for exactitude",[4] which again contrasts with the days when the basis for analysis was representative data, which had to be as accurate as possible in order not to produce incorrect results. Third, and perhaps most importantly, big data analysis merely searches for correlation rather than for causality, which is a decisive "move away from the age-old search for causality".[5] This move away will lead to a change in the way we explain the world (think of the new field of computational social sciences which supplanted earlier empirical methods based on sample statistics). It will likewise result in changes in the information economy and the way we organize our institutions. This "datafication" of society, as the authors call it, is driven by digital data collection undertaken both by public authorities and private companies, from public sector information, customer data, satellite data to data collected by the increasing number of geo-positioned devices.[6]

3 As regards the economy, a new "treasure hunt" has just begun, which is "driven by the insights to be expected from data and the dormant value that can be unleashed by a shift from causation to correlation".[7] While new markets are emerging, the question is whether companies that possess huge amounts of data should keep them for themselves, whether they should hand them over to big data analysts who aggregate them with data resources from other companies thus creating added-value to be sold back to the initial producers/owners of data, whether companies should license their data to third parties or even competitors, or whether they should make them openly – and freely – available to everyone (as has been opted for, one might add, by the legislature with regard to public sector information[8]). Last but not least, there is the tricky yet important issue of how to price data. It appears that as of yet, little clarity exists regarding the answer to the question of which model should be adopted in which case. However, almost certainly, the shift from traditional modes of data analysis to the analysis of big data will produce both winners and losers. According to the authors, in the big data value chain composed of big data holders, intermediaries – i.e. data specialists with expertise or technologies to carry out complex analysis – and "companies and individuals with a big data mindset",[9] data owners and those with a big data mindset will most likely be on the winner's side. In contrast, according to the authors, in many areas, we'll see the "demise of the expert" whose decisions are mainly based on year-long experience, whereas newly emerging data analysts who often come from fields outside of the area analysed will take over. But these intermediaries also operate on shaky ground, the more the tools for analysing data will become generally available. Also, data owners are in a position to keep their data as property. Summing up, the authors conclude that it will be the data itself which will be the most important asset in the big data value chain. In the book, the authors describe and explore each of these trends in separate chapters under the rather simple and straightforward headings "Now", "More", "Messy", "Correlation", "Datafication", "Value" and "Implications".

4 Of course, this new development will not come without "Risks" (the "dark side of big data" as the authors call it), and these risks call for "Control", if the future ("Next") will be mastered without loss of human freedom and individual responsibility. These risks are also threefold. First, with the new insights big data provides to those who analyse them, privacy and data protection are threatened even more than they already are on the Internet.[10] Second, the correlations found on the basis of big data between certain indicators and the behaviour of groups of people results in the "possibility of using big data predictions about people to judge and punish them even before they've acted". Needless to point out, such "penalties based on propensities ... negate ideas of fairness, justice and free will".[11] Third, the danger exists that data and numbers will be fetishized and relied on even in instances where the numbers are not the only factor on which an appropriate decision should be based. In sum, "handled responsibly, big data", the authors believe, "is a useful tool of rational decision-making". However, the authors fear, "wielded unwisely, it can become an instrument of the powerful, who may turn it into a source of repression".[12]

5 What do the authors propose in order to control the risks just described? What is lost and what will have to be preserved?

6 As regards privacy, it is obvious that existing data protection rules are at odds with big data. Data protection's three fundamental principles of (1) data avoidance, (2) specification of purpose of use and (3) prohibition on passing on data without consent, can hardly be maintained in view of the three fundamental conditions on which big data analysis rests, namely (1) to collect as much data as possible, which (2) are used for purposes other than those for which the initial consent was given, and which (3) are combined with data held by other sources. In addition, in many instances, anonymisation of personal data – the traditional means of redress – will not be of help when it comes to analysing big data. Since banning the collection and use of big data is not a viable alternative, the authors propose to move from privacy to accountability (in a way similar to the shift, in the Gutenberg era, from censorship to freedom of expression on the one hand, and legal responsibility in case of libel and slander on the other hand). In other words, in the alternative privacy framework Mayer-Schönberger and Cukier propose, big data users should as a rule have the permission to collect, store and analyse personal data as much and for as long and for whatever purpose they want. Of course, "legislators may choose different time frames for reuse, depending on the data's inherent risk, as well as on different societies' values".[13] As a counterpart, according to the authors, big data users should be held accountable for adverse results of their actions. In addition to this regulatory shift from "privacy by consent" to "privacy through accountability", the authors rely on technical innovation, mainly techniques of "differential privacy" which blur data so that correlations may still be detected without revealing results which make it possible to identify a particular individual.

