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Who is the PHOSITA

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ABSTRACT

The "person having ordinary skill in the art" (PHOSITA) is regulated in the U.S. patent law, whose functions are to read the patent specification, evaluate the novelty, non-obviousness factor and so on. His role is so important; however, unfortunately there is no clear rule to define this person. Owing to his virtual nature, many controversies will be accompanied with this person when patent rights are in dispute. If we can find some clues to define him/her or to delineate a line for the scope of him/her, that may help us to reduce many issues in the patent practice. In this essay, part I is the historical clues of this person. Part II I will analyze some factors related to him/her based on current U.S. patent regulations. Part III will illustrate the information of the USPTO to recruit new patent examiners. Part IV is a comparative review to the regulations of other jurisdictions about this role in the court. In the final section, part V, I will propose a proper person to act as this virtual role based on the result of the above information and analyses.

Keywords: PHOSITA, patent drafter, patent examiner, patent attorney, non-obvious

I. The Historic Reasoning behind "PHOSITA"

A "person having ordinary skill in the art" can be found in the landmark case of *Hotchkiss v. Greenwood.*[2] In this case, the issue was related to patent validity. The invention claimed a door knob that had a usual structure and could be made of various materials. The only feature of the invention different from other ones was that the knob was made of clay or porcelain, not of metal or wood.[3] The court held that the invention was plain for "an ordinary mechanic acquainted with the business."[4] Hence, despite an ordinary mechanic without creativity or skill, he/she would still be able to construct a

[1] Assistant professor, Taipei University of Technology. This essay is revised from my thesis.
[2] 52 U.S. (11 How) 248, 13 L. Ed. 683 (1850).
[3] *Id.* at 251.
[4] *Id.* at 252-253.

knob by using different materials.[5]

However, the court did not mention which scope or what level of a mechanic could make a knob without testing it.[6] That is, the judges had to set up the standard or scope of the person whose skill level qualified him/her as an ordinary mechanic before making a judgment.[7] Therefore, in the current patent system, there exists this obscure standard, and it takes some measures to define PHOSITA respectively in each case.

Generally, the examiners and administrative patent judges on the Board can be seen "as persons of scientific competence in the fields in which they work," and their findings are "informed by their scientific knowledge, as to the meaning of prior art references to persons of ordinary skill in the art."[8] Besides, there is no clear definition to describe this particular person in patent law.

II. The Related Factors to Define "PHOSITA"

A PHOSITA in patent law is like a reasonable man in tort law.[9] For example, a reasonable person in tort law plays the most critical role in evaluating negligence in injury litigation.[10] Similarly, a person having ordinary skill in the art in patent law is hypothesized to assess the patent validity and infringement claims.[11]

A person having ordinary skill in the art is supposed to have knowledge

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[5] *Id.* at 253, 265.

[6] *Id.*; *see also Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 696, 218 USPQ 865, 868 (Fed. Cir. 1983) (discussing various factors about ordinary skill in the art, but not specifying an applicable standard of the skill level). If the inventor could prove that the claimed processes of manufacturing knobs were different from those made of general metal or wood knobs, or could prove that clay or porcelain had different features from those of metal or wood, perhaps the inventor could be granted patents at that time.

[7] William H. Francis, Robert C. Collins, James D. Stevens, Andrew M. Grove & Matthew J. Schmidt, *Patent Law*, 418 (6th ed. 2007).

[8] *In re Berg*, 320 F.3d 1310, 1315 (Fed. Cir. 2003) ("As persons of scientific competence in the fields in which they work, examiners and administrative patent judges on the Board are responsible for making findings, informed by their scientific knowledge, as to the meaning of prior art references to persons of ordinary skill in the art and the motivation those references would provide to such persons.").

[9] *See, e.g. Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1566 (Fed. Cir. 1987) ("[T]he decisionmaker confronts a ghost, i.e., 'a person having ordinary skill in the art,' not unlike the 'reasonable man' and other ghosts in the law."); *see also* Joseph P. Meara, *Just Who Is the Person Having Ordinary Skill in the Art? Patent Law's Mysterious Personage*, 77 Wash. L. Rev. 267 (2007).

[10] *California v. Beheler*, 463 U.S. 1121, 1125, 103 S.Ct. 3517, 3520 (1983).

[11] *See* Meara, *supra* note 56.

related to the invention when it is invented.[12] The purpose is to prohibit hindsight.[13] Hence, the PHOSITA has to review the invention based on the skill level of technology at the time of invention.

There are two dimensions in determining who is qualified as a PHOSITA─horizontal and vertical dimensions. The first one is "the scope and content of the prior art,"—i.e., which fields are related to the claimed invention? The scope has to be drawn in advance with a proper boundary. Not all the fields of technology or wide-ranging arts are proper to assess invention fairly. Thus, a certain field related to the claimed invention has to be defined. The second one is "the level of the skill," —i.e., the extent of ability or capability of PHOSITA. This factor will affect the determination of the non-obviousness and its relevant issues in the patent system. For example, an invention may be obvious to people with higher skill level, but may not be obvious to ones with lower skill level. The following are discussions on these two parts separately.

1. The Scope and Content of the Prior Art

The scope and content of the prior art is an important factor before the determination of the level of the skill in the art can be attained,[14] because there are so many patents and publications existing prior to the invention. Any one or any combinations of the prior techniques can be used as a prior art to raise against the invention if there is no limitation on the scope. Moreover, most inventions are combinations of prior arts and consist of old elements.[15] Obviously, it is easy to combine the relevant or even irrelevant prior arts to render the invention obvious to the prior art. Furthermore, inventors are unable to understand or read all the techniques prior to their inventions, so it is difficult for them to fight against the public with different knowledge during the

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[12] 810 F.2d 1561, 1566 (Fed. Cir. 1987) ("[T]he decisionmaker must step backward in time and into the shoes worn by that 'person' when the invention was unknown and just before it was made."); *see also* 2141.03 Level of Ordinary Skill in the Art [R-08 2012), *available* at http://www.uspto.gov/web/offices/pac/mpep/s2141.html#d0e209300 (last visited May 1, 2015).

[13] *See KSR Intern. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1742-1743, 167 L. Ed. 2d 705 (2007); *see also Graham v. John Deere Co.*, 383 U.S. 1, 36, 86 S.Ct. 684, 15 L. Ed. 2d 545 (1966).

[14] *See E.I. DuPont DeNemours & Co. v. Monsanto*, 903 F. Supp. 680, 692 (D. Del. 1995) ("[T]he resolution of the issue of infringement is a two-step process. First, a court must determine the scope of the claims of the patent. Then, once the scope of the claims is ascertained, the court must determine whether the defendant's allegedly infringing activity falls within the scope of the claims. Id. Claim construction is a question of law.").

[15] *See* Howard T. Markey, *Why Not the Statute?*, J. Pat. Off Soc'y, 333-334 (1983) (Author, a Chief judge, Court of Appeals for the Federal Circuit gave a talk on April 26, 1983 at the Chicago Law School).

prosecution.[16]

This factor is also important to the 35 U.S.C. Section 102 and 103 of the Patent Act and is regulated in the MPEP § 2141.01.[17] There are two staged functions in this rule. The first staged function is to define the scope of the "content" under Section 102.[18] Then the content with the defined scope will be raised against the invention under Section 103—for example, the determination of the anticipated and obvious factors.[19]

a. The dilemma of the design of the patent system

The design of the patent system is to allow use of claims to frame the scope of the patentee's privilege, not drawings or emblements within the application file. The drawings can clearly demonstrate the claimed invention in physical type, but it cannot exclude other subtle changes based on the claimed invention. Similarly, the best modes in the specification are emblements used to illustrate the results of the claimed invention; however, it cannot list all the examples of the claimed invention.

In practice, patent drafters always draw the broadest scope for the invention as long as they do not touch the bright line of the prior art. They may choose alternative terms to avoid crossing the scope of the prior art unless they think that the claimed invention perhaps will be requested to amend the claims due to office actions. For example, if the scope of the claimed invention with the pre-drawn line is too broad, the invention may touch the bright line of the prior art and may not be qualified to satisfy the requirements of novelty or of non-obviousness. On the contrary, if the scope of the claimed invention with the pre-drawn line is too narrow, or even if it is not over the bright line and can satisfy the requirements of novelty and of non-obviousness, it will shrink the scope of the inventor's privilege. The pre-drawn line is so important that it affects not only the granting of patents in the period of patent prosecution but also the scope of the privilege in the future. How to write broad claim terms for clients is the main concern of patent drafters who can

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[16] *See General Mills, Inc. v. Standard Brands, Inc.*, 431 F. Supp. 687, 691 (E.D. Tenn. 1977) ("One way to apply the obviousness test of 35 U.S.C. § 103 is to picture the inventor working in his shop with the prior art references which he is presumed to know hanging on the walls around him."); *see also In re Wood*, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979) ("[A]n inventor could not possibly be aware of every teaching in every art.").

[17] Scope and Content of the Prior Art [R-6] - 2100 Patentability; *also available* at http://www.uspto.gov/web/offices/pac/mpep/s2141.html#d0e208803 (last visited May 1, 2015).

[18] *Id.*

[19] *Id.*

demonstrate their professional abilities.[20]

Except for the inventor, no one is perfectly able to illustrate the claimed invention, let alone the office personnel of the USPTO. The USPTO officers cannot help but rely on the references cited by applicants if they cannot find the critical features of the claimed invention at first glance. In *DuPont,*[21] the federal judges also relied more on the references cited in the specification to prove the factor of obviousness, even though the search for the other references was a required procedure.

b. Pre-examination of the claimed invention: determination of the scope and content of the prior art

(1) The necessity of determining the scope and content of the prior art

An initial review of the application is required to ascertain the scope and content of the prior art prior to examining the claims. In *Graham,*[22] the supreme court proposed the non-obvious requirement under § 103 to evaluate the patentability in addition to the other two requirements: novelty and utility. The court found four factual inquires to outline this new factor: determining the scope and content of the prior art, ascertaining differences between the prior art and the claims at issue, resolving the level of ordinary skill in the pertinent art, and assessing the secondary consideration.[23] However, the court acknowledged that this factor is not easy to determine, so it is amendable and has to be decided case by case.[24] Therefore, this non-obvious factor apparently inherited its nature when it was born.

(2) The role of a factfinder

"Whether a claimed invention is unpatentable as obvious under 35 U.S.C. § 103 is a question of law based on underlying findings of fact."[25] The court held

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[20] *See, e.g., Johnson*, 285 F.3d at1057 (Fed. Cir. 2002) (en banc) ("When one of ordinary skill in the relevant art would foresee coverage of an invention, a patent drafter has an obligation to claim those foreseeable limits").

[21] *DuPont*, 903 F. Supp. 680 (D. Del. 1995).

[22] *Graham v. John Deere Co.*, 383 U.S. 1, 86 S.Ct. 684, 15 L. Ed. 2d 545 (1966).

[23] *Id*. at 17-18 (When the former three elements cannot clearly determine whether the requirement of non-obviousness is satisfied, the environmental evidence perhaps can help to illustrate. The secondary considerations are like commercial success, long felt but unsolved needs, failure of others, etc.).

[24] *Id*. ("What is obvious is not a question upon which there is likely to be uniformity of thought in every given factual context. The difficulties, however, are comparable to those encountered daily by the courts in such frames of reference as negligence and scienter, and should be amenable to a case-by-case development.").

[25] *See Okajima v. Bourdeau*, 261 F.3d 1350, 1354 (Fed. Cir. 2001); *see also* MPEP § 2141("It

that judges have the final decision in patentability;[26] however, the temporary determination of the scope and content of prior art has to be done prior to the fact finding. That temporary determination contains the nature of

legal decision. For example, measuring the length of materials can be compared to assessing the claimed invention whether it satisfies the requirement of obviousness or not. A ruler generally has a definite scale to measure the length of material. There will not be any difference for anyone who uses a standard rule with a definite scale to measure the material. However, in the patent system, there is no fixed or standard "ruler" to measure the claimed invention.[27] Especially, the scale of the ruler has to be established prior to measuring the claimed invention every time.

However, as to the examination of patents, both steps are always finished by the same person: examiner(s), or the jury, or judges at the same time. That is to say, the standard of assessment and the scope of the search for the prior art based on the standard are set up at the same time. Those persons simultaneously play conflicting dual roles, like a referee and a player, in evaluating the patentability.[28] To some extent, the decision on whether there is obviousness or not is not as objective as the novelty factor. In addition, this initial and important decision primarily falls on the patent office (PTO) examiners, even though it is dynamic and can be amended by judges when the claimed invention is brought to the court.[29]

The United States Patent and Trademark Office (USPTO) officers act as critical factfinders in this stage.[30] Their main responsibilities are to accumulate the evidence and propose the rationale to support the determination whether the claimed invention meets the requirement of non-obviousness or novelty.[31] Nevertheless, the factfinders are not limited to the examiners of the USPTO, but also to the jury and judges.[32]

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must be remembered that while the ultimate determination of obviousness is a legal conclusion, the underlying Graham inquiries are factual.").

[26] *See Markman II*, 517 U.S. 370 (1996).

[27] The answer to "What standard should be employed" at this step is like a question of *vicious circle.*

[28] James L. Wamsley, *A View of Proposed Amendments to Patent Reexamination through the Eyes of a Litigator*, 36 IDEA 589, 592-593 (1996).

[29] PTO examiners usually amends their prejudice after reading some of the references during the initial search and change the presumed features or keywords related to the claimed invention to make another new search for the prior art.

[30] *See* MPEP § 2144.

[31] *Id.*

[32] *Id.* at 1355 (Fed. Cir. 2001) ("[T]the level of skill in the art is a prism or lens through which a judge [or] jury ... views the prior art and the claimed invention. This reference point prevents these factfinders from using their own insight or, worse yet, hindsight, to gauge obviousness.").

(3) The search of the scope and content

Besides inventors, patent drafters should be secondary in knowing the essence of inventors' ideas and the relevant prior arts. A good patent drafter always searches for the prior art and then defines the boundary between the prior art and the invention prior to drafting the patent specification.[33] Without pre-defining the scope of the prior art, the invention cannot be drafted in the broadest terms to acquire the broadest scope of patent privilege. In addition to the patent specifications, it is requested that references of the prior arts be sent to the USPTO.[34]

USPTO examiners have to review the differences between the prior art and the claimed invention to confirm the factors of novelty and non-obviousness according to the proper line separating the invention from the prior art. The proper line is supposed to be the line that is proposed by patent applicants. To determine the scope and content of the prior art, the examiner has to review claims—including the specification, which is disclosed and claimed by the patent applicant—to understand what the applicant has invented.[35] Even if the technology is very new or rare, the examiner is supposed to understand it completely.[36] Then he/she has to define the subject matter and the features of the invention for subsequent review.[37]

The scope of the invention is supposed to be clearly defined in claims that will be interpreted in the broadest way,[38] unless there are exceptions, such as estoppel in the prosecution.[39] Later the examiner has to deal with "how to

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[33] Hal Milton, *Patent Preparation Mandated By the Law*, 89 J. Pat. & Trademark Off. Soc'y 809, 810 ("[T]he prior art establishes the meters and bounds of the claims, particularly the broadest claim 1, and without that prior art, the drafting of the claims is guesswork and not skill.").

[34] *Id.* at 809 ("[M]any patent applications are filed without any attention to the prior art and/or without any identification whatsoever of the subject matter of the invention.").

[35] *See In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995); *see also* 2141 Examination Guidelines for Determining Obviousness under 35 U.S.C. 103 [R-6], MPEP, *also available at* http://www.uspto.gov/web/offices/pac/mpep/documents/2100_2141.htm (last visited June 15, 2008).

[36] *See How to Search*, MPEP § 904.

[37] *See* MPEP § 2141; *see also PTO Biotech/Pharma Trends---News To Report, 2nd Annual Patent Law Institute*, 923 PLI/Pat 281, 304 (2008).

[38] *See In re Morris*, 17 F.3d 1048, 44 USPQ2d 1023 (Fed. Cir. 1997); *see also Fiddes v. Baird*, 30 USPQ2d 1481 (Bd. Pat. App. Int. 1993); *see also* MPEP § 904, 2141.

[39] *See, e.g.*, *Cybor* at 1460 ("Prosecution history estoppel provides a legal limitation on the application of the doctrine of equivalents by excluding from the range of equivalents subject matter surrendered during prosecution of the application for the patent.").

search,"[40] and determine "what to search for" and "where to search."[41]

i. What to search for

The scope of search is not limited to the literal elements of claim terms.[42] It also covers the disclosed features and the claimed subject matter that are reasonably anticipated in an applicant's amendment by the examiner.[43] In addition, a preferred search will be focused on the references that provide "teaching or suggestion" even though a rejection of patent is not necessarily based on the combination of the rule of teaching or suggestion.[44] Therefore, the preliminary scope of the prior art is closely connected to the claims and to the examiner's recognition.

ii. Where to search

The prior art may exist in the field of the applicant's endeavor or another field which is reasonably pertinent to the particular problem with which the applicant was concerned.[45] That is, although the invention is supposed to prevail in one field, market demands will force the variation and perhaps be able to prevail in the other fields.[46]

iii. How to search

The required search includes documents which are disclosed in patents and other published documents; i.e., non-patent publications.[47] The scope of the documents cited is not limited to the state but also covers those in foreign countries.[48] In addition, patent officials should look for all the relevant documents at best in the first search unless it is required to review the amendments to the boundary of the claims in the prosecution.[49] The

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[40] *See* MPEP § 904.

[41] *See* MPEP § 2141.

[42] *Id*.; s*ee also* Mary Jo Boldingh, *Patenting the New Business Model: Building Fences in Cyberspace, United States Patent & Trademark Office Formulating and Communicating Rejections under 35 U.S.C. § 103 for Applications Directed to Computer-Implemented Business Method Inventions*, 636 PLI/Pat 69, 75 (2001).

[43] *Id.*

[44] MPEP § 2141.

[45] *Id.*

[46] *KSR Intern. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1731, L. Ed. 2d 705 (2007) ("When a work is available in one field, design incentives and other market forces can prompt variations of it, either in the same field or in another."); *see also* MPEP § 2141.

[47] MPEP § 2141 ("Office personnel should continue to follow the general search guidelines set forth in MPEP § 904 to § 904.03 regarding search of the prior art."); MPEP § 904.

[48] *See* MPEP § 904; *see also* Boldingh, *supra* note 42.

[49] *Id*. ("The first search should be such that the examiner need not ordinarily make a second search of the prior art, unless necessitated by amendments to the claims by the applicant in the first reply, except to check to determine whether any reference which would appear to be

examiner has to assess the results of the search, and then ascertains which are qualified as the prior arts.

(4) Tagging which one as the "prior art"

To reserve sufficient time and energy for the review of claims and the specification, the efficient way is to exclude irrelevant documents through initial filtration. Numerous documents will be found after the overall rough search work; however, not all of the documents found are qualified as "prior art" under 35 U.S.C. § 102. Perhaps several of them will be useless and will have to be excluded at the beginning stage. The initial filtration work is to find qualified and valuable documents for future office actions—for example, ascertaining the critical date and inventorship, and then excluding documents irrelevant to the factor of novelty under § 102 or obviousness under § 103.[50]

In summary, the work of finding and determining the "prior art" is completed by the USPTO officers, who establish the primary framework of future actions. The more correctly and clearly the description of claim terms is done, the more understanding the examiner will get. The unequivocal acknowledgement will help to define the proper scope and the content of the prior art of the invention.