7 Regarding the problem of judging individuals according to group propensities, the authors propose "a guarantee that we will continue to judge people by considering their personal responsibility and their actual behavior, not by 'objectively' crunching data to determine whether they are likely wrongdoers".[14] Most importantly, the authors call for monitoring and transparency of the algorithms which establish

the correlations and which in almost all cases constitute a black box. Inspired mainly by the German model of the internal data protection official and external auditing systems as well as the dual role of in-house accountants and outside auditors, the authors propose the mandatory creation of both internal and external "algorithmists". Their task should be to "monitor big data companies' activities", to act "as impartial auditors to review the accuracy or validity of big-data predictions whenever the government requires it" and to "perform audits for firms that want expert support".[15] Finally, "as the nascent big data industry develops, an additional critical challenge will be to safeguard competitive big-data markets". This challenge the authors want to meet by way of antitrust regulation preventing abusive power comparable to the regulatory systems that established competition and oversight in the area of earlier monopolistic or oligopolistic technologies such as railroads, steel manufacturing and telegraph networks.

8 Ultimately, the authors are "confident" that with these new strategies in place, "the dark side of big data will be contained".[16]

9 Most, if not all of this makes perfect sense, and the book addresses the major issues that can be spotted at present. However, a couple of additional issues can already be pointed out which the book does not yet address. For example, the aspect of nature of legal "ownership" of data is not dwelt on, nor is the issue discussed whether or not performing an analysis of someone else's big data infringes upon the extraction and reutilization right under the sui generis protection regime of the EU database Directive.[17] Undeniably, there is always factual "ownership" of data by those who have first collected them. But the authors only briefly mention possible strategies of benefiting from the economic value which these data may hold. Should a particular company keep those data for itself? Should it entrust a data-intermediary with its analysis and pay for the results of the analysis? Should it license the data or even make them generally available for free? Some additional guidance similar to the one given in the book by Varian and Shapiro mentioned above with regard to doing business on the Internet still seems to be called for regarding the economics of big data, both on the level of micro- and of macro-economics. The crucial question is, under what conditions will an individual firm and the society at large benefit from big data analysis? Most likely, this answer will depend on the amount of data collected and on the quality of the algorithms performing the analysis, as well as on the extent to which the data and the analysing software tools will become available to third parties.

10 If, in this respect, the authors address the problem of judgment of individuals by propensities both as one of the individual vis-à-vis the state and vis-à-vis private firms, their proposed safeguard of procedural guarantees only seems to address the area of criminal law, i.e. the relationship between state and citizen. In contrast, they do not provide a hint as to how effects of scoring activities on individuals should be dealt with. Rather, in this respect the authors focus on the core problem that the algorithms designed to detect correlations in the mass of data from different sources are not transparent. In most cases, they are private property of the firms engaging in the business of big data analysis. Hence, even the authors cannot tell us how these algorithms work. They can only inform the reader about the fact that in order to predict the spread of the winter flu in the United States, it took Google "a staggering 450 million different mathematical models in order to test the search terms, comparing their predictions against actual flu cases"[18] in earlier years. Their call for transparency in this respect is of utmost importance and their proposal of data "algorithmists" – which at least in cases of dispute should be entrusted with advisory or auditing competencies – is at least one solution which might provide redress. However, this novel idea still needs to be propagated. Only recently, the German Federal Supreme Court granted the plaintiff, who had been refused credit on the basis of the German credit agency's big data calculation, a claim for information against the credit agency only concerning the data the agency had used for the calculation of the plaintiff's creditworthiness. In contrast, the Court denied a claim for information regarding the algorithm used by the credit agency which, in the eyes of the Court, constitutes a protected business secret.[19] This decision is not only a marked contrast from the call for transparency of the authors of *Big Data*; it also failed to take into account that the credit agency in question enjoys a de facto monopoly in Germany.

11 Finally, the non-transparency in this respect raises another problem. Decisions directly inflicted upon individuals meet with acceptance difficulties whenever it is not possible to understand how the decision was arrived at. This is a general problem of automated and computerized decisions which is aggravated by big data's complex algorithms and which affects more and more areas of society (think of the search results produced by Google search and, more generally, of how algorithms focus our attention via the use of computerized data in automated media processes[20]). But then, even before big data, we have become accustomed to the fact that a number of individual decisions are based on collective data and mathematical models (think about insurance premiums, airfare, etc.). Therefore, the question of transparency will have to be phrased differently. Rather than asking whether there should be transparency or no transparency, the question should be in what situations transparency is called for and in what situations non-transparency might

be acceptable. Ultimately, one might ask: Can the dark side of big data really be contained by implementing appropriate safeguards, or will we end up – if only for some time to come – accepting the individual "false positives" produced by non-transparent algorithms of big data analysis as "collateral damage" of a technological system in much the same way as we got used to those injured and killed by the system of motorized traffic?

12 The book is written in the Anglo-American style that appeals to the general public ("tell them what you will tell them, tell them, tell them what you just told them"). It contains the most famous as well as lesser known real-life examples of big data analyses, such as Google's predicting the spread of the flu in the US on the basis of 45 search terms used by the users of Google's search engine some days before the actual outbreak of the flu in a particular area, or the discovery of an individual woman's pregnancy on the basis of a change in her buying pattern that correlates to most women's third month of pregnancy, to name just two of these examples. The book is not an academic one, but as a *New York Times* and *Wall Street Journal* bestseller (as the paperback cover proudly announces), it will get all the attention it deserves.

1 See, e.g., the call for proposals by the German Ministry for Economic Affairs and Energy, www.bmwi.de/DE/Service/wettbewerbe,did=596106.html.

2 Mayer-Schönberger/Cukier, Big Data, London 2013, p. 17.

3 Ibid., p. 12 and pp. 19 et seq.

4 Ibid., p. 13 and pp. 32 et seq.

5 Ibid. p. 14 and pp. 50 et seq.

6 Ibid. p. 15 and pp. 73 et seq.

7 Ibid. p. 15 and pp. 98 et seq.

8 Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information, OJ L 345, 31.12.2003, p. 90, as amended by Directive 2013/37/EU of the European Parliament and of the Council of 26 June 20, OJ L 175, 27.6.2013, p.1.

9 Mayer-Schönberger/Cukier, op. cit. (footnote 2), p. 129.

10 Ibid., p. 151 and pp. 152 et seq.

11 Ibid., p. 151 and pp. 157 et seq.

12 Ibid., p. 151 and pp. 163 et seq.

13 Ibid. p. 174.

14 Ibid., p. 178.

15 Ibid., pp. 178 et seq. and p. 181.

16 Ibid. p. 183.

17 Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, OJ L 77 of 27.3.1996, p. 20.

18 Mayer-Schönberger/Cukier, op. cit. (footnote 2), pp. 2 and 179.

19 German Federal Supreme Court (Bundesgerichtshof) of 28 January 2014, case no. VI ZR 156/13.

20 See, e.g., www.groundbreaking-journalism.com/#konferenz.

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Book Review

by **Sylvia F. Jakob**, LL.B. Hons., Dipl. L.P., LL.M. (Edinburgh), Solicitor & Notary Public (n.p.), Research Associate Leibniz University of Hannover, Institute for Legal Informatics

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1 "European Intellectual Property" is a neologism composed of elements that were once thought to be mutually exclusive. This was due to the principle of territoriality, which provided that IP Rights (IPRs) were not universal, but limited in effect to the territory of the state in which they had been granted. This principle stood in direct opposition to the realization of the single market as set out in the European Treaties, as diverging substantive and procedural IP laws in different Member States made free trade virtually impossible.

2 It was not until the coming into force of the Lisbon Treaty that the EU obtained comprehensive competences for the harmonization of substantive and procedural norms relating to IP (Art. 118 TFEU). Hence the EU resorted to a piecemeal approach of harmonization initiatives relating to individual IPRs, which were either driven by international law or aimed at the removal of quantitative restrictions on imports and all measures having equivalent effect within the internal market (Art. 34 TFEU).

3 Thus when speaking of "European Intellectual Property", we refer to a highly ramified, complex framework of international law, EU primary law and special IP related Directives and Regulations, which Kur & Dreier's Textbook endeavors to tame. The text is primarily aimed at students but also at practitioners from the EU and beyond who seek to obtain a fundamental understanding of this complex legal field.