In case *E.I. DuPont De Nemours and Co. v. Monsanto Co.*,[51] the court had to determine whether "the Anton patent"[52] was invalid because of obviousness to the prior art. The claimed patent relates to nylon fibers and a process for manufacturing sulfonated, stain resistant, solution-dyed nylon fibers.[53] The purpose of the Anton invention is to avoid acid dye staining the color nylon fibers when they are operated on with colored pigments. The scope and content of the prior art can be recognized that:

> (1) Solution dyed nylon was known in the art, and (2) it was known in the art that resistance to acid dye staining could be imparted to nylon fibers either with topical stain-blockers, or by copolymerizing certain materials, such as aromatic sulfonates, with the nylon, as disclosed by Flamand, Crampsey, and Ucci. Accordingly, the scope of the prior art is defined as the art of manufacturing nylon fibers, including SDN fibers and acid dye stain-resistant fibers. The content

substantially more pertinent than the prior art cited in the first Office action has become available subsequent to the initial prior art search….").

[50] *See* Boldingh, *supra* note 89.

[51] *See DuPont*, 903 F. Supp. 680 (D. Del. 1995).

[52] U.S. Patent No. 5,108,684 (Issued April 28, 1992).

[53] *Id.* at 719

of the prior art includes the references cited in the Anton specification and the references considered by the Examiner during the Anton prosecution and reexaminations.[54]

The court relied upon the references cited in the specification and the relevant patented documents to draw the scope of the prior art.

2. The level of ordinary skill in the art

Before the determination of the factor of obviousness of patent application, the court has to determine the level of the person of ordinary skill in the art. In the case of *Environmental Design*,[55] the court held that PHOSITA is not a judge, nor a nonprofessional, nor people who are skilled in the irrelevant arts, nor geniuses in the art;[56] however, the court did not define a fixed standard for this factor. Because its nature is flexible and usually changes according to the invention itself, the PHOSITA's level varies widely in different types of inventions.

If the PHOSITA's level is low, he/she might see the invention as non-obvious.[57] In other words, when a PHOSITA has merely basic education or experience in the art, a trivial invention might be non-obvious based on his/her viewpoint. Vice versa, if his/her level is high, small changes in the invention may be obvious to them. In brief, it is easy for a PHOSITA with higher-level skill to draw several prior art references to anticipate the invention.[58]

There are five reference factors to determine the level of ordinary skill in the art: (1) "type of problems encountered in the art," (2) "prior art solutions to those problems," (3) "rapidity with which innovations are made," (4) "sophistication of the technology," and (5) "educational level of active workers in the field."[59] However, it is not necessary to meet all the factors in every

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[54] *Id.* at 751.

[55] *Environmental*, 713 F.2d 693 (Fed. Cir. 1983).

[56] *Id.* at 697.

[57] *Dystar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356,1370 (Fed. Cir. 2006) ("If the level of skill is low, for example that of a mere dyer, as Daystar has suggested, then it may be rational to assume that such an artisan would not think to combine references absent explicit direction in a prior art reference.").

[58] *Id.* ("[T]he level of skill is that of a dying process designer, then one can assume comfortably that such an artisan will draw ideas from chemistry and systems engineering-without being told to do so.").

[59] *Compare* 2141.03 Level of Ordinary Skill in the Art [R-6], MPEP (Sep. 2007), *with In re GPAC*, 57 F.3d 1573, 1579, 35 USPQ2d 1116, 1121 (Fed. Cir. 1995), *and Custom Accessories, Inc. v. Jeffrey-Allan Industries, Inc.*, 807 F.2d 955, 962, 1 USPQ2d 1196, 1201 (Fed. Cir. 1986), *and Environmental*, 713 F.2d 693, 696 (Fed. Cir. 1983) (The previous version of the MPEP in 2006 had six factors. The deleted one was "the education level of the

case, but at least one factor can predominate in a particular issue.[60]

a. Type of problems encountered in the art

In the case *of GPAC,*[61] the invention was related to the techniques involving in asbestos removal art.[62] Because asbestos would contaminate the environment, it was necessary to prevent asbestos from escaping during the processes. The invention was a method and system to control airborne asbestos contamination when asbestos was removed from a building. The theory in the invention was to create negative pressure to be able to retain the airborne asbestos in an isolated space as it was expelled through the filters.[63] The main issue of the case was whether the techniques of the invention were disclosed in the prior art.[64]

The court found that Board of Patent Appeals and Interferences erred in rejecting the claims based on the asbestos primary and secondary references that disclosed the prior art;[65] however, the prior art was disclosed in the other reference, Whitfield.[66]

The Whitfield patent was applied for in 1962 and issued in 1964. It was a utility patent that was mainly used in clean rooms.[67] This type of space was required to be dust-free and could be found in hospital operating rooms.

In brief, the claimed invention was to solve the technical problems in the prior art when the technique was applied in open areas. That is, the technique was good when it was used in closed areas, but it could not function well in open areas. The inventor modified the old technique to fit different environments; however, this modification to the previous technique was obvious to the person with ordinary skill in the art.

b. Prior art solutions to those problems

This factor is usually treated simultaneously with the "type of problems encountered in the art" when the determination of the level of skill is

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inventor.").

[60] *Environmental,* 713 F.2d 693, 696 (Fed. Cir. 1983).

[61] *In re GPAC,* 57 F.3d 1573 (Fed. Cir. 1995).

[62] U.S. Patent No. 4,604,111 (filed May 20, 1985).

[63] *In re GPAC,* 57 F.3d 1573, 1575 (Fed. Cir. 1995).

[64] *Id.* at 1583.

[65] *Id.*

[66] U.S. Patent No. 3,158,457 (filed May 14, 1962) (Whitfield created "an ultraclean room within which high flow rate, continuously circulated air performs a sweeping function over the work area to remove dust from the air.").

[67] *Id.*

made.[68] It means that the comparison of the prior solution to the invention can demonstrate the merits of the invention.

In *Messerschmidt v. United States*,[69] the subject at issue was a "Helicopter Control Device", which was used to inhibit the problems of cross-coupling. The prior art solution to the problem was to use a friction device which was not a mechanical design (unsuccessful) but a computer-aided design, to "brake or lock certain axes during movement between the individual axis to solve the problems."[70] Similarly, the invention also consisted of the same basic elements as the prior art solution to form a locking device; however, it was mechanically designed.[71] The court adopted the testimonies of the experts in the art as to functional and structural differentiation.[72] The seven PHOSITAs have either bachelor's degrees in aerospace engineering or master's degrees in mechanic engineering, and all have many of years experience in the art of relevant control design.[73]

c. Rapidity with which innovations are made

There has been no court applying this factor until now;[74] however, the parties in the court have used the factor as arguments.[75] For example, in *Studiengesellschaft Kohle mbH v. Dart Industries, Inc.*,[76] the court did not accept the party's arguments that the rapidity of invention could be counted as a factor which leads to "obviousness" in the eyes of the PHOSITA.[77]

In theory, if technology can rapidly reach innovation, it means that perhaps there is no big obstacle to develop this technology. This result also matches the purpose of the patent system. Therefore, some debates about this condition are raised.[78] "Is it proper to grant many patents in this field?" "Will patent grants hinder subsequent developments?" "Is the innovation so

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[68] *See, e.g.*, Meara, *supra* note 56 at 381.
[69] 29 Fed. Cl. 1, 21 (1993).
[70] *Id.* at 33.
[71] *Id.*
[72] *See Id.* at 63-65.
[73] *See Id.*
[74] *See also* Meara, *supra* note 56 at 281.
[75] *Id.*
[76] 549 F. Supp. 716 (D. Del. 1982).
[77] *Id.*; *see also* Meara, *supra* note 56 at 281.
[78] *See* John W. Schlicher, *Biotechnology and the Patent System: Patent Law and Procedures for Biotechnology, Health Care and Other Industries,* 4 U. Balt. Intell. Prop. L.J. 121, 131 (1996) ("If technical change in a particular technology appears to be slow, that is no reason to try to issue more patents to speed it up. Conversely, if technical change appears to be very fast, that is no reason to issue fewer patents to try to slow the pace.").

obvious to the PHOSITA, because it requires little effort to make an innovation?" In several cases—for example, *Computrol, Inc. v. Lawrence Electronics, Inc.*[79]—the patentee argued that technology with the feature of rapid changes needs more protective means, like the patent system, because it demands its benefit from a monopoly of the market.[80] Notwithstanding, those debates cannot propose apparent evidence to prove the relationship with the patent grants. Therefore, it is proper for the administrative authority not to have prejudice when it evaluates patent applications in this type of technology,
but to grant patents based on the requirements of the patent law and relevant regulations.[81]

d. Sophistication of technology

This factor is mainly related to the suggestion test's "rule of evidence."[82] In other words, when the invention is more complex, the detailed description of the specification is essential for meeting the requirement of the disclosure of the patent; otherwise, the disclosure does not contain the content of teaching and suggestion to the other inventors who pursue their inventions in the relevant arts.[83]

In theory, the PHOSITA's skill level in the claimed art should be higher when the invention is more complex than usual.[84] Especially, when the complexity oftechnology is higher, it is improper to instruct the jury or nonprofessionals to decide the factual issue during the trial.

Although the court did not mention how to apply this factor, we still can trace the clues in the cases. With a less technologically complex invention, for example, *In re Dembiczak*,[85] the invention at issue was a large trash bag. The bag was made of orange plastic and decorated with lines and facial features. Its appearance looked like a Halloween-style jack-o'-lantern. The only difference between the invention and the prior art was "the application of

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[79] 893 F. Supp. 1440 (D. Idaho 1994).

[80] *Id.* at 1456 (The patentee sought for preliminary injunction and argued that when the technology is in a competitive condition and its changes is very quickly, "any technical advantage may be temporary and fleeting". Therefore, "exclusivity is necessary" for the inventor to "benefit fully from the competitive advantage that flows from innovation.").

[81] *See* Schlicher, *supra* note 125 at 131.

[82] *See* Christopher Cotropia, *Patent Law Viewed through an Evidentiary Lens: The "Suggestion Test" as a Rule of Evidence*, Tulane Public Law Research Paper No. 06-03 (March 2006), *available at* http:// ssrn.com/abstract=893965.

[83] *Id.* ("The more complex the invention, the greater detail and analysis needed for the undocumented suggestion evidence to be 'admissible.'"); *see also* Meara, *supra* note 56 at 283.

[84] *In re GPAC*, 57 F.3d 1573 (C.A. Fed. 1995).

[85] 175 F.3d 994 (Fed. Cir. 1999).

the facial indicia to the outer surface of the bag."[86] The court had to determine whether the invention was obvious or not. She pointed out that the designer and manufacturer of trash bags, who particularly specialized in the ornamental and graphic design of such bags, would not be aware of the prior art and could not combine it into a conventional trash bag to render this invention.[87]

From the above mentioned, it can be inferred that the relationship between the complexity of invention and the level of skill in the art is not so closely connected. That is, the factor of technology in this case is transferred to the factor of "technique or art" in this type of invention. Therefore, even if an invention includes a subtle changein its appearance and no complexity of technology, its patentability is not affected.[88]

To the complex technology or pioneer research and development, the treatment of this factor is much different from the less technologically complex invention. For example, *Mobil Oil Corp. v. Amoco Chemicals Corp.*,[89] the invention at issue is a Zeolites. It has natural and synthetic crystalline forms, which are useful in various applications, including uses in the petroleum industry and many kinds of relevant applications. The initial study started in the 1800s and several subsequent research projects demonstrated its remarkable characteristics. Some companies have added various elements to synthesize new compounds to achieve their applications since the 1990s.[90] Different knowledge is needed to accomplish the synthesis of these new compounds. For example, the analysis of characteristics requires X-ray diffraction techniques and methods of conducting elemental analysis. In addition, the technique of the mass production of these materials is different from that of the lab production; actually, it is more complex.

The facts also showed that workers in this field had either a doctoral degree or a bachelor's degree with many years of relevant experience. The court, however, thought that a chemist with only a bachelor's degree and two-year work experience would not match the PHOSITA's level.[91]

As a result, the proper PHOSITA's level should be one with a master's degree.[92] The educational level in this case means the level of qualification.

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[86] *Id.* at 998.

[87] *Id.* at 1001.

[88] *Id.* at 999 ("[T]he best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.").

[89] 779 F. Supp. 1429, 1442-1443 (D. Del. 1991).

[90] *Id.* at 1443-444.

[91] *Id.* at 1443.

[92] *Id.* (finding that the skill level of PHOSITA should be the average level between bachelor's degree and doctoral degree).

It can be inferred that the level of skill of the PHOSITA was raised when the complexity of technology was upgraded.

e. **Educational level of active workers in the field**

Persons who are related to the PHOSITA's educational level can be divided into two different groups: one is inventors and the other is active workers. There were several cases using the former factor to determine the PHOSITA's level, such as *Environmental Designs*.[93] However, in the case of *Kimberly-Clark Corp.*,[94] the court found that the PHOSITA was not the inventor.[95] Notwithstanding, the educational level of inventors can serve as an indicative reference to the PHOSITA's educational level, such as *Orthopedic*.[96]

The current version of the Manual of Patent Examining Procedure (MPEP) of theUSPTO excludes the factor of educational level of inventors, but includes the factor of the educational level of active workers.[97] Although both the Federal Court and the USPTO have adopted the factor of the educational level of active workers in the field to determine the level of skill in the art, they have no comments on the application to this factor.[98] Moreover, the educational level does not mean that it is necessary for a PHOSITA to have a formal academic degree.[99] Most workers in the accused art go directly to work after graduating from high school and do not pursue a bachelor's degree in their lives.[100] In *Chem. Separation Tech. Inc. v. United States*,[101] the court found that having a formal academic degree could not represent the person who would be viewed as skilled in the art.[102]

Nevertheless, some courts have alluded to the range of educational level in their judgments. For example, In *Bose Corp. v. JBL, Inc.*[103] the court found that

[93] *Environmental*, 713 F.2d 693, 696, 218 USPQ 865, (Fed. Cir. 1983).
[94] *Kimberly-Clark Corp. v. Johnson & Johnson*, 745 F.2d 1437 (Fed. Cir. 1984).
[95] *Id.* at 1454 ("[H]ypothetical person is not the inventor, but an imaginary being possessing 'ordinary skill in the art' created by Congress to provide a standard of patentability.").
[96] *Orthopedic Equip. Co. v. All Orthopedic Appliances, Inc.*, 707 F.2d 1376, 1383 (Fed. Cir. 1983) ("[T]he educational level of the inventor may be a factor to consider in determining the level of ordinary skill in the art, it is by no means conclusive.").
[97] 2141.03 Level of Ordinary Skill in the Art [R-6], Manual of Patent Examining Procedure (Sep. 2007).
[98] *See* Meara, *supra* note 56 at 280.
[99] *Penda Corp. v. United States*, 29 Fed. Cl. 533, 573 (1993) (considering the reference to the criterion "education" not only limited to formal education, but also to informal education and practical experience).
[100] *Id.*
[101] 51 Fed. Cl. 771 (Fed. Cl. 2002).
[102] *Id.* at 790.
[103] *Bose Corp. v. JBL Inc.*, 112 F. Supp.2d 138 (D. Mass. 2000).

if a person had worked in loudspeaker design for two or three years and "having kept up with current literature and trade magazines to keep abreast of new developments," he would be supposed to know about the aerodynamics, fluid flow mechanics, and acoustics.[104] He could compete in knowledge with a person who had "a bachelor of science degree in electrical engineering, physics, mechanical engineering, or possibly acoustics."[105] In *Dystar*,[106] the court further confirmed that a person who only had a high school education might be able to handle non-difficult work; however, he was unable to design better dying procedures.[107]

With regard to the rare technology or pioneering inventions, the educational level of workers in the field is not determinative. For example, the case of *ITT Corp. v. United States*[108] was related to the development of fiber in the 1970s.[109] At that time, there was no such information or relevant courses offered in any college or university.[110] Hence, working in this special field were people with different educational backgrounds, including physics, mechanical engineering, and electrical engineering; their educational levels ranged from high school to master's degrees.[111]

In addition to the implication of the lower limitation of educational level, some cases have also discussed the upper limitation of educational level. In general, it is improper to see the educational level of a PHOSITA and that of the inventor in the same way. If so, every invention will be seen as obvious to PHOSITAs─not to mention to experts─and will not be patentable.[112] The court also found that users and developers of the arts could be seen as the same group, except in some special fields.[113] For example, people who are engaged in research and development in the modern medical industry are different from the people who diagnose patients and prescribe known treatments.[114] That is to

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[104] *Id.* at 154-155; *see also* Meara, *supra* note 56 at 281.
[105] *Id*. at 155.
[106] 464 F.3d 1356 (Fed. Cir. 2006).
[107] *Id.* at 1362-63 ("Designing an optimal dyeing process requires knowledge of chemistry and systems engineering, for example, and by no means can be undertaken by a person of only high school education whose skill set is limited to 'flipping the switches'.").
[108] 10 Cl. Ct. 321 (1986).
[109] *Id.* at 331-332.
[110] *Id.*
[111] *Id.*
[112] *Dayco Products, Inc. v. Total Containment, Inc.*, 258 F.3d 1317, 1324 (Fed. Cir. 2001) (interpreting the claims from the viewpoint of the PHOSITA, instead of counsels or experts).
[113] *Daiichi Sankyo Co. v. Apotex, Inc.*, 501 F.3d 1254, 1257 (Fed. Cir. 2007) (holding inventors specializing in otorhinolaryngology, clinical development, new drug development or clinical trials and in the research and development of antibiotics with the same skill level).
[114] *Id.*

say, even if a general practitioner or a pediatrician is able to prescribe the invention drug to treat ear infections, he/she is not qualified to develop the patented drugs without special education or experience as the patent's inventor.

To sum up, the range of educational level varies from the bachelor's degree or its equivalent to the doctoral degree or its equivalent. At the basic limitation, the courts treat the workers having worked in the art for more than two years the same as the persons having formal academic degrees in the art. Similarly, as to the upper limitation of educational level, the court considers PHOSITAs to be specialists having professor-level positions and engaging in special topics at research institutes. The educational level of PHOSITA varies in each invention according to the claimed techniques involved in the invention. Therefore, although the range is wide, the scope in each case is focused on a certain level depending on the invention itself.

III. The qualifications of patent examiners of the USPTO

As discussed above, the definition of PHOSITA is still vague and needs advanced discoveries based on other references. A patent examiner is not equal to a PHOSITA, but he/she is absolutely the best role to help give a clear scope of a PHOSITA because his/her role is so closely connected to the claimed invention during the prosecution.