4 The book is divided into nine chapters of considerable length. The first two chapters are introductory, whereas the third, fourth, fifth and sixth address particular intellectual property rights in detail: chapter 3 looks at patents, chapter 4 at trademarks, chapter 5 at copyright and chapter 6 at plant variety rights, geographical indications, industrial design and semiconductor topographies. Chapter 7 deals with the interplay of intellectual property and competition law, chapter 8 looks at the harmonization of EU-wide enforcement measures and chapter nine provides an excursus on jurisdiction and applicable law with special regard to the particularities of IPRs.

5 Chapter 1 constitutes a general introduction to the nature of intellectual property, the rationale of protection and the different international legal instruments, including the Paris and Berne Conventions, the TRIPS Agreement and the WIPO Copyright Treaty (WCT). Further reference is made to different international developments such as the WIPO Development Agenda, the Doha Round and the role of bilateral trade agreements. The chapter ends with an excursus on human rights and its ever growing role in the EU under the Charter of Fundamental Rights.

6 Chapter 2 is essentially a summary of the whole book touching upon the topics that are later explained in detail. It begins with an overview of the development of the European Union, its basic treaties, institutions and interaction with EFTA and EEA. Subsequently the principles of free movement are explained and set in relation to the principle of territoriality applicable to IP law. Reference is made to early ECJ case law, which became known as parallel import cases ranging from *Consten and Grundig*[1] to *Deutsche Grammophon*[2], but also to cases built on the principle of "non-discrimination on grounds of nationality"(Art. 18 TFEU). The following section provides a short introduction to the nature of Directives and Regulations and to the distinctiveness of enhanced cooperation (Art. 20 TEU). Next up, a short overview of the current state of EU legislation on IP is given, starting with trademarks, industrial designs, copyright and patents, followed by competition law and enforcement rules, specifying not only the Enforcement Directive 2004/48/EC, but also the E-commerce Directive 2000/31/EC, which regulates the conditions under which ISPs are to be held liable for content hosted by them. After that brief reference is made to the legal framework relating to jurisdiction and applicable law, in particular the Brussels I, Rome I and Rome II Regulations. The chapter ends with a short explanation of the primacy of EU law and the interplay of international conventions and EU IP law.

7 Chapter 5 deals with patents in Europe. It starts with a historical overview of the objective pursued by the grants of patents, i.e. the promotion of technical progress by rewarding the inventor with an exclusive market position for a number of years, and its recent dimensions in light of the information and communication technologies. It follows with a short overview of the development of patent law in Europe, discussing the advantages and disadvantages of the European patent vis á vis the unitary patent, which at the time of printing had not been agreed upon yet.[3] Also, first reference is made to the Patent Cooperation Treaty (PCT) which allows inventors to obtain worldwide patent protection by filing an application with WIPO, either directly or through a national receiving office.

8 The following section explains in great detail the legal framework underlying the European patent, which is regulated by the European Patent Convention (EPC) of 1973 and its implementing regulations. Accordingly, the EPC constitutes a special agreement within the meaning of Article 19 of the Paris Convention designed to centralize patent administration in Europe. Patent applications are examined and granted by the European Patent Office (EPO) in Munich. Most importantly, the European patent is not a unitary title valid throughout the EPC Member States, but a bundle of national rights subject to the diverging substantive and procedural national laws. Despite the EPC primarily dealing with organizational and administrative matters, Articles 52-74 of the EPC are devoted to substantive patent law specifying what constitutes patentable subject matter, types of patents, conditions for protection and scope of protection.

9 This section is highly recommendable for anyone wishing to understand the substance and interplay of the EPC and the unitary patent created on the basis of enhanced cooperation, as the latter will be granted as a European patent subject to the provisions of the EPC.

10 After that, patents relating to specific fields of technology are discussed; in particular Directive 98/44/EC (Biotech Directive) designed to harmonize the conditions under which patents can be granted in the area of biotechnology and genetic engineering. The incorporation of the Biotech Directive into the Implementing Regulations of the EPC provided the ECJ with the right to adjudicate on matters previously in the sole power of EPO's independent Boards of Appeal. Reference is made to early and latter case law that illustrates this shift. Further discussion surrounds the patentability of computer-implemented inventions and the failed initiative of the Commission to establish a Directive harmonizing this area of law.

11 Thereafter a relatively new development in patent law is presented: the Supplementary Protection Certificates for medical products. Regulation 469/2009/EC defines EU-wide rules on granting supplementary protection certificates. They are designed to compensate the right-holder for the time lapse between the filing of the patent application and the granting of the authorization to put the medical product on the market. As such they are able to prolong the 20-year-long protection period granted under the traditional patent framework by five years.

12 The chapter ends with a short outlook on the development of the unitary patent and the Unitary Patent Court, without, however, having the benefit of knowing that Regulations 1257/2012/EU (UPR) and 1260/2012/EU came into force on 17 December 2012.

13 Chapter 4 deals with trademarks in Europe. It begins with a historic overview of the objective pursued by trademark protection and clarifies the fundamental difference of trademarks compared to other IP rights: unlike inventions or original works, distinctive signs are not worthy of protection in itself, but in their capacity to convey information about the origin of goods or services. Thus in order to foster competition, it is of utmost importance that appropriation of a trademark as such does not confer on its holder a competitive advantage from which others are excluded.

14 The following section deals with an overview of the trademark law framework in Europe, explaining the two-tier system consisting of the Trade Mark Directive (TMC) and Community Trademark Regulation (CTMR). Thereafter the administrative procedures of the Community Trademark system are explained in detail. In this context, short reference is made to the possibility of registering trademarks on an international level under the auspices of WIPO.

15 Since trademark protection in Europe is harmonized to the greatest possible extent, substantive law provisions relating to the requirements for protection, absolute grounds for refusal, relative grounds for refusal, scope of rights and loss of rights can be found in the TMC and the CTMR. As such, the remainder of the chapter guides the reader through the substantive law provisions making reference to the respective decisions of the ECJ where deemed appropriate.

16 Chapter 5 deals with copyright in Europe. It begins with a historic overview of the objective pursued by the granting of copyright, which traditionally protected original works in the field of literature and arts but was later extended to functional and investment intensive subject matter such as computer programs and databases. It follows with an overview of copyright law in Europe, which until recently was of no major economic interest to the EU since cross-border exploitation of copyrighted work was rather the exception than the rule. This, however, changed with the introduction of new protectable subject matter and the advent of new communication technologies such as cable, satellite and most importantly the Internet. It became clear that the territorial approach to protection was hindering the realization of the internal market and required targeted harmonization initiatives.

17 In this context, the authors present and explain each of the seven copyright Directives relating to copyright as of September 2012:

- Directive 2009/24/EC (originally published as 91/250/EEC) – the Computer Programs Directive
- Directive 2006/115/EC on rental and lending rights and on certain rights related to copyright in the field of intellectual property (originally published as 92/100/EEC) – the Rental and Lending Rights Directive
- Directive 93/83/EEC/ on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission – the Satellite and Cable Directive
- Directive 2006/116/EC on the term of protection of copyright and certain related rights (originally published as 93/98/EEC) – the Term Directive
- Directive 96/6/EC on the legal protection of Databases – the Database Directive
- Directive 2001/29/EC on the harmonization of certain aspects of copyright and related rights in the information society – the Information Society or InfoSoc Directive
- Directive 2001/84/EC on the resale right for the benefit of the author of an original work of art – the Resale Right Directive

18 A brief outline is then given on the discussion of the proposed orphan works protection, which was later implemented on 25 October 2012 as Directive 2012/28/EU.

19 As indicated by the authors, further developments may soon be expected in relation to the licensing of music throughout Europe with the full Parliament expected to vote on the proposed Directive on Collection Societies[4] (11th July 2012, COM (2012) 372)) on 24 February 2014.[5]

20 The following section entails an amalgamation of harmonization initiatives launched by the ECJ, which although being limited to individual issues, might eventually serve as a blueprint for a uniform European copyright. With this in mind, the authors address aspects of the most prominent cases in the order in which the different copyright issues are usually dealt with in a legislative instrument, i.e. different cases are repeatedly discussed under headings such as subject matter, conditions of protection, ownership of rights, exclusive rights, distribution rights, communication to the public, exhaustion, term of protection and technological protection measures.

21 This part constitutes an interesting (academic) exercise, but it may confuse students new to the field or the practitioner who would just like to see a concise summary of the effects of the *Murphy*[6] or the *Infopaq*[7] case, without having to gather scattered bits and pieces or resort to the full judgment.

22 The chapter ends with an evaluation of the current approach of piecemeal harmonization through directives, discussing the possibility of the introduction of a community copyright which could be brought about by the EU under its new powers set out in Article 118 TFEU.