The academic background of patent examiners can be divided into three main fields— engineering, life science and physical science—according to the positions of the applicants.[115] The first group covers fourteen subfields, including aeronautical, agriculture, biomedical, ceramic, civil, chemical, electrical, engineering physics, general, industrial, mechanical, metallurgical, nuclear, and petroleum engineering.[116] The second group cover five subfields, including biology, microbiology, biochemistry, botany, horticulture, and pharmacology.[117] The third group covers two subfields, including chemistry and Physics.[118] In addition to that above areas of expertise are primarily for utility patents, the other special areas of expertise for design patents are also in demand, such as industrial design, visual design, and so on.

The academic level of an applicant for a position as a patent examiner is required to be at least a bachelor's degree, or equivalent training, or practical

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[115] *See* Patent Examiner Positions, USPTO, http://www.uspto.gov/web/offices/pac/exam.htm (last visited May 1, 2015) (The main job of patent examiners is to determine the scope of the privilege of claimed invention, to research the technologies related to the claimed invention, to communicate with patent practitioners or inventors on the issue of patentability.).

[116] *Id.*

[117] *Id.*

[118] *Id.*

experience.[119] For example, an applicant who specializes in microbiology has to complete four years of study and get a bachelor's degree in a relevant major, like biology or chemistry, and is required to have at least 20 credit hours in microbiology, as well as relevant subjects.[120]

With the more complex and practical technology, such as electrical engineering, the USPTO had illustrated the applicants' required qualifications. The qualifications of applicants could be divided into two groups: a degree in professional engineering and a combination of education and experience. The former applicants had to take at least one professional engineering curriculum program which was accredited by the Accreditation Board for Engineering and Technology (ABET) and some advanced courses in five different fields of science or engineering (except for first-year courses), such as physics, mathematics, and chemistry. The latter applicants had to take college-level courses, or have technical experience in specified engineering with enough knowledge of physical and mathematical science and have good understanding

of both theory and practice.

IV. Who is involved much more in the work of claims

Besides the above discussions of the objective standard regarding PHOSITAs, another approach is to find who is closely connected to claims. Of course, inventors are the native mothers of their inventions because they make their ideas come true. However, they do not add legal meanings to their ideas until the claims are expressed in words. Claims are usually written by professional drafters who get information from inventors. A patent drafter can be viewed as a "surrogate mother" because he/she gives the idea a legal sense. The strength or energy of the "baby"—the scope of idea—is temporarily fixed when a patent drafter illustrates the claimed invention in general or specific terms.

The idea does not get its legal position until the application documents are sent to the patent office. The baby is born when the umbilical cord is cut and he/she is isolated from his/her mother, but the claimed invention does not obtain its legal position when the draft is completed. The claimed invention has to be reviewed and revised to satisfy the requirements of the Patent Act when it is filed at the patent office. The review is based on the combination of information

supplied to patent examiners and their education and work experience. The revision to claims or specification is a result of negotiation between the inventor(s) and examiner, or among the inventor(s), the examiner, and the drafter in patent

[119] *Id.*
[120] *Id.*

prosecution. A patent examiner can be seen as an "adoptive mother" of the idea with legal guardianship because he/she can request that the inventor revise the specification or the claims upon the administrative right.

The subsequent arguments over the scope of patent rights are primarily based on the application files and the office actions, which are restricted by the principle of estoppel.[121] This principle forbids inventors from withdrawing the waived rights so that the scope of rights is roughly defined. It can be inferred that the most important roles in determining the initial scope of patent right are played by patent drafters and patent examiners,[122] specifically for patent examiners having the review right.

V. Other jurisdictional definitions

EPC (European Patent Convention) uses the "problem and solution" approach to determine a PHOSITA; i.e., the technical problem is solved based on the disclosure.[123] The PHOSITA is permitted to combine a primary technique with a secondary technique to solve the problem.[124] As to the complex techniques, such as the genetic engineering, the PHOSITA may form a team to work out the problem.[125] Similar to their U.S. counterpart, the skill or ability of the PHOSITA does not have inventive ingenuity.[126] Besides, the PHOSITA is cautious and conservative, but can adopt known methods related to the art to solve the problem.[127]

In Asia, Japan has similar regulations; however, judges of the Japan Intellectual Property High Court mainly rely on the assistance of technical commissioners who are former patent examiners working exclusively for the JIP court; therefore, the abstract role of PHOSITA is played by one with

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[121] *See, e.g.*, *Cybor*, 138 F.3d at 1460.

[122] *See Johnson*, 285 F.3d at1057 (Fed. Cir. 2002) (en banc) (imposing a duty on patent drfters to draft broad terms to claim a foreseeable right because they are PHOSITAs who are able to foresee the "insubstantial variation" infringment).

[123] *See* Lan Muir, Matthias Brandi-Dohrn and Stephan Gruber, *European Patent Law*, 156 (2d 2002).

[124] *Id.* at 156, 192 (quoting T 32/81-OJ 1982, 225-Five Cail Babcock).

[125] *Id.* at *156 (*quoting EPO T 460/87-CLBA 1996-VISCOSUD*);* at 192 (quoting T 60/89-OJ 1992, 268-Harvard). *See also* M.J.W. Atchley, *European Patents Handbook : Including Patent Cooperation Treaty Material / Chartered Institute of Patent Agents,* 3/50 *(*quoting T 60/89 and T 301/87).

[126] *Id.* at 192.

[127] *See* Atchley, at 3/49.

expertise.[128] Taiwan has a similar system as that of Japan. [129]

Similarly, Germany has established its Federal Patent Court, which introduces technical judges into patent litigation.[130] This specialized court is set up to improve the uniformity and consistency of court decisions in patent disputes.

VI. Conclusion

Through the analysis of several factors related to the PHOSITA, we can find that some factors are properly defined as "PHOSITA" in specific cases. For example, a PHOSITA is not required to have a high academic degree or to understand all related knowledge, but he/she must at least have a basic education, such as the level of high school. In addition, he/she should have some profound understanding of the techniques at issue, and be able to compete with the people with bachelors or higher degrees. Nevertheless, the PHOSITA has to be defined respectively in each case depending on the nature of the specific technique. That is, it is difficult to give "PHOSITA" a unified definition to apply to all cases.

In addition, we can get a significant impression of the role of patent drafters and patent examiners during the patent prosecution and the patent litigation.[131] If we want to comprehend the abstract definition of PHOSITA and to search for a candidate for a PHOSITA position, patent drafters and examiners are close to embodying the above-mentioned factors and can be objective models of PHOSITAs, except for competitors and infringers of the issued patent. [132]

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[128] *See* Takuya Ueda, *A Japanese View on Questions raised by Phillips v. AWH Corp.*, http://www.ip.courts.go.jp/documents/pdf/topics/051118.pdf (last visited May 1, 2015) (Judge, Japan Intellectual Property High Court).

[129] http://ipc.judicial.gov.tw/en/ (last visited May 1, 2015).

[130] *See* Germany Federal Patent Court, https://www.bundespatentgericht.de/cms/index.php?lang=en (lasted visited May. 1, 2015).

[131] *See* John M. Golden, *Construing Patent Claims According to Their "Interpretive Community": A Call for an Attorney-Plus-Artisan Perspective*, 21 Harv. J.L. & Tech. 321 (proposing that claim construction is governed by the patent attorney or agent who can access to the knowledge of PHOSITA).

[132] *See* Rebecca S. Eisenberg, *Obvious to Whom? Evaluating Inventions From the Perspective of PHOSITA*, 19 Berkeley Tech. L.J. 885 (proposing that patent examiners, former technology practitioners, are the objective role to review the obviousness factor by the assistance of current outside technology practitioners). *But cf.* Toshiko Takenaka, *A Person of Ordinary skill in the Art and the Extent of Patent Protection*, Festschrift für Jochen Pagenberg 81 (2006) (proposing that Circuit court marginalizes the role of a PHOSITA by applying a teaching-suggestion-motivation rule to assess the non-obviousness factor).

The Reform of the EU Data Protection Framework: A Better Way to Member States?

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ABSTRACT

This essay aims to evaluate the debate about the pros and cons of the proposed EU General Data Protection Regulation of 2012. Concentrating on purpose and objective of the law, arguments presenting negative issues about the proposal can be briefly sketched out: (1) dilemma between promoting free flow of personal data to function internal market of the EU and protecting fundamental rights and freedoms is uneasy to be dealt with; (2) there are practical obstacles of transferring the Directive to the Regulation; (3) the proposed General Regulation is too complex and vague to follow; and (4) with respect to the objective of the EU data protection law, once information qualifies as identified or identifiable, it falls under the data protection regime.

On the basis of acceptance of a broad conception of privacy, I argue that the promotion of a workable internal market and the protection of personal data, in particular the right to privacy, can be achieved at the same time without unnecessary crash. However, it should be noted that there are limitations with respect to broad conception of privacy. Moreover, I agree with Solove and Schwartz's argument: not every type of risk to privacy should be treated the same. However, I argue that this idea is not new in the EU data protection law regime.

I. Introduction

This essay aims to critically evaluate scepticism about the proposed EU[1] General Data Protection Regulation (General Regulation hereafter) on personal

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[1] The Treaty of Lisbon amending the Treaty on European Union (TEU) and the Treaty establishing the European Community has entered into force on 1 December, 2009. Consequently, as from that date, references to the EC shall be read as the EU.

data protection,[2] in particular the purpose and objective of the law. The Directive is a significant milestone of the European data protection model.[3]Before the Data Protection Directive,[4] there was no effective and specific international instrument which focused on interferences through the processing of personal data. It is a main regulatory instrument in Europe, extends its worldwide influence (Article 25 of the Directive).

The Directive considers both the human rights approach and the economic approach from which it aims to harmonise data protection legislation of member states (Article 1 of the Directive). However, dilemma between promoting free flow of personal data to function internal market and protecting the fundamental rights and freedoms of nature persons is commented as rather troublesome in the field of science and technology. Limitations of collecting, processing and using personal sensitive data, for example, are considered as barriers on biomedical research improving human health. As those scientists commonly argue, such interests are diminished by the personal data protection barriers.[5] On the basis of this logic, biomedical scientists may feel even more upset on the reform of the General Regulation. This is because, being impressed from the outset, the proposed General Regulation seeks to reinforce the position of data subjects and enhance the responsibility of data controllers. To them, unsurprisingly, more responsibility of the controllers means higher cost and more limitations on using samples and personal data from individuals. Moreover, the European data protection model is notoriously complex – it might even be considered as too complex to achieve the ultimate goal of full harmonisation within the EU.[6]

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[2] European Commission, 'Proposal for a Regulation of the European Parliament and of the Council 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)' (2012) <http://ec.europa.eu/justice/data-protection/document/review2012/com_2012_11_en.pdf> accessed 30 Janurary 2012.

[3] The difference between the European and US model of data is best described by Francesca Bignami:
'[i]n the European Union, privacy is essential to protecting citizens from oppression by the government and market actors and preserving their dignity in the face of opposing social and political forces. In the United States, privacy is secondary.' Francesca Bignami, 'Transgovernmental Networks vs. Democracy: The case of the European Information Privacy Network' (2005) 26 MICH J INT'L L 807. See also, Joel Reidenberg, 'Setting Standards for Fair Information Practice in the U.S. Private Sector' (1995) 80 IOWA L REV 497, 500.

[4] 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 [1995] OJ L 281.

[5] E.g., *R v Department of Health ex p. Source Informatics* [2001] QB 424.

[6] Peter Blume, 'Will it be a better world? The proposed EU Data Protection Regulation' (2012) 2 International Data Privacy Law 130-136.

However, it should be noted that the above argument holds a presumption that the interests of internal market (e.g., research interests) and data protection rights, in particular the right to privacy, is always competing. In other words, this presumption excludes/ underestimates the possibility that both interests considered may be fostered and protected in an optimal way since it sees the balancing test as weighing one interest against the other. The above thinking has been termed the conflict model.[7] On the basis of this model, the purpose of the General Regulation thus presents new challenge to scientists. Two problems can be identified in this respect. Firstly, can the proposed General Regulation perfectly improve the position of data subject and, ultimately, harmonise transnational data processing within the EU internal market? Secondly, can the competing interests of both side of data processing being capable of supporting each other?

In my view, both questions can be answered. The essay consists of five chapters including this introductory remark as its section 1. To arrive at a background understanding of the reform of the EU data protection law regime, I provide an overview of the purpose and objective of the Data Protection Directive and the proposed General Regulation in section 2. This is followed by a section addressing scepticism about the high cost of implementation and the problem of conceptualising personal data of the proposed General Regulation. In section 4 I will evaluate criticisms addressed in section 3. I argue that the acceptance of a broad conception of privacy is capable of dealing with the issue at stake. However, there are limitations on the European expansionist approach of personal data protection. As regards the way of implementation, I argue that the minimal-regulation model in this field may not be adequate. Indeed, there are practical difficulties to the proposed reform. However, at least the reform presents a good start.

II. The Directive and roposed Regulation

a. The EU Data Protection: A Complex Nature

The EU is under an obligation to uphold international law when exercising its powers.[8] Article 12 of the Universal Declaration of Human Rights

[7] Deryck Beyleveld, 'Conceptualising Privacy in Relation to Medical Research Values' in Sheila AM McLean (ed), *First Do No Harm: Law, Ethics and Healthcare* (Ashgate Publishing 2006) 155.

[8] Case C-286/90 *Anklagemyndigheden v. Poulsen and Diva Navigation* [1992] ECR I-6019, para 9. Paul Craig and Gráinne De Búrca, *EU Law: Text, Cases and Materials* (5th edn, OUP 2011) 341.

(UDHR)[9] states that:
No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks.

This principle is echoed in Article 17 of the International Covenant on Civil and Political Rights (ICCPR). According to Article 216(2) TFEU,[10] if international agreements are entered into by the EU, those agreements are held to be an integral part of the EU legal order.[11] However, it should be noted that the EU is not a party to any of these aforementioned international instruments and the Union itself is not directly bound by them (although individual member states that have ratified these instruments will be).

The data protection principles stated by both the OECD Guidelines (paragraph 6) and the Data Protection Convention[12] (Article 11) are to be considered as minimum standards. It has been observed in a RAND report,[13] however, that there was considerably little harmonisation between these two regulatory texts before the introduction of the Data Protection Directive. This might be explained by the nature of these two instruments: while one is introduced for economic reasons, the other's purpose is to protect fundamental rights.[14] The variation of regulatory instruments at national level led to a barrier to the fluent exchange of personal data which is contained in both of the private business sector and the public sector. This characteristic is crucial to later discussions of this work. Influencing every pillar of the EU, therefore, the need to establish a foundation for a proper harmonisation, particularly in terms
of the first pillar, was then reflected in the Data Protection Directive.[15]

After the introduction of the Data Protection Directive, several related instruments concerning different sectors for processing personal data were

[9] It was proclaimed by the General Assembly of the United Nations on 10th December 1948. Available at: < http://www.un.org/en/documents/udhr/> accessed 28 February, 2010.

[10] I.e., Article 188L, which is the article number used in the text of the Lisbon Treaty.

[11] Case 181/73 *Haegeman v Belgium* [1974] ECR 449, para. 5. Under this circumstance, the member states are bound by international agreements as a result of their duties under Community law, not international law. See Case C-239/03 *Commission v. France (Etang de Berre)* [2004] ECR I-9325, para 26. Also, Craig and Búrca 344.

[12] Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data, ETS no. 108, 1981.

[13] Neil Robinson and others, *Review of the European Data Protection Directive* (Technical Report, 2009).

[14] It is noted that if one reads these two values separately, they are prone to coming into conflict. To ensure a more harmonised application of the law, a broad concept of privacy should be accepted.

[15] This is addressed through the Recitals 7-10 of the Data Protection Directive.

issued. With respect to electronic communications, particularly the internet, for example, Directive 2002/58/EC was issued in 2002.[16] Moreover, in terms of retention of information concerns in public communication networks or electronic communications services, the EU issued Directive 2006/24/EC (Data Retention Directive) [17] which amended Directive 2002/58/EC. The Data Retention Directive specifically applies to data protection in law enforcement activities.[18] The EU then issued Directive 2009/136/EC on universal service and users' rights relating to electronic communications networks and services amending Directive 2002/58/EC.[19] This Directive draws attention by requiring informed consent before information is retained or accessed in the users' terminal device under Article 5.3.20

Article 1 states the objective of the Data Protection Directive and is a key to the interpretation of all of the later elements of the Directive. At the pre-Lisbon stage, according to Article 1.1, for the purpose of a harmonised manner of the internal market, the Data Protection Directive aims to safeguard fundamental rights and freedoms of natural persons, especially the right to privacy, in order to enable the free flow of personal data from one EU Member State to another. In sum, under the Data Protection Directive, data protection covers the protection of all fundamental rights and freedoms regarding personal data, and in particular (but not only) the right to privacy.

Three points need to be noted here. Firstly, the Directive does not give a clear indication as to whether or not it concerns itself with striking a balance

between single market objectives and the protection of fundamental rights and

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[16] Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications), OJ L 201, 31/07/2002 P. 0037 – 0047.

[17] Directive 2006/24/EC of the European Parliament and of the Council of 15 March 2006 on the retention of data generated or processed in connection with the provision of publicly available electronic communications services or of public communications networks and amending Directive 2002/58/EC, OJ L 105, 13/04/2006 P. 0054 – 0063.

[18] Francesca Bignami, 'Privacy and Law Enforcement in the European Union: The Data Retention Directive' (2007) 8 Chicago Journal of International Law 233-255.

[19] Directive 2009/136/EC of the European Parliament and of the Council of 25 November 2009 amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services, Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector and Regulation (EC) No 2006/2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws, OJ L 337,18/12/2009, P. 0011-0036.

[20] This article has profound impact on the usage of cookies on the internet. For detailed discussion and opinions in relation to the consent exemption, see: Article 29 Data Protection Working Party, *Opinion 04/2012 on Cookie Consent Exemption* (No 00879/12/EN, WP194, 2012).

freedoms. However, before the Lisbon Treaty of 2009, the Directive (Article 1.2) per se shall not be misinterpreted as the purpose of the Directive is to essentially strike a balance between fundamental rights and internal market. This is because the central purpose of the Directive is to **enable the free flow of personal data** between the EU member states. At the post-Lisbon stage, nevertheless, as required by Article 6 TEU, human rights provisions in the EU Charter of Fundamental Rights have been upgraded as possessing the same binding legal effect as the Treaties. Yet, as Craig and De Búrca comment,

> "…the legacy of the EEC's roots in the common market project remains significant since, despite its constantly changing and expanding nature, the EU's dominant focus remains economic, and the debate over the appropriate scope of its human rights role remains even after the important changes introduced by the Lisbon Treaty."

In this regard, it has been suggested that this is best viewed as 'internal' to the activity of the protection of fundamental rights and freedoms.[21] Indeed, 'the economic well-being of a country' in relation to interests brought by the free flow of personal data between the EU members *can also be regarded as a type of interest concerning private life under the heading of the right to private life in Article 8(1),* or *the public interest laid down by Article 8(2)*. With the idea of the internal activity of protecting the right to private life, it is not necessary to have a conflict between the protection of fundamental rights and freedoms as such and any other factors (e.g., the free movement of personal data between the EU members). To view this matter internally, therefore, can avoid the unnecessarily and inconsistency with the notion of integrity of protecting fundamental rights and freedoms. [22] This is consistent with the broad concept of privacy[23] held by the opinions of the ECtHR and remains valid after the introduction of the Lisbon Treaty. Moreover, this idea is even more crucial with reference to rapid technological developments and globalisation which require 'further facilitat[ion of] the free flow of data within the Union and the transfer to third countries and international organisations, while ensuring a high level of the

protection of personal data.'24

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[21] Deryck Beyleveld, 'An Overview of Directive 95/46/EC in Relation to Medical Research' in Deryck Beyleveld and others (eds), *The Data Protection Directive and Medical Research Across Europe* (Ashgate Publishing 2004) 7.