23 Chapter 6 explains in detail adjacent areas of protection which are of growing relevance in practice but do not fit into the scheme provided by the "classical" IP rights.

24 The first right presented is that of plant varieties. Recognition of a cultivated plant as a variety provides its breeder with some legal protection called "plant breeder's rights". These are, however, difficult to monitor since plants have the natural abil-

ity to propagate, enabling the buyer to grow more of the same. This dilemma is addressed by Regulation 2100/94/EC on Community Plant Variety rights (CPVR Reg.).

25 In the following section, the authors provide a concise overview of the main provisions of the CPVR Reg. addressing protection requirements, registration and examination procedures, exclusive rights and limitations, including the so-called farmer's privilege. Food for thought is given in the final part where possible overlaps with the Biotech Directive are identified and discussed.

26 The second right presented is that of geographical indications (GIs). This section begins with an overview of the nature and rationale of protection of geographical indications, which are not only intended to provide consumers with the ability to make informed choices but also to honor and to preserve the traditional ways and means of production of local specialties. It follows with an overview of the protection of GIs in the EU, which is now mainly based on Regulation 2006/510/EC (foodstuff regulation). Its provisions are explained in detail and set in relation to non-EU procedures, in particular in the United States where protection for GIs is solely obtained through registration of collective marks, without any substantive examination as to the link between the relevant region and the products designated by the collective mark.

27 Next up, a brief insight is given on the interplay of GIs and trademarks, followed by a short discourse on the relationship of Community GIs vis á vis national protection systems, which may provide protection to GIs not concerning food. The section ends with a discussion on the interaction of GIs and EU primary law referring to particular ECJ cases that adjudicated on the alleged negative effect of GIs on the free movement of goods.

28 The third right presented is that of industrial designs. The section begins with a historical overview of the development and rationale of protection of industrial designs, which evolved from simply masking industrial utility objects to an important form of cultural expression. After that, the two-tier protection framework consisting of Design Directive 71/1998/EC and the Community Design Regulation 6/2002/EC (CDR) are explained in detail and set in relation to other forms of protection such as trademark law, copyright law and unfair competition law. In this context, short reference is made to the spare parts debate, in which independent manufacturers request that design protection of crash parts of automobiles be limited as to not foreclose the secondary market in these parts. The section ends with a brief outlook on the effects of prohibiting the marketing of particular product appearances based on rules of unfair competition law for the free movement of goods.

29 The fourth right presented is that of semiconductor topographies, which due to its limited practical importance is only touched upon; i.e. the authors provide a short background on the development of semiconductor topography protection, which was triggered by the US Semiconductor Chip Protection Act 1984 (SCPA) and its reciprocity clause. After that, the European legal framework consisting of Directive 87/54/EC is introduced, and its main provisions including requirements for protection, ownership of rights, registration requirements, exclusive rights and limitations, term of protection and requirement of reciprocity are explained and set in relation to the SCPA.

30 Chapter 7 gives a comprehensive insight into the interplay of European intellectual property and competition law. It begins by explaining the fundamental dilemma: the aim of granting IPRs is to provide incentives and further innovation and competition. However, the exclusivity of IPRs may under certain circumstances be abused by the right-holder, who may thus prevent the development of new and innovative products. This phenomenon, in turn, may clash with the EU's competition policy set out in Article 101 *et seq*.TFEU (ex Art. 81, 82).

31 The authors set out to quote the provisions of Articles 101 and 102 TFEU and explain their effects in relation to IPRs.

32 Then a short excursus is made on the role of the Commission as the watchdog of competition in the EU before introducing the Technology Transfer Block Exemption Regulation (TTBER) and the Block Exemption on R&D Agreements (R&DBER), which may be invoked to circumvent the restrictions set out in Article 101 TFEU if certain conditions are met.

33 In this context, further reference is made to so-called "patent pools", in which multiple partners come together to cooperate in the research and development of new technologies. In these cases, no restriction of competition will result if the patents included are essential and complementary and if licenses are granted under fair, reasonable and non-discriminatory terms ("FRAND").

34 The following section deals with the overlap of IP and competition law as adjudicated upon by the ECJ starting with cases that arose under Article 101 TFEU (ex Art. 81), including *Consten and Grundig*,[8] *Ideal Standard*,[9] *Nungesser*,[10] *Windsurfing International*,[11] *GlaxoSmithKline*[12] and *SABAM II*.[13] Further case law decided under Article 102 TFEU is presented, including *Volvo v. Veng*,[14] *Magill*,[15] *IMS Health*[16] and *Microsoft*.[17]

35 The remainder of the chapter is dedicated to the legal framework regulating unfair competition, which was first anchored in Article 10 bis of the Paris Convention and can now be found in primary community law such as Article 34 TFEU (ex Art. 28) interpreted by the ECJ in *Dassonville*,[18] *Cassis de Dijon*,[19] *Keck & Mithouard*[20] and secondary instruments such as the Unfair Commercial Practices Directive 2005/29/EC (UCP) and the Misleading and Comparative Advertising Directive 2006/114/EC, which overlaps to a considerable extent with trademark law.

36 Chapter 8 deals with the harmonization of legal remedies available in cases of intellectual property infringement. It commences with a discourse on the dual nature of the term "infringement", which on the one hand might be considered as "business as usual" due to the legal uncertainty inherent in the fuzzy boundaries characterizing IP rights, and on the other hand as piracy and counterfeiting on a commercial scale. The demand for stronger IP rights is usually linked to the latter, often forgetting, however, that stronger repercussions might seriously harm the legitimate interests of persons accused of (innocent) infringement.

37 It follows with an outline of the legal development of sanctions and enforcement measures, which traditionally lay in the competences of the Members States. It was not until the coming into force of TRIPS that a comprehensive set of rules of enforcement measures, both civil and criminal, substantive and procedural, formed part of an international legal instrument. Following the TRIPS Agreement, the EU amended and extended the Border Measure Regulation 3295/94/EC, which up until then had only dealt with trademarks and copyright as to include patents and other IPRs (Regulation 1383/2003/EC) and adopted Directive 2004/48/EC on the enforcement of intellectual property rights (the Enforcement Directive), which harmonizes the civil sanctions available to injured right holders. On p. 441 the authors give a fantastic one-stop overview of the latter's main provisions, which are then explained in detail on the following pages.

38 The next section deals with enforcement of IPRs on the Internet, outlining the particular difficulties that might arise for any right-holder wishing to get hold of an alleged infringer. Accordingly, effective enforcement does not only depend on jurisdiction and applicable law further elaborated in chapter 9, but also on the extent to which ISPs could be held liable for acts committed whilst using their services. In this context, liability of Internet Service Providers (ISP) as set out in Directive 2000/31/EC (E-commerce Directive) is explained and illustrated by ECJ case law.

39 Following on, the enforcement of IPRs as envisaged in the Enforcement Directive is set in relation to the European Data Protection Framework; e.g. Art. 8 of the Enforcement Directive provides a right-holder with the right of information against third parties, which would *prima facie* allow a right-holder to request personal information, e.g. an IP address, from an ISP if it were not for the Data Protection Directive 95/46/EC, which allowed the processing of personal data only if the interests and fundamental rights and freedoms of the data subject are not violated. References to case law seeking to strike a balance between these opposing regimes include *Promusicae*,[21] *LSG Gesellschaft zur Wahrnehmung von Leistungsschutzrechten*,[22] *Scarlet Extended*,[23] *SABAM* [24] and *Bonnier Audio*.[25]

40 Next up is an explanation of the Border Measures Regulation 1383/2003/EC, which provides a special procedure that facilitates the seizure and disposal of all infringing goods at the outer borders of the EU. It follows with a short summary of its main provisions and a discussion on its effects on goods in transit.

41 The chapter ends with a discourse on the advantages and pitfalls of criminal sanctions as a deterrent to intellectual property infringements. In this context, reference is made to the Commission's proposal of a Directive on criminal measures aimed at ensuring the enforcement of intellectual property rights (COM (2005) 276 Final), which met with fierce resistance from academic circles and was eventually abandoned. Nevertheless, the provisions rejected in that proposal were raked up in the Anti-Counterfeiting Trade Agreement (ACTA), which had the objective of enhancing international enforcement over and above existing legislative provisions (TRIPS + approach). At the time of printing, the Commission had referred ACTA to the ECJ, asking whether it was compatible with Community law, in particular with the Charter of Fundamental Rights. The Commission had hoped to reinstitute the failed ratification process before the European Parliament had the verdict been positive. However, at the time of writing, we have the benefit of knowing that the Commission has withdrawn its referral to the ECJ in December 2012, meaning that ACTA will definitely never become good law in the EU. This makes ratification in the individual Member States also highly unlikely. The last pages of this chapter thus provide a historic overview on the effects of ACTA on civil remedies, border measures, ISP liability and criminal sanctions, had the current version of the text come into force.