[22] Ibid.

[23] I will explain this and provide a brief justification in this regard later.

[24] European Commission, Recital 5. In the 2012 EU General Data Protection Regulation, it is

Secondly, to interpret the fundamental rights and freedoms set out in Article 1, the rights recognised in the ECHR, which have been treated by the ECJ as a 'special source of inspiration' for EU human rights principles[25] and required by Article 6(2) TEU to accede to the ECHR, must be taken into account.[26] Lastly, as regards to the principles of fundamental rights and freedoms, which have been clarified by the ECJ to view the Charter as the principle basis,[27] Recital 11 gives substance to and amplifies those contained in the Data Protection Convention.

b. The Proposed General Regulation: a Way to Harmonisation

The Problem of the Directive: Too Flexible to Achieve the Goal

Before assessing the price of implementation the proposed General Regulation in the following section, it is essential to understand the related problem of the Directive. According to Article 288 TEU, Member States must ensure the compliance of their domestic legislation with the directive before the end of the implementation period expires. The Data Protection Directive requires implementation in Member States by 24th October, 1998. Data protection legislation has been implemented by most EU Member States at various stages (although only Sweden met the deadline).[28] EU legislation often calls for implementing action by the national authorities. However, in England and Wales for example, some important matters are dealt with through an Act of Parliament – in this case, the Data Protection Act (DPA).[29]

It is observed by Craig and De Búrca that one of the most problematic

issues is the doctrine of direct effect of EC law.[30] For example, due to the weak nature of Article 258 TEU, direct effect could only be applied in public enforcement law.[31] For private enforcement law aspects (which individuals can

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stated in Article 1(3) that 'The free movement of personal data within the Union shall neither be restricted nor prohibited for reasons connected with the protection of individuals with regard to the processing of personal data.'

[25] Craig and Búrca 362.

[26] The draft accession agreement of the European Union to the European Convention on Human rights has been worked out by member states of the CoE. See: The Council of Europe, 'EU Accession to the Convention' (2013) <http://hub.coe.int/what-we-do/human-rights/eu-accession-to-the-convention> accessed 15 November 2013.

[27] Craig and Búrca 362. It should be noted, however, the UK, Poland, and the Czech Republic negotiated a protocol to the Lisbon Treaty with respect to the impact of the Charter.

[28] The Status of implementation of data protection Directive 95/46/EC could be found at: <http://ec.europa.eu/justice_home/fsj/privacy/law/implementation_en.htm#ukingdom> accessed 24 April 2010.

[29] Colin Turpin and Adam Tomkins, *British Government and the Constitution* (6th edn, CUP 2007) 321. For a detailed description and analysis of the DPA, see: Peter Carey, *Data Protection: A Practical Guide to UK and EU Law* (3rd edn, OUP 2009).

[30] Craig and Búrca 180.

[31] Paul Craig, 'Once upon a Time in the West: Directive Effect and the Federalization of EEC

use to challenge local courts and national action that are against the Community legal order), the ECJ offers direct effects with certain conditions, which were gradually loosened by the ECJ.32

This also occurs with regards to the effect of directives. The ECJ held the opinion that directives could have direct effect in principle in the *Van Duyn*[33] and the *Ratti* case.[34] However, the ECJ gives the consistent opinion that directives are capable of direct effect merely in a *vertical* way, meaning that they could be brought before the courts against the States (or state entities), but do not have *horizontal direct effect* which imposes obligations on a private party.

As regards the indirect effects of directives, the ECJ holds that, in many aspects, the Member States have some freedom of action in implementing the directives. However, this is not unlimited.[35] In the *Marleasing* case[36] and in later cases such as *Johnson v MDU*,[37] the ECJ held that the national court's obligation is to interpret domestic legislation, so far as possible, in the light of the wording and purposes of a directive and thereby comply with EU obligations. This includes the obligation arising from a directive, which applies even in a horizontal situation. Furthermore, in the *Von Colson* case[38] the ECJ established the principle of consistent interpretation,[39] according to which national courts are under an obligation to interpret national law *at all possible* to avoid a conflict with the Community law.[40] Also, the supremacy of EC/EU

law is declared since the *Van Gend en Loos* case[41] and the UK courts has

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Law' (1992) 12 Oxford Journal of Legal Studies 453. Also, Craig and Búrca, *EU Law: Text, Cases and Materials* 181.

32 Craig and Búrca, *EU Law: Text, Cases and Materials* 181, 186-188.

33 Case 41/74 *Van Duyn v. Home Office* [1974] ECR 1337, para 12.

34 Case 148/78 *Pubblico Ministero v. Tullio Ratti* [1979] ECR 1629, para 23.

35 Case C-553/07 *The College van burgemeester en wethouders van Rotterdam v Rijkeboer* [2009], paragraph 56.

36 Case C-106/89 *Marleasing SA v La Comercial Internacional de Alimentación SA* [1990] ECR I-4135.

37 *Johnson v Medical Defence Union* [2007] EWCA Civ, para 90.

38 Case 14/83 *Von Colson and Kilmann v Land Nordrhein-Westfalen* [1984] ECR 1891.

39 Paul Craig and Gráinne De Búrca named this as 'the principle of harmonious interpretation'. See Craig and Búrca, *EU Law: Text, Cases and Materials* 200-207.

40 It is worth noting that in *Marleasing SA v La Comercial Internacional de Alimentación SA*, it goes further to require the national courts to interpret domestic law so as to ensure achievement of the objectives of the Directive. However, Case C-334/92 *Wagner Miret v Fondo de Guarantia Salaria* [1993] ECR I-6911, subsequently, with slightly conservative attitude, holds the opinion which allow national courts to go against pre-existing domestic law, but still requires national courts to interpret national law *at all possible* to avoid a conflict with the Community law. See also, Deryck Beyleveld, 'Data Protection and Genetics: Medical Research and the Public Good' (2007) 18 King's Law Journal 277.

41 Case 26/62 *Van Gend en Loos v Nederlandse Administratis der Belastingen* [1963] ECR 1.

accepted this since the *Factortame* case.[42]

On the other hand, it is well established in the UK, for example, that where domestic legislation implements a directive of the European Community, the domestic legislation must so far as possible be interpreted in conformity with the directive. As Sir John Laws posited in *Thoburn v Sunderland City Council*, the UK court is under the duty when delivering a final judgment to override any rule of national law found to be in conflict with any directly enforceable rule of Community law.[43]

Nevertheless, due to the 'negotiated' character of EU legislation,[44] some domestic implementations may not interpret and apply the purposes of the EU law effectively and consistently. This surfaced when applying directives, which are one of the main 'instruments of harmonization'[45] used widely by EU institutions. This can be found in the Data Protection Act 1998 (DPA) of the UK, for example, that the definition and scope of 'relevant filing system' given in s.1(1)(c) was explained by the House of Lord in a rather narrow way as mentioned above in the *Durant* Case. However, considering the opinions given by the ECJ to interpret provisions of national law so as to comply with the terms of a directive, this decision is open to criticism and in fact controversial.

The Reform

The EU Commission proposed a reform of Data Protection law regime in the EU in 2012 to deal with the 'flexible' issue and try to harmonise the EU data protection law regime. According to the Commission, the main policy objectives are to:[46]

1. Modernise the EU legal system for the protection of
2. personal data, in particular to meet the challenges resulting from globalisation and the use of new technologies;
3. Strengthen individuals' rights, and at the same time reduce

[42] *R v Secretary of State for Transport ex parte Faetortame (No 2)* [1991]1 AC 603 (HL).
[43] *Thoburn v Sunderland City Council* [2003] QB 151.
[44] Jean-Claude Piris, 'The legal orders of the European Community and of the Member States: peculiarities and influences in drafting' (2005) 58 Amicus Curiae 24-25.
[45] Craig and Búrca, *EU Law: Text, Cases and Materials* 187-188.
[46] European Commission, 'Reform of the Data Protection Legal Framework' (2013) <http://ec.europa.eu/justice/data-protection/review/index_en.htm> accessed 23 October 2013.

administrative formalities to ensure a free flow of personal data within the EU and beyond; and

4. Improve the clarity and coherence of the EU rules for personal data protection and achieve a consistent and effective implementation and application of the fundamental right to the protection of personal data in all areas of the Union's activities.

Moreover, on the basis of Recital 7 of the proposed General Regulation:

> The objectives and principles of Directive 95/46/EC remain sound, but it has not prevented fragmentation in the way data protection is implemented across the Union, legal uncertainty and a widespread public perception that there are significant risks for the protection of individuals associated notably with online activity. **Differences in the level of protection of the rights and freedoms of individuals, notably to the right to the protection of personal data, with regard to the processing of personal data afforded in the Member States may <u>prevent the free flow of personal data throughout the Union</u>.** These differences may therefore constitute an obstacle to the pursuit of economic activities at the level of the Union, distort competition and impede authorities in the discharge of their responsibilities under Union law. This difference in levels of protection is due to the existence of differences in the implementation and application of Directive 95/46/EC (emphasis added).

A significant difference between the Directive and proposed General Regulation is about the implementation. According to Articles 290 and 291 of the TFEU, the Commission is capable of issuing further secondary legislation in the form of implementing and delegating acts. After the proposed General Regulation coming into force, the 'negotiated' character of EU legislation may no longer be a significant issue. This is because Art. 288 of the TFEU provides that, at least in principle, a regulation needs not to be transposed into

national law, as it has general application and is binding in its entirety and directly applicable in all Member States. This might be capable of covering up the weakness of the Data Protection Directive, e.g., different regulatory strength in relation to free flow of personal data required by Art. 1.2.

From Recital 7 of the proposed Regulation, moreover, as addressed above, economic development remains a dominated focus in the EU regime. The main tool of policy is to encourage a single market to achieve the goal. Unsurprisingly, therefore, Recital 4 of the proposed General Regulation states that:

> The economic and social integration resulting from the functioning of the internal market has led to a substantial increase in cross-border flows. The exchange of data between economic and social, public and private actors across the Union increased. National authorities in the Member States are being called upon by Union law to cooperate and exchange personal data so as to be able to perform their duties or carry out tasks on behalf of an authority in another Member State.

However, it should be noted that such statement does not necessarily follow that the central purpose of economic development is the **only** thing concerned. Indeed, Recital 2 of the proposal emphasis that '[i]t should contribute to the accomplishment of an area of freedom, security and justice and of an economic union, to economic and social progress, the strengthening and the convergence of the economies within the internal market, and the well-being of individuals.' This is in line with the purpose of the Directive. In this respect, the concepts and the overarching goal of regulatory method of data protection remain consistent.

c. Conceptualising Personal Data

Article 2(a) of the Directive sets out that if an identifiable person can be identified 'directly or indirectly', then this linkable data is personal data. Moreover, such data can only be identified through 'reasonable methods' – those do not consume disproportionate time, energy or financial means. In this

regard, the adoption of a broad concept of personal data and privacy is noted by the Commission to cover all information concerning an *identifiable* individual.[47] The law, therefore, reflects 'the intention of the European throughout the legislative process.'48

[47] COM (92) 422 final, 28.10.1992, 10.

[48] Article 29 Data Protection Working Party, *Opinion 4/2007 on the Concept of Personal Data* (No 01248/07/EN, WP136, 2007) 8.

It has been stated that the opinion of the ECtHR is treated by the ECJ as a special source of inspiration for EU human rights principles and required by Article 6(2) TEU to accede to the ECHR. It is thus plausible to look at the content and interpretation of the ECHR.

The very essence of the ECHR is the respect for fundamental rights and freedoms. This should be distinguished from the purpose of the Directive and the Regulation at issue. However, how to judge whether a specific action falls within the scope of the guaranteed rights or freedoms 'might be open to question.'[49] The nature of fundamental rights and freedoms thus results in inconsistent interpretations regarding the scope of the enshrined rights: the right to privacy is included therein.

The core purpose of an article is of central importance when looking at the scope of the rights covered by any specific article under the EHCR. Take Article 8 as an example, the ECtHR identified that 'the essential object of Article 8 is to protect the individual against arbitrary interference by the public authorities' in the Hokkanen case.[50] It has also been underlined by the Court that the intention of Article 8(1) is to ensure that 'the development, without outside interference, of the personality of each individual in his relations with other human beings.' (emphasis added)[51]

With this in mind, it is unwise to ignore the extension of a right entailing the notion of respect. To link the rights covered by Article 8 of the ECHR to merely 'theright to privacy' with a sense of narrow interpreting may produce inappropriate results. It is therefore unsurprising that the Court rejects this narrow interpretation. For example, the *Niemietz* Case points out that the Court tends to interpret Article 8 broadly under its jurisprudence:[52]

> '[r]espect for private life must also comprise to a certain degree the right to establish and develop relationships with other human beings,'…
>
> 'it would be too *restrictive* to limit the notion to an "inner circle" in which the

[49] Jeremy McBride, 'Proportionality and the European Convention on Human Rights' in Evelyn Ellis (ed), *The Principle of Proportionality in the Laws of Europe* (Hart Publishing 1999) 23.
[50] *Hokkanen v Finland* Series A no 299-A (1994) 19 EHRR 139 para 55.
[51] *Von Hannover v. Germany* (App no 59320/00) (2004) ECHR 294 para 50. See also: *Hokkanen v Finland* and *Botta v Italy* (1998) 26 EHRR 241 para 32.
[52] See: Beyleveld, 'Conceptualising Privacy in Relation to Medical Research Values' 154-155. Also, David Harris and others, *Harris, O'Boyle & Warbrick: Law of the European Convention on Human Rights* (2nd edn, OUP 2009) 364-366.

> individual may live his own personal life as he chooses and to exclude therefore entirely the outside world not encompassed within that circle.'53

One question, however, remains unresolved: does the Strasbourg Court possess absolute power in assessing the applicability of Article 8(1) of the ECHR? Although there is indeed a tension between the power of sovereignty owned by nation states and individual fundamental rights and freedom protected by the ECHR, Member States are not able to claim restrictions freely without any limitation on those protected rights after having signed and ratified the Convention. 54 Therefore, it is at least appropriate 'for the Court to impose procedural requirements on states' which violate interests protected by Article 8(1).55

Overall, the opinion of the ECtHR with respect to identifying whether a right is covered by Article 8, which considers that the right to private life is 'incapable ofexhaustive definition,' [56] is in line with the broad conception of privacy. However, the Court does provide some guidelines to understand the definition and scope of the primary aim of Article 8(1). Nonetheless, this approach is not clear enough. Two reasons can be given: first, the Court does not depend on an applicable theoretical framework and clear guidelines to deal with non-exhaustive and ill-defined definition of Article 8(1). Secondly, it is observed by David Feldman that:

> [t]he field is becoming considerably more complex because of developments information technology and the explosion in the range of legal rules which seek to regulate the use of information.[57]

The legal justification offered by the ECHR (as well as the interpretation by the EctHR) can be applied to the Directive for personal data protection – I have emphasised the importance of Art.1 of the Directive. It seems to me, form

the outset wording of proposed General Regulation, a broad conception of personal data/ privacy remains sound.[58]

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[53] *Niemietz v Germany* (1992) 16 EHRR 97 para 29. Also, *Costello-Roberts v UK* (App no 13134/87) (1993) 19 EHRR 112 para 6 and *Peck v UK* (2003) 36 EHRR 41 para 57.

[54] David Feldman, *Civil Liberties and Human Rights in England and Wales* (2nd edn, OUP 2002) 541.

[55] Ibid 542.

[56] Harris and others 364.

[57] Feldman 531.

[58] Recital 7 of the proposed General Regulation states, '[t]he objectives and principles of

III. Scepticism: Full Harmonisation within the EU?

a. The Purpose: The Price of Implementation

The first issue concerns whether the proposed General Regulation can fully harmonise the data protection law regime in the EU. Challenges of perusing the goal of promoting economic development and protection of fundamental rights and freedoms can be identified as below.[59]

Dilemma between promoting free flow of personal data to function internal market of the EU and protecting fundamental rights and freedoms.

In his essay Blume suggests that two perspectives namely the EU perspective and the national/ member state perspective may be in a conflict.[60] His approach relates the EU perspective to the side of concerning the 'functioning of the Union as such and in particular the single market,' and relates the national perspective to the (high potential) competing side of 'legal culture and tradition with respect to privacy and data protection related to the understanding of the relationship between state and citizen and between enterprise and citizen also have a high priority.' [61] Although he does not totally exclude the possibility of co-operation between the two interests, the argument implies a conflict model,[62] which potentially underestimates the possibility that both interests considered may be fostered and protected in an optimal way. This is because the argument sees the balancing test as weighing one interest *against* the other.[63]

For example, with respect to the relationship between data protection values and the right to benefit from a well-developed market or the right to property, this model suggests that the former interests always conflict with the latter one.[64] It views competing rights as a zero-sum trade-off and holds that the

Directive 95/46/EC remain sound.'

[59] It should be noted that most issues have been identified by Blume. See: Blume 130-136. However, I disagree some of his opinions. I will explain this in the following section.

[60] Ibid 130-131.

[61] Ibid.

[62] Beyleveld, 'Conceptualising Privacy in Relation to Medical Research Values' 155.

[63] Katja de Vries and others, 'The German Constitutional Court Judgment on Data Retention: Proportionality Overrides Unlimited Surveillance (Doesn't It?)' in Serge Gutwirth and others (eds), *Computers, Privacy and Data Protection: an Element of Choice* (Springer 2011) 21.

[64] See for example: *R v Department of Health ex p. Source Informatics* [1999] 4 All ER 185, [2000] 1 All ER 786, cited from Beyleveld, 'Conceptualising Privacy in Relation to Medical

right to privacy does not in any way, or at least not in a realistic fashion, support advances in science and technology. Such a model can be summarised as follows:

i. For those who consider that privacy values (i.e., the EU perspective) should always give way when there is a conflict, endorsing a *narrow conception of privacy*.[65]

ii. In contrast, for those who maintain that privacy values should always override benefits of a well-functioned internal market (i.e., the country holds a legal culture to value privacy), since the right to privacy is not an absolute right, there must still be chances of fallacy. In fact, even the most extreme privacy advocates rarely suggest that privacy values should always override the benefits of science and technology. Moreover, there is a tendency for supporters of a narrow conception of privacy to regard the right to privacy as a personal interest while seeing the interest of internal market as a general public interest. Under a Utilitarian calculus, which should be familiar to those who adopt of narrow conception of privacy, this situation comes into play frequently. Moreover, mention should also be made to the fact that 'if there is a high concern of privacy, it is merely communicated. Mostly there is a low interest in enhancing privacy.'[66] Consequently, on the basis of the narrow conception of privacy, even though privacy concerns are highly valued, privacy may still not prevail.

1. Practical obstacles of transferring the Directive to the Regulation

At least two practical issues can be identified in this regard. The first and most obvious problem is the potential cost for the legislation and enforcement of the 'legal revolution'[67] for member states. The scope of the update of data

protection legislation in member states will cover, for instance, financial institutions and social welfare.[68] Moreover, member states with minimum level of protecting personal data required by the Directive will need to make more

Research Values' 152.

[65] It is argued that, normally, the conflict model is associated with the narrow concept of privacy. Beyleveld, 'Conceptualising Privacy in Relation to Medical Research Values' 156.

[66] Daniel Guagnin, Leon Hempl and Carla Ilten, 'Privacy Practices and the Claim for Accountability' in René von Schomberg (ed), *Towards Responsible Research and Innovation in the Information and Communication Technologies and Security Technologies Fields* (Publications Office of the European Union 2011) 103.

[67] As Blume observes, '[t]here are numerous rules in statutory law regulating data protection which will be covered by the Regulation, provided they do not have a basis in other parts of EU law.' The update of the new rules will be a 'legal revolution' in this regard. See: Blume 134.

[68] Ibid 134.

efforts in this respect.

Secondly, in the contrast, for those nations already laid stricter data protection law then the requirement of the proposed Regulation, it is claimed that the current level of data protection will be reduced.[69] This is because the national data protection acts will disappear when it becomes supranational law in charge.

2. Too complex and too vague to follow

The text of the Directive has notoriously and regularly been argued as too complex and vague to understand. This happens at both the EU and national levels. The first question one must consider about the issue is always 'how closely these changes fit with what already exists at the domestic level.'[70]

Blume has made a vivid description on this issue: they are gifts to lawyers[71] – for sure the difficult texts will not be gifts for the ordinary people. However, re-phrased language at national level on the basis of different native legal culture and languages may solve the problem of complexity of the Directive. Nevertheless, this cannot be applied with respect to the proposed Regulation due to the nature of the Regulation in the EU law regime.

The complexity issue produces a further problem: the text of the Regulation may not be capable of reflecting legal culture of different member states.[72] However, it should be noted that, as Blume recognises, this is in some sense a common characteristic of supranational law in the EU.[73] Indeed, this is not a new issue in relation to the Europeanization back to the last century.

b. The Objective: The Problem of Conceptualising Personal Data

In their forthcoming essay two knowledgeable American scholars Schwartz and Solove argue that '[b]oth identified and identifiable information fall squarely within the scope of EU data privacy law, and they are treated in the same fashion'.[74] It is put that The duties of the data

[69] Ibid 131.
[70] Maria Green Cowles, James Caporaso and Thomas Risse, 'Europeanization and Domestic Change: Introduction' in Maria Green Cowles, James Caporaso and Thomas Risse (eds), *Transforming Europe: Europeanization and Domestic Change* (Cornell University Press 2001) 2.
[71] Blume 134.
[72] Ibid 132.
[73] Ibid 132.
[74] Daniel J. Solove and Paul M. Schwartz, 'Reconciling Personal Information in the United States and European Union' (2014) 102 California Law Review 7.

controller and the rights of the data subject are the same for both identified

and identifiable information. The crossing of the threshold for either category functions as an "on" switch for the application of EU data protection law. (emphasis added)[75]

In other words, it is argued that '[o]nce information qualifies as identified or identifiable, it falls under the data protection regime.'[76] As personal data falls within the regime, it follows that '[t]he consequence of this classification is to trigger a wide range of obligations, rights, and protections.'[77] Moreover, in the essay it is considered that notable changes in this respect may be found in the proposed General Regulation: personal data has been re-defined as 'any information relating to a data subject'.[78] However, a crucial continuity should be noted: the ultimate test regarding 'identifiability' (Directive) or indirect identification (proposed General Regulation) remains the same.[79]

The consistent EU broad data protection approach has been commented by them as the primary benefit. However, the equal status of both identified and identifiable personal data for triggering a full suite of obligations of data controllers and protection of data subjects is arguable. The essay thus argues that

To place all such data into the same conceptual category as data that currently relate to an identified person is an approach that lacks nuance and risks activating burdensome regulations for data processing entities that are incommensurate with actual risks to the privacy of individuals.

The two authors go on their argument according to an opinion made by the WP29.[80] On the basis of the argument made by the authors, if I am correct, relevant points can be sketched as follows:

i. A broad concept of privacy/ data protection in relation to the

European approach is considered beneficial by the authors.[81]

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[75] Ibid 7.
[76] Ibid 7.
[77] Ibid 8.
[78] Art. 4.2 of the proposed General Regulation.
[79] Solove and Schwartz 9.
[80] Article 29 Data Protection Working Party, *Opinion 4/2007 on the Concept of Personal Data*.
[81] Solove and Schwartz 14.

Yet, some types of identification of personal data 'will not be likely to occur,

ii. which means there is not [sic] use of personal information.' [82] Therefore, 'unless this gathering of information creates data that is reasonably capable of being linked to a specific person, it does not create identified information.'83

iii. Moreover, the two authors argue that the WP29 confuses collection and stated purpose with identifiability. This is because the WP29 views 'where the purpose of the processing implies the identification of individuals, it can be assumed that the controller or any other person involved have or will have the means "likely reasonably to be used" to identify the data subject.'[84]

iv. Nevertheless, they argue different levels of protection/ obligation should be put on the basis of associated risks on different types of personal data. Accordingly, they suggest the concept of PII 2.0 model which 'place personal data on a continuum that begins with no risk of identification at one end, and ends with identified individuals at the other.' On this continuum, moreover, three categories are divided on the basis of types of personal data: identified, identifiable, and non-identifiable.

I will evaluate these addressed arguments in the following section.

IV. The Argument: Harmonisation and Spectrum of Personal Data Protection

a. The Acceptance of A Broad Conception of Privacy

First thing first: it is arguable to relate the pursuing of internal market function to the EU perspective and relate the protection of fundamental rights and freedoms to the national level. Indeed, in the Recital of the Data Protection Directive, the EU legislative institutions have regard to Article 100/a EEC,85

which allowed the Council to adopt directives 'for the approximation of such laws, regulations or administrative provisions of the Member States as directly affect the establishment or functioning of the internal market.' It is thus crucial for any interpretation of the Directive at issue to look at internal market harmonisation. However, after the Titanium dioxide case,86 subsequent judgements of the ECJ

82 Ibid 17.
83 Ibid 14.
84 Article 29 Data Protection Working Party, *Opinion 4/2007 on the Concept of Personal Data* 16.
85 Article 115 TFEU, ex Article 94 TEC.
86 *Commission v Council* Case C-300/89 [1991] ECR I-2867.

on which were aimed to pursue multiple objectives appeared to 'swing the balance'[87] in favour of legal basis which guaranteed the protection of other fundamental rights and freedoms and against 100a EEC. In the judgement of First Tobacco Advertising,[88] moreover, it is condemned by the Court that the EU legislature has only a power/duty to improve the condition for the establishment and functioning of the internal market rather than regulating it. Similarly, to simply relate the protection of fundamental rights and freedoms to the domestic legal culture level may not be necessarily correct, in particular considering the Charter of Fundamental Rights of the European Union and the Treaty of Lisbon.

I argue that, on the basis of the acceptance of broad concept of privacy, there is a possibility for data protection values, particularly the right to privacy, and the interest of the proper functioning of internal market being capable of supporting each other. In other words, it might be incorrect to always regard privacy/ data protection values and other values as belonging to two mutually exclusive sets. For example, with respect to the issues at stake:

i. The fulfilment of data protection requirements, particularly the protection of the right to privacy, can support proper functioning of internal market. This can be achieved by applying a more efficient legal instrument, i.e., a Regulation. This is more or less reflected by an interesting observation which Blume remarks in his essay: European enterprises seem to support harmonisation rather than the current diverging domestic rules.[89]

ii. Conversely, functioning of a better internal market of the EU improves security and convenience of the private lives of individuals (including considerations of privacy values) as well as public interests. The interests with regard to proper functioning of internal market can also provide individuals with more control over their private lives by providing them with more options. This fits with the concept of decisional privacy and informational privacy under the broad conception of privacy.[90]

This provides the central idea of the co-operative model demonstrating that multiple objectives protecting different values/ interests in a single legislature

[87] Kieran St Clair Bradley, 'Powers and Procedures in the EU Constitution: Legal Bases and the Court' in Paul Craig and Gráinne de Búrca (eds), *The Evolution of EU Law* (OUP 2011) 97.
[88] *Germany v European Parliament and Council of the European Union* Case C-376/98 [2000] ECR I-8419.
[89] Blume 131.
[90] See: Anita Allen, 'Coercing Privacy' (1999) 40 William and Mary Law Review 723-757.

text are capable of supporting each other rather than coming into conflict.[91] The acceptance of broad concept of privacy and the idea of co-operative model, moreover, is similar to Solove's disagreement against the'all-or-nothing argument.'92

Limits of the broad conception of privacy

In their essay it is considered that the analysis made by the WP29 sweeps too broadly.[93] In this respect, the European expansionist approach may result in comprising everything. For example, section 3(1) of the Federal Data Protection Act of Germany (Bundesdatenschutzgesetz, BDSG) refers personal data to 'any information concerning the personal or material circumstances of an identified or identifiable natural person.' The two authors of the essay provide an example to demonstrate that the possibility of identification may be highly remote for the party who has access only to key-coded data. However, according to Rejman-Greene's opinion with respect to Recital 26 of the Directive, there are principles to decide the situation of reasonable measures to identify biometric data (which is a type of sensitive data). [94] Only after all

[91] It should be noted that a variety of approaches might be adopted in pursuit of functioning of the internal market of the EU. 'Horizontal harmonisation', for example, is suggested in general requirement for the protection of consumers from identified risks arising from individual products. Bradley 99.

[92] Daniel J. Solove, *Nothing to Hide: the False Tradeoff between Privacy and Security* (Yale University Press 2011) 33-37.

[93] Solove and Schwartz, 'Reconciling Personal Information in the United States and European Union' 18.

[94] Marek Rejman-Greene, 'Privacy Issues in the Application of Biometrics: a European Perspective' in James L. Wayman and others (eds), *Biometric Systems: Technology, Design and Performance Evaluation* (Springer 2005) 344-345. These addressed conditions are:

1. The identity of a previously enrolled individual is only represented by a "one way" template without any possibility of reconstruction of the original record;
2. The template could also be generated by a sufficient number of other subjects in the population;
3. The template is stored on a token held by the end user;
4. The comparison, at verification, of the output of the sensor with the template, is made on the token itself;
5. All images and records relating to the enrolment are securely disposed of at the time of enrolment;
6. No other data is available that, combined with the biometric data, could link the user uniquely to a template; and
7. The backup alternative, in case of failure of the biometric, does not expose the biometric to a process whereby a subsequent verification could reveal the person's identity.

these requirements are satisfied, could it possibly be considered that non-identifiability is achieved. Hence, even in the case of sensitive data, there are imaginable cases of not being an identifiable data.

I accept the idea of broad conception of privacy held by the EU model of personal data protection. It should be noted that, however, there are limits of the broad conception of privacy. In other words, a broad conception of privacy is not to say that everything is privacy: the conception of privacy still needs to stay within some basic characteristics of privacy. Indeed, any discussion defending the fundamental value of privacy interests has to define the concept so as to differentiate it from other ideas. Logically, as there must be different ideas, the conception of privacy will never cover everything. Overall, the conception of privacy can be broad, but it still needs to be privacy rather than irrelevant conceptions e.g., the right a fair trial.

Moreover, the consequence of a broad conception of privacy is that it does not only protect one value but several. Hence, there is a second limit to the broad conception of privacy – a possibility of conflict within the co-operative model. Specifically, as Beyleveld remarks, 'not only is privacy capable of conflicting with other non-privacy interests, but some privacy interests are capable of conflicting with each other.'[95] In this regard, the criterion of balancing interests, e.g., the principle of proportionality,[96] can then be used to assess these competing values within the conception of privacy both inter-personally and intra-personally.

Not all the same

Arguably, the broad conception of privacy may be considered as being too broad. This might lead to a conviction that the two types of data should be treated

[95] Beyleveld, 'Conceptualising Privacy in Relation to Medical Research Values' 158.

[96] In other work I argue that the criterion of needfulness for action on the basis of the principle of generic consistence (PGC) is the proper criterion. For detail, see: Deryck Beyleveld and Roger Brownsword, *Human Dignity in Bioethics and Biolaw* (OUP 2001).

as equivalent categories. This is simply wrong. Again, take section 3(1) of the BDSG as an example, a broad conception of privacy does not require agents/ regulators to treat the two categories (i.e., the identified and identifiable agent) equally; rather, **it simply ask regulators to treat them within the concept of privacy**. In other words, to consider categorises of identified/identifiable as conceptions of privacy/personal data does not necessarily mean that they will be treated them equally.

The broad conception of privacy is at least not being denied by Schwartz and Solove. What they disagree is that different levels of protection/ obligation should be put on the basis of associated risks on different types of personal data. However, I do not see that the WP29 show any disagreement on this. In fact, in the same document which the two scholars rely on to show that all the identified and identifiable personal data are treated the same, it is put that:

> Retraceably pseudonymised data may be considered as information on individuals which are indirectly identifiable. Indeed, using a pseudonym means that it is possible to backtrack to the individual, so that the individual's identity can be discovered, but then only under predefined circumstances. In that case, although data protection rules apply, the risks at stake for the individuals with regard to the processing of such indirectly identifiable information will most often be low, **so that the application of these rules will justifiably be more flexible than if information on directly identifiable individuals were processed**. (emphasis added)[97]

Moreover, I argue that the precautionary reasoning should be considered with respect to the growing scope of personal data (or, PII). This is because it is useful in dealing with the uncertain privacy risks brought about by the capacity of re-identification. Indeed, the principle is formulated by the Nuffield Council on Bioethics in relation to the concerns over genetically modified crops that the regulators may 'impose restrictions on otherwise legitimate commercial activities, if there is a risk, even if not yet a scientifically demonstrated risk…'[98]

However, again, it is noted that the protected rights and freedoms are not absolute. Thus, according to precautionary reasoning and the principle of proportionality, although identifiable/ re-identifiable data should be included within the scope of personal data (in a broad-concept sense) to avoid the risk of violating privacy, it needs to be proportionately treated on the basis of the

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[97] Article 29 Data Protection Working Party, *Opinion 4/2007 on the Concept of Personal Data* 18.

[98] Nuffield Council on Bioethics, *Genetically Modified Crops: The Ethical and Social Issues* (Nuffield Council on Bioethics, 1999) 162.

possibility of being identified.

Alone the line of logic, briefly:

1.If data refers to an identified data subject, the risk level is high. Moreover, within the identified data, sensitive data receives even higher level of protection.

2.If data refers to an identifiable data subject, the risk level is lower than the identified one. Since there remains a possibility of risk, minimising the risk of violating fundamental rights and privacy (e.g., the right to privacy) is still needed. Since the risk of identifiable data is lower than that of identified data, to protect the competing fundamental rights and freedoms (e.g. the right to enjoy the advances of science and technology), such data should be proportionately less limited than identified data.

b. The Regulatory Approach

In terms of the issue regarding whether a regulation is a better approach of harmonising the EU data protection law regime, it is at least arguable that there is a demand to determine adequate regulatory instruments. Different levels of regulatory methods, however, are favoured. For instance, whenever new and powerful technologies have been developed to the point of being able to be widely applied and implemented, there will be opponents holding differing opinions. This has been termed the 'Luddite argument' by Solove.[99] Privacy and data protection advocates, for example, may be labelled as the Luddites. However, this can be rebutted by the 'Titanic Phenomenon', which holds that while many new technological proposals have great advantages, 'proponents are not giving adequate thought to the consequences if they

fail.'[100] This phenomenon, pointed out by Solove, refers to the tendency of those 'quick' users of the changing technologies: they tend to be overconfident or optimistic to apply the technology without 'appropriate legal architecture in

[99] Solove, *Nothing to Hide: the False Tradeoff between Privacy and Security* 201. Luddites is a term originally means those who protested against the mechanisation of the Industrial Revolution in 19th century. Similarly, Beyleveld and Pattinson term this 'science hatred,' meaning the belief that science is inherently evil. Deryck Beyleveld and Shaun D. Pattinson, 'Individual Rights, Social Justice, and the Allocation Of Advances in Biotechnology' in Michael Boylan (ed), *Public Health Policy and Ethics* (Kluwer 2004) 70.

[100] Solove, *Nothing to Hide: the False Tradeoff between Privacy and Security* 199. The 'Titanic Phenomenon' indicates that the designers and builders of the Titanic did not provide enough lifeboats since they thought the ship is unsinkable.

place to use it responsibly.'[101]

Another response is to abandon regulation and assume that technological prospects might/ be able to dictate the 'right direction' or to try at least to 'hold the regulatory line, concentrating resources on the most serious violations.'[102] Indeed, positive rights to fundamental rights and freedoms are in potential conflict with the other individuals' rights. This is because they impose obligations to the other agents that limit the other individuals' rights. Hence, on the one hand, it has been claimed that free markets are better suggested. This is because, based on a Utilitarian argument, this model may promote the overall utility as long as the deals between the agents are not harming anyone and the deals possess the potential of bringing mutual profits. In a preference Utilitarian version, for example, it is the maximisation of the subjective preferences of agents in a calculus in which all preferences count equally. Moreover, based on the Libertarian rights ethics, voluntary exchanges uphold the respect of individual liberty. Free markets are therefore advocated by such theories.

However, there are objections to the above free-market model.[103] Aeneral objection against the free-market model, for example, considers that technologies associated with human bodies are incompatible with human dignity. It can be, rather, argued that certain benefits and social practices cannot be the object of trade or patents. In terms of serious risks, moreover, Fukuyama considers that such technologies cannot be captured by the Utilitarian calculus.[104]

It has been argued, for instance, that it is inappropriate to patent processes or products involving tissues from human beings, are for it may be contrary to human dignity. [105] Some regulations, according to such a consideration, incorporate a morality exclusion.[106] Moreover, a free-market model cannot

avoid the possibility of an initial situation of inequality. It is debateable that not every deal is fair in a free market. This is because there are chances that the deal is made under a non-free or out-of-necessity situation. In such cases, even though there may be consent in attendance, it may still be made in an invalid way.[107] Overall, this objection is similar to the 'dignity as constraint' argument on a dignity-

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[101] Ibid 203.

[102] Roger Brownsword, *Rights, Regulation, and the Technological Revolution* (OUP 2008) 315.

[103] Michael J. Sandel, *Justice: What's the Right Thing to Do* (Penguin Books 2010) 81-91.

[104] Francis Fukuyama, *Our Posthuman Future* (Profile Books 2002) 101, citing from Brownsword 314.

[105] For example, the *Relaxin Opposition* in Europe. See: Beyleveld and Brownsword, *Human Dignity in Bioethics and Biolaw* 196-202.

[106] For example, the European Patent Convention and the Directive on the Legal Protection of Biotechnological Inventions. See: ibid 199.