42 Chapter 9 deals with questions of jurisdiction and applicable law (private international law), which become relevant when cross-border claims for intellectual property infringement are raised or when claims are derived from contracts to which a foreign law applies. In these cases it has to be determined whether the court seized is actually competent to hear the case and which law is to be applied to the proceedings. The relevant legal framework presented and discussed in this context are predominantly Regulation 44/2001/EC on Jurisdiction and

the Recognition and Enforcement of Judgments in civil and commercial matters, Regulation 593/2008/EC on the Law applicable on contractual obligations (Rome I) and Regulation 864/2007 on the Law applicable to non-contractual obligations (Rome II). Some international and secondary community instruments on IPRs do, however, contain their own specific provisions on jurisdiction and procedures, e.g. the European Patent Convention, the Unitary Patent Framework, the Community Trademark Regulation and the Community Design Directive, which need to be taken into account when applicable.

43 The chapter finishes with an overview on international, non-governmental harmonization efforts such as the ALI and CLIP principles, which may serve as blueprints for an internationally harmonized approach concerning the unanswered questions of IPRs under private international law.

44 To summarize, we can say that the book is a laudable endeavor, which has the ambition of explaining every aspect of European intellectual property law, and as such to provide its reader with a true understanding of the different regimes that come together in this field. It is worth pointing out, however, that due to the sheer volume of legislation and case law that is constantly produced in this area, some parts of the book may already be regarded as historic. However, this should not prevent the authors from continuing with this wonderful project and providing regularly updated versions.

1 *Etablissement Consten and Grundig v. Commission*, joined cases C-56/64 and 58/64 of 13 July 1966.

2 *Deutsche Grammophon v. Metro SB*, C- 78/70 of 8 June 1971.

3 The text reflects only legislative developments until September 2012; however, Regulation 1257/2012 implementing enhanced cooperation in the area of the creation of unitary patent protection and Regulation 1260/ 2012 implementing enhanced cooperation in the area of the creation of unitary patent protection with regard to the applicable translation arrangement came into force on 17 December 2012.

4 Proposed Directive of the European Parliament and of the Council on collective management of copyright and related rights and multi-territorial licensing.

5 http://europa.eu/rapid/press-release_MEMO-14-80_en.htm.

6 *Football Association Premier League v. QC Leisure* and *Karen Murphy v. Media Protection Services*, joined cases C-403/08 and C-429/08 of 4 October 2011.

7 *Infopaq International v. Danske Dagblades Forening (Infopaq I)* C-5/08 of 16 July 2009.

8 *Etablissement Consten and Grundig v. Commission*, joined cases C-56/64 and 58/64 of 13 July 1966.

9 *IHT Internationale Heiztechnik v. Ideal Standard*, C - 9/93.

10 *Nungesser v. Commission*, C- 258/78 of 8 June 1982.

11 *Windsurfing International v. Commission*, C-193/83.

12 *Sot. Lélos kai Sia et al v. GlaxoSmithKline*, C-468/06.

13 *BRT v. SABAM II*, C- 127/73.

14 C-238/78 of 5 October 1988.

15 *RTE and ITP v. Commission (Magill)*, joined Cases C- 241/91 and 242/91 of 6 April 1995.

16 *IMS Health v. Commission*, C-418/01 of 29 April 2004.

17 *Microsoft v. Commission*, T-201/04.

18 *Procureur du Roi v. B. and G. Dassonville*, C 8-74 of 11 July 1974.

19 *Rewe v. Bundesmonopolverwaltung für Branntwein (Cassis de Dijon)*, 12/78 of 20 February 1979.

20 *B. Keck and D. Mithouard*, joined cases C-267/91 and 268/91 of 24 November 1993.

21 *Promusicae v. Telefonica*, C-275/06.

22 *LSG Gesellschaft zur Wahrnehmung von Leistungsschutzrechen v. Tele2 Telecommunication GmbH*, C-557/07.

23 *Scarlet Extended v. SABAM*, C-70/10.

24 *SABAM v. Netlog*, C-360/10.

25 *Bonnier Audio v. Perfect Communication*, C 461/10.

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