[107] This is closely related to the Justice theory of John Rawls.

based perspective.[108]

In terms of the proposed General Regulation, it is pointed out in the press release by the Commission that '[t]echnological progress and globalisation have profoundly changed the way our data is collected, accessed and used'[109] and the cloud computing has been noted in particular as a specific type of new challenge.[110] Regulating technology with respect to privacy and data protection issues encounters a more specific problem: the scope and the conception of personal data are influenced by rapidly changing technology and data-sharing practices. This is because the line between personal data and non-personal data – whether the data can be identified/ identifiable – profoundly depends on technology. The scope of personal data may expand since changing technologies provide stronger and more efficient abilities to identify and re-identify data. In this regard, Paul Ohm argues that the scope of personal data[111] 'will never stop growing until it includes everything.'[112] Ohm thus proposes an alternative approach to focus the privacy law on a different conception of personal data; the regulators should

> …consider a series of factors to identify situations in which harm is likely and whether it outweighs the benefits of unfettered information flow. When they identify harm that outweighs these benefits, they should regulate, focusing on narrow contexts and specific sectors rather than trying to regulate broadly across industries.[113]

Again, this resonates with the Utilitarian argument and therefore can be rebutted through the objections presented above. Moreover, the approach suggested by Ohm is to

> …resign themselves to a world with less privacy than they would like. But more often, regulators should prevent privacy harm by squeezing and reducing the flow of information in society, even though in doing so they

[108] Beyleveld and Brownsword, *Human Dignity in Bioethics and Biolaw* 198-202. The 'dignity as constraint' argument suggests that it is 'implicated in much recent thinking about the limits to be placed on biomedicine, reflecting the belief that biomedical practice in the twenty-first century should be driven, not by the vagaries of individual choice, but by a shared vision of human dignity that reaches beyond individuals.' See: ibid 29.

[109] European Commission, 'Commission Proposes A Comprehensive Reform of the Data Protection Rules' (2012) <http://ec.europa.eu/justice/newsroom/data-protection/news/120125_en.htm> accessed 30 Janurary 2012 1.

[110] European Commission, 'How Will the EU's Reform Adapt Data Protection Rules to New Technological Developments?' (2012) <http://ec.europa.eu/justice/data-protection/document/review2012/factsheets/8_en.pdf> accessed 30 Janurary 2012.

[111] It seems that Ohm does not distinguish ideas between personal data and personally identifiable information (PII). Paul Ohm, 'Broken Promises of Privacy: Responding to the Surprising Failure of Anonymization' (2010) 57 UCLA Law Review 1704.

[112] Ibid 1742.

[113] Ibid 1759.

> may need to sacrifice, at least a little, important counter values like innovation, free speech, and security.[114]

However, this approach faces the objections stemming from the European data protection model, which consider the protection of the flow of information as the primary purpose of the Directive and the proposed General Regulation. As we have seen, this purpose may not come into conflict with privacy values. Indeed, Solove comments that 'where the first step is to restrict the flow of information is a move in the wrong direction.'[115]

Nevertheless, it should be noted that in practice some measures suggested by Ohm, may still have their merits. For example, he suggests the regulators should 'incorporate risk assessment strategies that deal with the reality of easy reidentification as the old PII model never could.'[116]

As regards the choice between the European model (which regulates all forms of data collection, processing, and using in the absence of specific exemptions) and the American model (which is based on the primacy of freedom of information, whereby unless something fits the scope of specific regulations, it is not protected), having taken into account the problems of the minimal-regulation model, I contend that the European model should be favoured. Indeed, it has been suggested in a comparative study submitted to the European Commission:[117]

> Data protection law in the EU (in all areas covered by the previous three pillars) can and should continue to rest on the basic data protection principles and –criteria set out in Directive 95/46/EC. The application of these broad standards needs to be clarified (as further discussed below, in particular in sub-section V.4), but they themselves do not require major revision in order to meet the new challenges. On the contrary, they reflect European and national constitutional/human rights standards of the kind just mentioned, that need to be strongly re-affirmed.

It is noted that in the 2012 EU data protection reform proposal, a single set

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[114] Ibid 1706.

[115] Paul M. Schwartz and Daniel J. Solove, 'The PII Problem: Privacy and A New Concept of Personally Identifiable Information' (2011) 86 NYU Law Review 1868.

[116] Ohm 1759.

[117] Directorate-General Justice European Commission, Freedom and Security,, 'Comparative Study on Different Approaches to New Privacy Challenges, in Particular in the Light of Technological Developments' (2010) <http://ec.europa.eu/justice/policies/privacy/docs/studies/new_privacy_challenges/final_report_en.pdf> accessed 30 Janurary 2012 21.

of rules has been suggested.[118] This is, accordingly, consistent with the European data protection model. Moreover, as I have addressed in section 2.2, a directive with the negotiated character has resulted in an (mis-)interpretation of a narrow concept of privacy in the England and Wales (the *Durant* case).
Furthermore, I argue that any criteria allocating benefits/ resources must recognise the equal status of all individuals as right-holders. This is because it is arguable that this contingent line of reasoning is commonly accepted by different individuals and cultures[119] – at least, this is accepted in the European and Formosan legal regime. Moreover, there are, indeed, claims that this contingent premise is valid. For example, Gauthier argues that, although not necessarily in all cases, it is in our interest to treat everyone equally in general (as we are not perfect).[120] There must be, therefore, an adequate framework, and an adequate moral or ethical justification, to deal with the market in order to reconcile competing rights.

Practical Difficulties

A number of complex desiderata have to be taken into account with respect to regulatory methods.[121] Blume, therefore, raises concerns with practical difficulties on current Directive and the proposed General Regulation. He is not alone. The WP29 notes the practical difficulties that 'may exist to

propose a general overhaul of the current *acquis*.'[122] I would say that the Commission has considered this (although not fully). Therefore, for example, despite the WP29 has called for a comprehensive single/ common legal instrument for data protection, there are two separate legal instruments: a General Regulation and a Directive for police and judicial perspective.[123]

[118] European Commission, 'Commission Proposes A Comprehensive Reform of the Data Protection Rules' 2. European Commission, 'Proposal for a Regulation of the European Parliament and of the Council 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)'.
[119] Deryck Beyleveld, 'The Principle of Generic Consistency as the Supreme Principle of Human Rights' (2012) 13 Human Rights Review 17.
[120] David Gauthier, *Morals by Agreement* (OUP 1986), citing from Beyleveld, 'The Principle of Generic Consistency as the Supreme Principle of Human Rights' 17.
[121] In Brownswords' *Rights, Regulation, and the Technological Revolution*, he adopts Trebilcock and Iacobucci's opinion that a number of values may be in a tension. These values include: independence, accountability, expertise, detachment, transparency, confidentiality, efficiency, due process, predictability, and flexibility. See: Brownsword 299.
[122] Article 29 Data Protection Working Party, *Opinion 01/2012 on the Data Protection Reform Proposals* 5.
[123] European Commission, 'Proposal for A Directive of the European Parliament and of

However, the WP29 holds the belief that 'the same high level of data protection should in the end be applicable to all data processing in this area, including the EU bodies.'[124]

Furthermore, the WP29 recommends the legislator to set a much stricter deadline[125] and 'calls upon the Commission to indeed put forward such proposals.'[126] Indeed, the EU data protection law is difficult to understand due to its complex nature. Blume thus considers that more time will be needed to transfer the Directive to the Regulation. However, the preparation and period of drafting of the proposal is remarkably long.[127] On the basis of the previous experience of implementing the Directive, I consider that it is better to deal with the issue without too much hesitation.

As regards the concern of worrying about the reduction of the current level of data protection in some member states, the WP29 'acknowledges that the current data protection regimes for some existing instruments and bodies are further reaching than the proposed Directive' and 'argues that the 'alignment of current regimes with the Directive should in no case mean lowering a current data protection standard.'[128] In terms of the needfulness for

national laws to fill the gap of the vague terms of the proposed Regulation,[129] as Solove suggested, considering the problem in relation to the gap between the law and changing technologies,[130] the '[l]aws must have sufficient breadth and

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the Council on the Protection of Individuals with regard to the Processing of Personal Data by Competent Authorities for the Purposes of Prevention, Investigation, Detection or Prosecution of Criminal Offences or the Execution of Criminal Penalties, and the Free Movement of Such Data, (COM(2012) 10 final)' (2012) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0010:FIN:EN:PDF> accessed 30 Janurary 2012.

[124] Article 29 Data Protection Working Party, *Opinion 01/2012 on the Data Protection Reform Proposals* 5.

[125] The Commission claims to ensure a revision of other legal instruments to identify the need for alignment in three years.

[126] Article 29 Data Protection Working Party, *Opinion 01/2012 on the Data Protection Reform Proposals* 5.

[127] The extensive consultations with all major stakeholders on a review of the current legal framework for the protection of personal data lasted for more than two years. European Commission, 'Proposal for a Regulation of the European Parliament and of the Council 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)' 2.

[128] Article 29 Data Protection Working Party, *Opinion 01/2012 on the Data Protection Reform Proposals* 5.

[129] For example, 'fairly', 'legitimate purpose' in Article 5 and 'necessary' in Article 6 of the proposed General Regulation. See: Blume 133.

[130] Indeed, there is also a gap between legal privacy regulations and privacy practices since 'practices often do not follow the written rules.' Guagnin, Hempl and Ilten 100.

flexibility to deal with rapidly evolving technology.'[131]

With respect to the complexity of the text, a mechanism of simplicity has thus been proposed by the Commission. To avoid unnecessary and inconsistent implementation of the Directive, therefore, the proposed General Regulation is going to be the only one which is 'responsible for taking legally binding decisions against a company ('one stop shop').'[132] It is commented by the WP29 that '[i]n general, the Regulation provides greater clarity through more precise definitions and provisions aimed at ensuring a more harmonised application of the law, thus facilitating the free movement of data.'[133]

Nevertheless, the text of the proposed General Regulation remains difficult to some extent, in particular to the ordinary people. In this regard, I argue that a well-functioning institutional framework can assist to deal with the problem at issue.

Overall, considering the practical difficulties that may occur, I argue that it is better to deal with the issue through a united and smart regulatory approach in a more efficient way. As the proposed General Regulation holds a consistent view on the conception of privacy and the consistency in levels of protection is better to achieve multiple objectives of the data Protection law, I consider this as a good start of the reform.

V. Conclusion

The central aim of this essay is to evaluate the debate about the pros and cons of purpose and objective of the proposed EU General Data Protection Regulation of 2012. Throughout this essay, I have sought to suggest the acceptance of a broad conception of privacy to deal with the issue.

Transferring a Directive to Regulation is never an easy work. Although the main propose of the proposed General Regulation is to pursue consistent and homogenous application of the rules of personal data protection, practical difficulties have been identified by commentators. I have evaluated criticisms made by Blume, Solove and Schwartz. On the basis of acceptance of a broad conception of privacy, I argue that the promotion of a workable internal market and the protection of personal data, in particular the right to privacy, can be achieved at the same time without unnecessary crash. However, it should be

[131] Solove, *Nothing to Hide: the False Tradeoff between Privacy and Security* 170.

[132] European Commission, 'The Proposed General Data Protection Regulation: The Consistency Mechanism Explained' (2013) <http://ec.europa.eu/justice/newsroom/data-protection/news/130206_en.htm> accessed 30 October 2013.

[133] Article 29 Data Protection Working Party, *Opinion 01/2012 on the Data Protection Reform Proposals* (No 00530/12/EN, WP191, 2012) 6.

noted that there are limitations with respect to broad conception of privacy. Moreover, I agree with Solove and Schwartz's argument: not every type of risk to privacy should be treated the same. However, I argue that this idea is not new in the EU data protection law regime.

Bibliography Books:

Beyleveld D and Brownsword R, *Human Dignity in Bioethics and Biolaw* (OUP 2001)

1. Brownsword R, *Rights, Regulation, and the Technological Revolution* (OUP 2008)
2. Carey P, *Data Protection: A Practical Guide to UK and EU Law* (3rd edn, OUP 2009)
3. Craig P and Búrca GD, *EU Law: Text, Cases and Materials* (5th edn, OUP 2011)
4. Feldman D, *Civil Liberties and Human Rights in England and Wales* (2nd edn, OUP 2002)
5. Fukuyama F, *Our Posthuman Future* (Profile Books 2002)
6. Gauthier D, *Morals by Agreement* (OUP 1986)
7. Harris D and others, *Harris, O'Boyle & Warbrick: Law of the European Convention on Human Rights* (2nd edn, OUP 2009)
8. Nuffield Council on Bioethics, *Genetically Modified Crops: The Ethical and Social Issues* (Nuffield Council on Bioethics, 1999)
9. Sandel MJ, *Justice: What's the Right Thing to Do* (Penguin Books 2010)
10. Solove DJ, *Nothing to Hide: the False Tradeoff between Privacy and Security* (Yale University Press 2011)
11. Turpin C and Tomkins A, *British Government and the Constitution* (6th edn, CUP 2007)

Cases:

1. *Van Gend en Loos v Nederlandse Administratis der Belastingen* Case 26/62 [1963] ECR 1
2. *Haegeman v Belgium* Case 181/73 [1974] ECR 449
3. *Van Duyn v. Home Office* Case 41/74 [1974] ECR 1337
4. *Pubblico Ministero v. Tullio Ratti* Case 148/78 [1979] ECR 1629
5. *Von Colson and Kilmann v Land Nordrhein-Westfalen* Case 14/83 [1984] ECR 1891
6. *Marleasing SA v La Comercial Internacional de Alimentación SA* Case C-106/89 [1990] ECR I-4135
7. *Commission v Council* Case C-300/89 [1991] ECR I-2867
8. *R v Secretary of State for Transport ex parte Faetortame (No 2)* [1991]1 AC 603 (HL)
9. *Anklagemyndigheden v. Poulsen and Diva Navigation* Case C-286/90 [1992] ECR I-6019
10. *Niemietz v Germany* (1992) 16 EHRR 97

11. *Costello-Roberts v UK* (App no 13134/87) (1993) 19 EHRR 112
12. *Wagner Miret v Fondo de Guarantia Salaria* Case C-334/92 [1993] ECR I-6911
13. *Hokkanen v Finland* Series A no 299-A (1994) 19 EHRR 139
14. *Botta v Italy* (1998) 26 EHRR 241
15. *R v Department of Health ex p. Source Informatics* [1999] 4 All ER 185, [2000] 1 All ER 786
16. *Germany v European Parliament and Council of the European Union* Case C-376/98 [2000] ECR I-8419
17. *R v Department of Health ex p. Source Informatics* [2001] QB 424
18. *Peck v UK* (2003) 36 EHRR 41
19. *Thoburn v Sunderland City Council* [2003] QB 151
20. *Commission v. France (Etang de Berre)* Case C-239/03 [2004] ECR I-9325
21. *Von Hannover v. Germany* (App no 59320/00) (2004) ECHR 294
22. *Johnson v Medical Defence Union* [2007] EWCA Civ
23. *The College van burgemeester en wethouders van Rotterdam v Rijkeboer* Case C-553/07 [2009]

Contributions:

1. Beyleveld D, 'An Overview of Directive 95/46/EC in Relation to Medical Research' in Beyleveld D and others (eds), *The Data Protection Directive and Medical Research Across Europe* (Ashgate Publishing 2004)

2. ——, 'Conceptualising Privacy in Relation to Medical Research Values' in McLean SA (ed), *First Do No Harm: Law, Ethics and Healthcare* (Ashgate Publishing 2006)
3. Beyleveld D and Pattinson SD, 'Individual Rights, Social Justice, and the Allocation Of Advances in Biotechnology' in Boylan M (ed), *Public Health Policy and Ethics* (Kluwer 2004)
4. Bradley KSC, 'Powers and Procedures in the EU Constitution: Legal Bases and the Court' in Craig P and Búrca Gd (eds), *The Evolution of EU Law* (OUP 2011)
5. Cowles MG, Caporaso J and Risse T, 'Europeanization and Domestic Change: Introduction' in Cowles MG, Caporaso J and Risse T (eds), *Transforming Europe: Europeanization and Domestic Change* (Cornell University Press 2001)
6. Guagnin D, Hempl L and Ilten C, 'Privacy Practices and the Claim for Accountability' in Schomberg Rv (ed), *Towards Responsible Research and Innovation in the Information and Communication Technologies and Security Technologies Fields* (Publications Office of the European Union 2011)
7. McBride J, 'Proportionality and the European Convention on Human Rights' in Ellis E (ed), *The Principle of Proportionality in the Laws of Europe* (Hart Publishing 1999)
8. Rejman-Greene M, 'Privacy Issues in the Application of Biometrics: a European Perspective' in Wayman JL and others (eds), *Biometric Systems: Technology, Design and Performance Evaluation* (Springer 2005)
9. Vries Kd and others, 'The German Constitutional Court Judgment on Data Retention: Proportionality Overrides Unlimited Surveillance (Doesn't It?)' in

Gutwirth S and others (eds), *Computers, Privacy and Data Protection: an Element of Choice* (Springer 2011)

Journals:

1. Allen A, 'Coercing Privacy' (1999) 40 William and Mary Law Review
2. Beyleveld D, 'Data Protection and Genetics: Medical Research and the Public Good' (2007) 18 King's Law Journal
3. ——, 'The Principle of Generic Consistency as the Supreme Principle of Human Rights' (2012) 13 Human Rights Review
4. Bignami F, 'Transgovernmental Networks vs. Democracy: The case of the European Information Privacy Network' (2005) 26 MICH J INT'L L
5. ——, 'Privacy and Law Enforcement in the European Union: The Data Retention Directive' (2007) 8 Chicago Journal of International Law
6. Blume P, 'Will it be a better world? The proposed EU Data Protection Regulation' (2012) 2 International Data Privacy Law
7. Craig P, 'Once upon a Time in the West: Directive Effect and the Federalization of EEC Law' (1992) 12 Oxford Journal of Legal Studies
8. Ohm P, 'Broken Promises of Privacy: Responding to the Surprising Failure of Anonymization' (2010) 57 UCLA Law Review
9. Piris J-C, 'The legal orders of the European Community and of the Member States: peculiarities and influences in drafting' (2005) 58 Amicus Curiae
10. Reidenberg J, 'Setting Standards for Fair Information Practice in the U.S. Private Sector' (1995) 80 IOWA L REV

11. Schwartz PM and Solove DJ, 'The PII Problem: Privacy and A New Concept of Personally Identifiable Information' (2011) 86 NYU Law Review
12. Solove DJ and Schwartz PM, 'Reconciling Personal Information in the United States and European Union' (2014) 102 California Law Review

Others:

Article 29 Data Protection Working Party, *Opinion 4/2007 on the Concept of Personal Data* (No 01248/07/EN, WP136, 2007)

1. ——, *Opinion 01/2012 on the Data Protection Reform Proposals* (No 00530/12/EN, WP191, 2012)
2. ——, *Opinion 04/2012 on Cookie Consent Exemption* (No 00879/12/EN, WP194, 2012)
3. Robinson N and others, *Review of the European Data Protection Directive* (Technical Report, 2009)
4. 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 [1995] OJ L 281
5. European Commission, 'Commission Proposes A Comprehensive Reform of the Data Protection Rules' (2012) <http://ec.europa.eu/justice/newsroom/data-protection/news/120125_en.htm> accessed 30 Janurary 2012

6. ——, ‘How Will the EU's Reform Adapt Data Protection Rules to New Technological Developments?’ (2012) <http://ec.europa.eu/justice/data-
7. protection/document/review2012/factsheets/8_en.pdf> accessed 30 Janurary 2012
8. ——, ‘Proposal for A Directive of the European Parliament and of the Council on the Protection of Individuals with regard to the Processing of Personal Data by Competent Authorities for the Purposes of Prevention, Investigation, Detection or Prosecution of Criminal Offences or the Execution of Criminal Penalties, and the Free Movement of Such Data, (COM(2012) 10 final)’ (2012) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0010:FIN:EN:PDF> accessed 30 Janurary 2012
9. ——, ‘Proposal for a Regulation of the European Parliament and of the Council 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)’ (2012) <http://ec.europa.eu/justice/data-protection/document/review2012/com_2012_11_en.pdf> accessed 30 Janurary 2012
10. ——, ‘The Proposed General Data Protection Regulation: The Consistency Mechanism Explained’ (2013) <http://ec.europa.eu/justice/newsroom/data-protection/news/130206_en.htm> accessed 30 October 2013
11. ——, ‘Reform of the Data Protection Legal Framework’ (2013) <http://ec.europa.eu/justice/data-protection/review/index_en.htm> accessed 23 October
12. European Commission D-GJ, Freedom and Security,, ‘Comparative Study on Different Approaches to New Privacy Challenges, in Particular in the Light of Technological Developments’(2010) <http://ec.europa.eu/justice/policies/privacy/docs/studies/new_privacy_challenges/final_report_en.pdf> accessed 30 Janurary 2012

13. The Council of Europe, ‘EU Accession to the Convention’ (2013) <http://hub.coe.int/what-we-do/human-rights/eu-accession-to-the-convention> accessed 15 November 2013

Viewing The Patent System Through The Lens Of Feminists

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ABSTRACT

The feminine inventions in patent litigation had showed biases caused by gender factors. In particular, *Bowers*, *Names*, and *Maynard* had revealed certain biases existed in litigations because they seemly undertook corset as witness. However, they are not patent cases even though they involved with gender factors.

Feminists argued that, in *Cohn*, the Justices had unselfconsciously utilized their masculinity by construing the words of a patent specification to describe an invention related to femininity. This article agrees that the U.S. patent litigation system may not be a gender-free zone in this regards, but this contention is not necessary true as applying to the U.S. patent prosecution system. And, the article suggests that the *Egbert* case was more of a case illuminating the discretion to the justices of the US Supreme Court upon determining the establishment of public use and did not essentially contain a gender issue to the patent system. Further, this article suggests that the PHOSITA is merely a neutral legal-fiction established to determine the existence of non-obviousness, there is no ground to connect it with a gender issue.

Feminists argued that the *Myriad* case had showed the patent law hindered genetic testing for breast cancer susceptibility. And, feminists asserted that feminine inventions to female are more fallen into public domain.

For example, more traditional forms of gendered labor such as cooking and making clothing do not count as new, novel, and industrial. But, if the public domain issues are managed to cover traditional forms of gendered labor, then feminists would essentially argue to expand the eligible patent matter.

Statistics may conflict with "dualism doctrine" suggested by feminists because the percentage of female inventors who have design patent, which fallen within the scope of feminine technologies, has the lowest figure. Additionally, the small percentage of female engineering graduates indicates the "difference claim" should be taken into consideration, and in return challenge the arguments provided by

feminists about their critique to science and technology because education system is a neutral one which provides equal opportunity to both male and female students. And, since the science and technology are factors significantly correlated to patent system in this regards, therefore,feminists should have no ground to argue any failure to the patent system based on the claiming of gender problem.

Keywords: feminist, public use, eligible patent matter, public domain.

I. Introduction

Feminist literatures have been piled voluminously for decades claiming the discriminatory treatment to female. They had rooted into Western philosophy, utilizing varies theories such as the "dualism doctrine" to divide and create two opposite groups, e.g., mind versus body, nature versus culture, and spirit versus matter, wherein the former are considered as masculine and domination with the later as feminine and inferior. This paradigm provides a permanent forum for endless arguing of the gender inequality.[1]

Although much less feminist literatures are discussing gender issues in intellectual property, still the dualism doctrine has been applied to this arena. Some epistemological arguments allow us to understand their assertions to intellectual property law. For example, a feminist epistemology can be grounded in an examination of craft labor done by women such as "caring", versus one done by men utilizing technology such as electronics. Further, feminists argue that when knowledge is constructed as abstract and rational, it is associated with the masculine. And, a masculine social construction of knowledge means that women primarily participate in a determined system framed by masculinity. Feminists want to deconstruct the asserted inequality.[2]

Facts show the absence of women in scientific field and deficit of female inventors. Opponents to feminism suggested that it is because of the inborn biological difference between men and women, and provides a "difference claim" upon the scientific and mathematics abilities. Incorporated into the suggestion is the assumption that even if legal structures facilitated or encouraged women to own patents,

women would remain the minority patent-holders because of their innate differences. Adoption of this explanation precludes any reason

[1] Dan L. Burk, *Feminism And Dualism In Intellectual Property*, 15 Am. U.J. Gender Soc. Pol'y & L. 183, 191 (2007).

[2] Debora Halbert, *Feminist Interpretations Of Intellectual Property*, 14 Am. U.J. Gender Soc. Pol'y & L. 431, 438-440 (2006).

or incentive to change the social and legal structures for acquiring patents in a way that would grant women more rights because, under the difference claim, the result would essentially remain the same.[3]

However, feminists counter argued that, the cause should be the social failings, such as discrimination, rather than reasons upon a difference claim.[4] In particular, a feminist emphasizes that the relevant question is not about the differences between the sexes, but rather the distribution of power in accordance to those alleged differences.[5] For example, laws of coverture, preventing married women from owning property, hindered their commercial activity as inventors. Once the laws were abolished, however, there was an increase in the number of United States patents issued to female inventors.[6] And, feminists had further expressed that either the culture or epistemology of science and engineering are hostile to women.[7]

Given these different school of thoughts, this article plans to discuss whether there is any inequalities to women in the patent system by reviewing literatures and related cases. Therefore, after this Part I, the Part II will examine the feminine inventions in patent litigation to see if there is any bias created by gender factors in light of sufficiency of description, and public use. Part III will examine feminine invention in patent prosecution in light of the eligible patent matter, the non-obviousness standard, and public domain, along with empirical data and analysis. Part IV is the conclusion.

II. Feminine Inventions In Patent Litigation

A. Feminine Inventions and Litigation Biases

For assessing whether there are biases in litigations from a gender perspectives, certain cases involving the feminine item "corset" [8] were reviewed as follows. The case *Comm. v. Bowers* held in 1876 contained the fact that a man and woman for convicting adultery when they were

[3] Shlomit Yanisky-Ravi, *Eligible Patent Matter-Gender Analysis Of Patent Law: International And Comparative Perspectives*, 852 Journal Of Gender, Social Policy & The Law, Vol. 19:3, 852 (2011).

[4] *Id.*, at 880.

[5] *Id.*, at 852, 854.

[6] Laura A. Foster, *Situating Feminism, Patent Law, And The Public Domain*, 20 Colum. J. Gender & L. 262, 314 (2011).

[7] Dan L. Burk, *Do Patents Have Gender?* 19 Am. U.J. Gender Soc. Pol'y & L. 881 (2011).

[8] The hourglass-shape corset used by women is a typical feminine item wherein masculine technologies are also applied, and therefore suitable for this article for purpose of discussing related gender and patent issues.

found in a hotel room at midnight. The man was in the bed although the woman was not and was fully clothed, except for her corset and shoes. The court held that her presence without a corset was considered a probative evidence of an adulterous purpose in their staying at the hotel.[9]

The court *Names v. Names* held in 1885 contained the fact that a woman found in a bedroom with a man not her husband, wore a "loose" wrapper, with her hair hanging "loosely", and her corset lying on the bed. The court held that her general state of physical looseness and her removal of her corset were evidence of loose morals sufficient to prove adultery.[10]

In *Maynard v. People,*[11] the court concluded that evidence that a man gave a corset to a woman was evidence that there had been a sexual relationship between the two. Despite of his denial of any sexual relationship at initial trial, he then was tried and convicted of perjury for his denial in the face of the evidence of the corset. The appellate court agreed that the evidence that "the purchase of the corset, and giving it to the woman, was a circumstance which, unexplained, was likely to prejudice the case of the defendant in the minds of the jury".[12]

These cases had nonetheless revealed certain biases in litigations caused by gender factors because they seemly undertook corset as witness. However, they are not patent cases. Therefore, feminists would be able to argue these biases only on grounds other than patent issues. Yet the courts did decide certain patent cases relating to gender issues including sufficiency and clarity in description and public use, and will be discussed as follows.

B. Sufficiency of Description

In *Cohn v. United States Corset Company,*[13] plaintiff patentee, a corset manufacturer, sued former employees who conducted corset business against him for patent infringement. The defendant successfully defended against the suit at trial by arguing that the patent at issue was invalid because his invention was already known. In

particular, they claimed that it had been fully disclosed in a printed publication in 1854, a year before the invention date at issue. In considering this argument on appeal, the Justices conducted the patent interpretation in order to determine whether his invention had been disclosed in the prior art. The Court determined that the prior art was fatal to the patent because it sufficiently described the corset claimed by

[9] Comm. v. Bowers, 121 Mass. 45, 45-46 (1876).
[10] Names v. Names, 25 N.W. 671, 671-72 (Iowa 1885).
[11] Maynard v. People, 25 N.E. 740, 744 (Ill. 1890).
[12] *Id.*, at 744.
[13] Cohn v. United States Corset Company, 93 U.S. 366 (1876).

the plaintiff. Thus they considered that the plaintiff was trying to assert a monopoly over something known to the public.[14]

In addition to the anticipation by the prior art, there is, for purpose of feminism discussion, another issue, i.e., whether gender terms can be used to determine the sufficiency of description. It is understood that the function of a corset in this period was to emphasize the breasts and hips relative to the waist, and the resulting hourglass shape would be lost if all stays were the same length. However, in its analysis of the sufficiency of description to these terms of art in
the specification, the Court repeated the words "elegance" and "grace" multiple times, obviously considering them as terms of art.[15]

It is stipulated in 35 U.S.C. 112 that "the specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention".[16] There should be no room for words such as "elegance" and "grace" to fulfill the sufficiency requirement to description of a specification.

The *Cohn* opinion revealed the result of male judges applying patent doctrine to a technology of gender. Feminists argued that corsets may have been feminine technology, made for use by women, but their purpose was to satisfy the male concern for "functioning and signifying for the beholder." They further argued that the Justices had unselfconsciously utilized their own masculinity by construing the words of a patent specification to describe an invention related to femininity,[17] and therefore, this article agrees that the U.S. patent litigation system may not be a gender-free zone in this regards, but this contention is not necessary true as applying to the U.S. patent prosecution system.

C. Public Use

There is another case, involving a corset again, which may also show the U.S. litigation system may not be a gender-free zone of technology. That is, the decision in *Egbert v. Lippmann*[18] which related to the public use doctrine arose out of judicial understanding of the

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[14] *Id.*, at 376.

[15] Kara W. Swanson, *Getting a Grip on the Corset: Gender, Sexuality, and Patent Law*, 23 Yale J.L. & Feminism 57, 87 (2011).

[16] 35 U.S.C. §§112 (a).

[17] Swanson, *supra* note 15, at 88.

[18] Egbert v. Lippmann, 104 U.S. 333 (1881).

gendered nature of the public and private divide in life.[19]

Specifically, the invention at issue, a corset, was used by a woman Frances Lee, for more than two years before applying for patent. The woman was an intimate friend of the inventor, Samuel Barnes, who later on became her husband. The majority justices stated that, according to the patent act, there were two things to be considered. First, to constitute the public use of an invention, it is not necessary having more than one patented articles to be publicly used. And, such use may be only capable of being used where it cannot be seen nor observed by the public eye. Second, whether the use of an invention is public or private does not necessarily depend upon the number of persons to whom its use is known.[20] Therefore, the Court found that one woman's use of an improved steel stiffener within her corset was a public use of the improvement.[21]

However, justices Miller dissented that the line drawn by majorities between public use and private use was not clear and thus the opinion was not persuasive. He pointed out that the novelty requirement in previous patent act provided, *inter alia*, "not known or used by others" before the discovery or invention made by the applicant, where the word "public" was not used. But, the amended patent act applicable to this case stipulated that said corset have been in "public" use or on sale with the consent or allowance of the inventor or discoverer. Therefore, the word "public" mandated in the amended patent act is an important member of the sentence of said section of the act and shall be considered.[22] He concluded that the spring inserted in a single pair of corsets,
and used by only one woman, covered by her outer-clothing, and in a position always withheld from public observation, should not be

interpreted as being a public use of that piece of steel.[23]

The *Egbert* case is one of the few humorous cases in patent litigation, and feminists had used it to contend a gender problem. Nonetheless, this case mainly dealt with the issue of how public must a "public use" be, and the majority justices had adopted a "minimal

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[19] Swanson, *supra* note 15, at 115.

[20] Egbert v. Lippmann, *supra* note 18, at 336.

[21] *Id.*.

[22] 35 U.S.C. §102 (a) A person shall be entitled to a patent unless (1) the claimed invention was patented, described in a printed publication, or in *public* use, on sale, or otherwise available to the public before the effective filing date of the claimed invention.

[23] Egbert v. Lippmann, *supra* note 18, at 339.

approach" for determining whether the public use was established.[24] This article suggests that it was at most a case illuminating the discretion of the justices of the US Supreme Court upon determining the establishment of public use and did not essentially relate to a gender issue to the patent system.

III. Feminine Invention In Patent Prosecution

The above-mentioned cases reflected gender issues during the litigation stage, feminists had further argued that there are same issues existed during prosecution stage as well. Notable cases can be found relating to eligible patent matter and non-obviousness standard.

A. The Eligible Patent Matter

The eligible patent matters stipulated in the U.S. patent law play a role of filter to determine whether an invention would be able to apply for a patent. The 35 U.S.C. 101 provides that whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title. It is noted that the eligible patent matter should not be confused with ones in the article 24 of our Patent Act where it restrictively and negatively lists four items to be excluded while the rest may be patentable subject matters.[25] And, the eligible patent matter, for purpose of discussing gender issues in patent law in this article, is focusing on discussing of the purpose of the patent system, the definition of invention, and the fields of technologies.

The purpose of patent system had been challenged by feminists as not being gender free to female inventors. They argued, for example, the WTO's TRIPS relating to patents had adopted the narrow definition of what is a patentable invention, i.e., patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application, although it prohibits discrimination, the prohibition focuses on the place of invention, not the gender of the

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[24] Donald Chisum, Craig Nard, Herbert Schwartz, Pauline Newman, and F. Scott Kieff, Principles of Patent Law, Cases and Materials, 3rd Edition, Foundation Press, 348 (2004).

[25] Article 24 of R.O.C. Patent Act: An invention patent shall not be granted in respect of any of the following: 1. animals, plants, and essential biological processes for the production of animals or plants, except for processes for producing microorganisms; 2. diagnostic, therapeutic and surgical methods for the treatment of humans or animals; or 3. inventions contrary to public order or morality.

inventor.[26] And, they contended that industrial application or industrial development is a masculine requirement where it would restrict female invention.[27]

It is understood that the U.S. Patent law in particular, is justified on the foundation of a utilitarian rationale that is expressed in the U.S. Constitution. Intellectual property laws are intended to act as an incentive factor for inventors to continue to enrich society with new intellectual products.[28] But, the feminists contended that the existing definition had been served to create and uphold a male elite with economic power while preventing growth and development of other non-technological fields that are important to promoting welfare in society today.[29]

They further pointed out that there are two principal legal approaches to defining an invention – the narrow one and the broad one. The narrowing trend can be seen, for example, the *In re Bilski* case,[30] which deals with the question of whether or not a business method can be recognized as a patentable invention.[31] They claimed that, from the perspective of gender, this narrowed definition of a patentable invention reflects a masculine model, promotes and perpetuates characteristics that are attributed primarily to male products, but neither considering nor legitimatizing the female voice. Nonetheless, feminists considered that the 35 U.S.C. 101 had adopted a more expansive or broad approach, i.e., the new and useful process, rather than the otherwise machine test.[32]

It is noted that our Patent Act contains similar languages wherein in article 1 of the Patent Act stipulates that this Act is formulated to

encourage, protect and utilize the creations of invention, utility model and design in order to promote "industrial development". It is further noted that the article 21 of our previous Patent Act (2003) defines an invention as a highly creative technical innovation and the grant of the patent for an invention depends whether it advances technology significantly beyond the state of art at the time of filing. The current article 21 of our Patent Act defines that "invention" means the creation of technical ideas, utilizing the laws of nature.[33]

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[26] Article 27 (1) of TRIPS.

[27] Dan L. Burk & Mark A. Lemley, *Is Patent Law Technology-Specific?*, 17 Berkeley Tech. L.J. 1155, 1156, (2002)

[28] Yanisky-Ravi, *supra* note 3, at 861.

[29] *Id.*, at 874.

[30] *Id.*, at 859.

[31] *Id.*, at 867.

[32] 35 U.S.C. §101 (2006); Yanisky-Ravi, *supra* note 3, at 859.

[33] *Cf.* Article 21 of R.O.C. Patent Act (2003) and current Article 1 and 21of R.O.C. Patent Act.

According to the above-mentioned categorization set forth by feminists, except the current article 21 containing no gender sensitive language, others appear to adopt a somewhat narrow approach, although there has no feminist argument in this regards been found in country yet. However, it should be noted that most countries have the definition of invention emphasizing the elements relating to machines, industry, and technology. Feminists therefor argue these definitions favor men and fail to reflect the contribution of women to human welfare.[34]

Further, feminists argued that patent law is technology-neutral in theory, but when taking a deeper view, it is technology-specific in application. And, they contended that patent law does not provide protection for all products and processes equally, but only for those products or processes that the law itself defines as worthy of protection, resulting in the exclusion of women.[35]

It is noted that, before feminists pointed out gender problems in science and technology arena, science and technology themselves were pervasive and abiding perceived as fact-based and thus gender-neutral. About three decades ago, feminists started emerging an argument about science and technology is gendered.[36] They suggested that social, educational, psychological, and familial invention are more suitable to female while the familiar categories of electronics, mechanics, and computers to male.[37]

However, it is also found that commentators had suggested that the more we expand the definition of eligible patent matter—to further women's cause—the more we might limit the development of the field we want to advance.[38]

B. The Non-Obviousness Standard

The abbreviated PHOSITA (person having ordinary skill in the art) in the patent system is a legal fiction created for determining the existence of non-obviousness to the invention at issue. The inventor is measured to against the PHOSITA who know all the pertinent arts regarding said invention, and said inventor is thereby entitled to have a patent when said invention is not obvious to said person.[39]

This legal fiction was derived from tort law's objective personification of a legal standard, called "a reasonably prudent person" who represents the behavior of due care that should be exercised by a person for purpose of tort law. Failure to behave at least as cautiously

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[34] Yanisky-Ravi, *supra* note 3, at 869.
[35] *Id.*, at 872.
[36] Swanson, *supra* note 15, at 64-65.
[37] Yanisky-Ravi, *supra* note 3, at 876.
[38] *Id.*, at 874.
[39] Standard Oil Co. v. Am. Cyanamid Co., 774 F.2d 448, 454 (Fed. Cir. 1995).

as a reasonably prudent person results in tort liability. It is widely understood that a reasonably prudent "person" was originally called a reasonably prudent "man" instead. The amendment, not surprisingly, was due to the critique from feminists. However, it is seemly not necessity to discuss it because using term of "man" rather than the gender-neutral term "person" can only be dating back to aging male-dominated era which is no long existing any more, and patent system's PHOSITA wherein the "P" stands for the word "person" rather than "man" indicates no such an issue existed either.

Feminists picked "duty of rescue" to from the tort law arena to describe the legal fiction as a masculine figure,[40] and even further describe the standard as being detached, isolated, and divorced from the community. That insight had been pursued further to query whether the ostensible objectivity or neutrality of the PHOSITA standard is masking social biases and power relationships.[41]

As depicted in the *In re Winslow*[42], the claimed invention, a paper bag filling device, was examined with regard to prior arts to see whether it met the non-obviousness standard from the perspective of the PHOSITA. The examiner at *Winslow* case brought at least two prior arts and tried to combine to see if the combination is obvious. An obvious combination would render the invention unpatentable.

Feminists consider the *Winslow* tableau as the PHOSITA being surrounding by devices utilizing masculine category of technology, and argued it would generate a non-gender-free zone for female inventors. However, this article would like to point out that the PHOSITA is an objective test in that it entails connotations of neutrality and

impartiality,[43] and suggest that PHOSITA is merely a neutral instrument established to determine the non-obviousness, so feminists shall have no ground to tie it to gender issue. And, the inquiry into the gendering of PHOSITA in patent system is consonant with the one discussed in the Part III.A. (The Eligible Patent Matter), i.e., the feminists' contention to the gendering problem in the patent system seems to hold most promise in the field of technologies.

C. Public Domain

Another inequality asserted by feminists is that feminine inventions to female are more fallen into public domain. The public domain has been theorized as "outside" of property law or "property's opposite."

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[40] Burk, *supra* note 7, at 893.

[41] *Id.*, at 903.

[42] In re Winslow, 365 F.2d 1017, 1017 (C.C.P.A. 1966).

[43] *See generally* Catherine MacKinnon, Feminism Unmodified: Discourses on Life and Law 50 (1987).

This is distinguishable from a "commons". Creative works in a "commons" are controlled by intellectual property rights, but still remain accessible to all because owners freely license their inventions. A dichotomy thus exists between the public domain and the private domain of IP rights.[44]

A subject matter within the public domain would not be able to acquire a patent for protection, no matter whether there exists a gender issue. For example, In *Moore v. Regents of the University of California*,[45] the plaintiff brought a legal claim arguing that physicians at UCLA hospital unlawfully obtained an ownership interest in his cells, without his permission, when they removed them from his body after surgery. The court found against the plaintiff, stating he did not have rights to his bodily tissue because of the logic behind the products of nature doctrine. Feminists believed that the doctrine treated his tissue sample ("nature" in terms of dualism doctrine) separately from the invention of the unique cell lines in the lab by UCLA scientists ("culture" in terms of dualism doctrine) in order to award rights to the scientists.[46]

In fact, the *Moore* case is neither a patent case nor a one containing gender issue, that article hereby presents other cases revealing that patent law does cause negative impact to female. For example, *Association for Molecular Pathology v. Myriad Genetics*[47]

showed that the patent law hindered genetic testing for breast cancer susceptibility. That is, the patenting of the BRCA 1 and BRCA 2 genes by Myriad Corporation restricts breast cancer research and affordable access to breast cancer screening for women.[48]

In fact, intellectual property rights are just one of the many concerns of indigenous women, but nevertheless it can be a source of disappointment or even harm. Therefore, indigenous women claim

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[44] Foster, *supra* note 6, at 274.

[45] John Moore v. The Regents of the Univ. of Cal., 51 Cal. 3d. 120 (1990).

[46] Foster, *supra* note 6, at 287.

[47] Association for Molecular Pathology v. Myriad Genetics, 569 U.S. ___ (2013). (The federal district court ruled that all the challenged claims were not patent eligible. The circuit court overturned in part, ruling that isolated DNA which does not exist alone in nature can be patented and that the drug screening claims were valid, and confirmed in part, finding the diagnostic claims unpatentable. The Supreme Court invalidated Myriad's claims to isolated genes and held that merely isolating genes that are found in nature does not make them patentable. Proponents of the validity of these patents argued that they encourage investment in biotechnology and promote innovation in genetic research by not keeping technology shrouded in secrecy. Opponents argued that these patents stifle innovation by preventing others from conducting cancer research, limit options for cancer patients in seeking genetic testing, and are not valid because they claim genetic information that is not inventive, but is rather produced by nature.)

[48] Foster, *supra* note 6, at 332.

authority to speak against intellectual property law not just as members of indigenous communities, but also as indigenous women.[49]

Further, even women invention will be hard to acquire the ownership, studies show how the presence of gendered inequalities in the public sphere means that women's creative work is considered public domain material, thus excluding women from obtaining patent law ownership. Certain studies demonstrate that female life scientists' inventive work also remains relegated to the public domain as they are less likely to patent their inventions than their male colleagues.[50]

This may explain the fact that 30% of males patented their work as opposed to 14% of female scientists and that this disparity held true over time, even though the quality and impact of patented inventions by female scientists is similar to or substantially better than male scientists who patented their research.[51]

Indeed, more traditional forms of gendered labor such as cooking and making clothing do not count as new, novel, and industrial. And, clothing and cooking have historically been considered a craft and function of homemaking, and design patents for clothing are unlikely to be granted. Proving novelty or non-obviousness in regards to a clothing invention is difficult because it is considered more functional rather than innovative. Patents on recipes are also theoretically possible, but hard to obtain and defend because the innovation can often be

anticipated by an ordinary person skilled in the art.[52]

Although the patenting of the BRCA 1 and BRCA 2 genes, to certain extent, may restricts breast cancer research and affordable access to breast cancer screening for women mostly, but the fact is that breast cancer had been found in men as well.[53] And, if the public domain issues are managed to cover traditional forms of gendered labor, then feminists would essentially argue to expand the eligible patent matter. However, as mentioned in Part III.A. (The Eligible Patent Matter), commentators had also suggested that the more we expand the definition of eligible patent matter, the more we might limit the development of the field we want to advance.

D. Empirical Data And Analysis

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[49] *Id.*, at 328.
[50] *Id.*, at 333-334.
[51] *Id.*, at 318.
[52] *Id.*, at 312.
[53] *See e.g.*, American Cancer Society, available at: http://www.cancer.org/cancer/breastcancerinmen/detailedguide/breast-cancer-in-men-what-is-breast-cancer-in-men (last visited: May 4, 2015).

The R.O.C Intellectual Property Office (TIPO) had provided statistics showing that female inventors in country who had been granted patent in 2013 is 9.79%, slightly increasing from the one in 2012.[54] Although it is definitely not a significant figure comparing to the percentage of male inventors, however, referring to the statistics in Japan from 1995 to 2001, the percentage of female inventors is 1.7%, Europe from 1993 to 1997 is 2.8%, and US from 2000 to 2003 is 5.2%,[55]our female inventors had rather achieved a relatively higher percentage among these countries and area. Nonetheless, these empirical data confirmed that low percentage of female inventors, resulting in low percentage of female patentee, is universally true.

These data may be interpreted either one of two ways, either by utilizing the "dualism doctrine" provided by feminists to construing the outcomes were caused by inequality of genders in patent system, or by suggesting the "difference claim" provided by the opponents of feminism to construing the outcomes were caused by differences embedded in genders. This article would accept the point of view of the latter and further supplement empirical data as follows.

The TIPO statistics show that female graduates from engineering fields in country from 2012 to 2013 merely represent 13.63% of all graduates.[56] Again, our small group of female graduates is not alone when we find that female graduates from engineering fields in Sweden from 2005 to 2007 is only 8.6%.

It would be widely acceptable that the education system itself is neutral and provides equal opportunity to both male and female students, and since the science and technology are factors significantly correlated to patent system in this regards, it is reasonable to conclude the resulting small percentage of female inventors is due to the furnishing of a small percentage of female engineering graduates. And, only if we accept the "difference claim" then we would be able to reasonably explain existence of the small percentage of female engineering graduates and resulting female inventors. This also indicates that feminists' argument, based on "dualism doctrine", about inequality to patent system and education system has no ground to make above-mentioned assertions.

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[54] Taiwan Intellectual Property Office official, available at: http://www.tipo.gov.tw/ct.asp?xItem=548568&ctNode=6723&mp=1 (last visited: May 4, 2015).

[55] Taehyun Jung and Olof Ejermo, *Demographic patterns and trends in patenting: Gender, age, and education of inventors*, Technological Forecasting & Social Change 86, 112, 118 (2014).

[56] http://www.moea.gov.tw/Mns/dos/content/wHandMenuFile.ashx?menu_id=11373 (last visited: May 4, 2015).

TIPO also provided that female inventors in country are mostly found in utility model patent area with the highest percentage of 5.47%, comparing to 2.76% and 1.57% to invention patent and design patent areas respectively.[57] These statistics further provide a fact which conflicts with above-mentioned "dualism doctrine" because design patents are fallen within the scope of feminine technologies suggested by feminists. Although female inventors with utility model acquiring the highest percentage may indicate they are more interested in patents by applying for subject matters with less complicated technologies, rather than the invention patents containing subject matters with more advanced and masculine technologies, but it still does not suffice to provide a persuasive reason to explain the fact that the lowest figure exists in the feminine design patent.

Given that gender disparities in science and engineering professions have long been a topic of both policy and scholarly debates, this article has no intention to suggest to maintaining the status quo of female performance in innovation. Rather, this article encourages more involvement of female inventors in the science and technology fields. A recent study pointed out that closing the gender gap in science and engineering degree holders in the US would increase US GDP per capita by 2.7%.[58] From an economics and management point of view, this article expects to see gender aspects of invention provide clues on more efficient human resource utilization.

IV. Conclusion

This article discusses whether there is any inequalities to women in the patent system by examining patent litigation and prosecution. The feminine inventions in patent litigation had showed biases caused by gender factors. In particular, *Bowers*, *Names*, and *Maynard* had revealed certain biases existed in litigations because they seemly undertook corset as witness. However, they are not patent cases even though they involved with gender factors.

Feminists argued that, in *Cohn*, the Justices had unselfconsciously utilized their masculinity by construing the words of a patent specification to describe an invention related to femininity. This article agrees that the U.S. patent litigation system may not be a gender-free zone in this regards, but this contention is not necessary true as applying to the U.S. patent prosecution system. And, the article suggests that the

[57] *Id.*

[58] Taehyun Jung and Olof Ejermo, *supra* note 55, at 111.

Egbert case was more of a case illuminating the discretion to the justices of the US Supreme Court upon determining the establishment of public use and did not essentially contain a gender issue to the patent system. Further, this article suggests that the PHOSITA is merely a neutral legal-fiction established to determine the existence of non-obviousness, there is no ground to connect it with a gender issue.

Feminists argued that the *Myriad* case had showed the patent law hindered genetic testing for breast cancer susceptibility. And, feminists asserted that feminine inventions to female are more fallen into public domain. For example, more traditional forms of gendered labor such as cooking and making clothing do not count as new, novel, and industrial. But, if the public domain issues are managed to cover traditional forms of gendered labor, then feminists would essentially argue to expand the eligible patent matter.

Statistics may conflict with "dualism doctrine" suggested by feminists because the percentage of female inventors who have design patent, which fallen within the scope of feminine technologies, has the lowest figure. Additionally, the small percentage of female engineering graduates indicates the "difference claim" should be taken into consideration, and in return challenge the arguments provided by

feminists about their critique to science and technology because education system is a neutral one which provides equal opportunity to both male and female students. And, since the science and technology are factors significantly correlated to patent system in this regards, therefore, feminists should have no ground to argue any failure to the patent system based on the claiming of gender problem.

HOW COPYRIGHT LAW MAY AFFECT POP MUSIC WITHOUT OUR KNOWING IT

Peter K. Yu*

I. INTRODUCTION

When copyright law is linked to the creation of music—the focus of this Symposium—interesting questions arise. In the context of classical music, for example, why could Johann Sebastian Bach "recycle" in his Concerto for Four Harpsichords the opening phrase in Antonio Vivaldi's Concerto for Four Violins, Strings and Harpsichord Continuo?[1] Why could Peter Ilyich Tchaikovsky include in his *1812 Overture* repetitive fragments of *La Marseillaise* and the anthem *God Save the Tsar!* to portray the clash between the French and Russian armies?[2] Would copyright protection in musical works help Wolfgang Amadeus Mozart avoid poverty and the fate of dying penniless? Or would such protection instead lead him to behave more like Johannes Brahms and Giuseppe Verdi, whose creativity slowed down significantly following the introduction of copyright protection?[3]

 Kern Family Chair in Intellectual Property Law and Director, Intellectual Property Law Center, Drake University Law School. The Author is grateful to Brandon Clark, Kristelia García, K.J. Greene, and Eric Priest for valuable comments and suggestions, and La'Cee Groetken, Jeffrey Kappelman, Nicholas Krob, and Brooke Yang for excellent research and editorial assistance. He is also indebted to Al and Bob Kohn and Donald Passman, whose frequently updated books have been indispensable guides to understanding the music business.

[1] As Ronald Rosen observed:

> These two concertos are scored for different solo instruments and are in different keys (Vivaldi in B minor and Bach in A minor). The pitch (or note) sequence and the context in which each is used, with each pitch having the same duration, and with the trills occurring at the same times and places, are not merely "substantially similar" as that term is used in the copyright law, but (except for the transposition from one key to another) are also virtually identical.

RONALD S. ROSEN, MUSIC AND COPYRIGHT 4 (2008) (footnotes omitted); *see also id.* at 161 ("[C]opyright laws had been enacted in the early eighteenth century, and Vivaldi, in his infringement action against J.S. Bach would have been successful because Bach lifted virtually the entire contents of Vivaldi's Concerto for Four Violins—note for note, rhythmically and essentially, harmonically the same, and used it in his Concerto for Four Keyboards.").

[2] *See id.* at 314–15 ("During the course of its twenty-plus minutes, Tchaikovsky quotes portions of the 'Marseillaise,' before that stirring anthem symbolizing the French army and nation is overwhelmed by the Russian victory over Napoleon, as the Overture concludes with the 'Czar's Anthem.'").

[3] *See* WILLIAM F. PATRY, HOW TO FIX COPYRIGHT 36 (2011) ("[A]fter Italian [copyright] laws were passed, Verdi was able to amass a considerable fortune. . . . Verdi made so much money he stopped composing. Johannes Brahms also made considerable sums as a result of the passage of copyright laws that enabled his publisher to prevent free-riding, and as a result retired early.");F.M. SCHERER, QUARTER NOTES AND BANK NOTES: THE ECONOMICS OF MUSIC COMPOSITION IN THE EIGHTEENTH AND NINETEENTH CENTURIES 179–80 (2003) ("Obtaining substantial revenues from score sales and performance fees, Verdi observed that he no longer needed to be a 'galley slave'

Outside classical music, one can also ask important questions about the appropriate boundaries for digital sampling—the practice of copying and remixing sounds into a new musical work, usually in the hip-hop genre.[4] In *Bridgeport Music, Inc. v. Dimension Films*,[5] for instance, the United States Court of Appeals for the Sixth Circuit found infringing the copying of a "three-note P- Funk guitar riff" by way of sampling of a sound recording.[6] The recording at issue was "Get Off Your Ass and Jam" by George Clinton, Jr. and the Funkadelics. As Judge Ralph Guy explained:

> Get a license or do not sample. We do not see this as stifling creativity in any significant way. It must be remembered that if an artist wants to incorporate a "riff" from another work in his or her recording, he is free to duplicate the sound of that "riff" in the studio. Second, the market will control the license price and keep it within bounds. The sound recording copyright holder cannot exact a license fee greater than what it would cost the person seeking the license to just duplicate the sample in the course of making the new recording. Third, sampling is never accidental. It is not like the case of a composer who has a melody in his head, perhaps not even realizing that the reason he hears this melody is that it is the work of another which he had heard before. When you sample a sound recording you know you are taking another's work product.[7]

Since the mid-1990s, copyright litigation relating to digital sampling has sent shock waves across the hip-hop industry, unleashing profound changes to both hip-hop music and copyright licensing.[8] Under Judge Guy's highly restrictive approach in *Bridgeport*, many of those musical works created during

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and to compose at a frantic pace. Between 1840 and 1849 (he was thirty-six years old in 1849), Verdi composed 14 operas. During the 1850s he composed 7, in the 1860s he produced 2, and he wrote 1 in each of the succeeding three decades.").

[4] For discussions of digital sampling, see generally JOANNA TERESA DEMERS, STEAL THIS MUSIC: HOW INTELLECTUAL PROPERTY LAW AFFECTS MUSICAL CREATIVITY 71–110 (2006); KEMBREW MCLEOD & PETER DICOLA, CREATIVE LICENSE: THE LAW AND CULTURE OF DIGITAL SAMPLING (2011).

[5] Bridgeport Music, Inc. v. Dimension Films, 410 F.3d 792 (6th Cir. 2005).

[6] KEMBREW MCLEOD, FREEDOM OF EXPRESSION®: OVERZEALOUS COPYRIGHT BOZOS AND OTHER ENEMIES OF CREATIVITY 112 (2005).

[7] *Bridgeport Music*, 410 F.3d at 801.

[8] *See* MCLEOD & DICOLA, *supra* note 4, at 141 ("[*Bridgeport*] marked, for sound recordings, a return to the no-exceptions, no-nuance approach of *Grand Upright* [*Music Ltd. v. Warner Bros.Records, Inc.*], at least in the jurisdiction of the Sixth Circuit. And since most samples implicate the sound recording copyright in the song being sampled (if not always the music composition copyright, as *Newton v. Diamond* shows), the stark rule of *Bridgeport* could profoundly affect the legal environment for sampling."); *see also id*. at 14–44 (discussing *Bridgeport*'s effect on digital sampling and creativity).

what Kembrew McLeod and Peter DiCola referred to as "The Golden Age of Sampling"[9] could not have been commercially released.[10] As Chuck D, the leader of Public Enemy, lamented: "[The limitations imposed by copyright law] changed how we had to approach music to the point where we couldn't use fragments in a song. That's what changed overnight. It would take maybe a hundred different artists to construct a Public Enemy song, though they are all unrecognizable."[11] Walter Leaphard, the group's manager, concurred: "We just flat-out say, 'From now on, no samples.' We don't have the man power or the legal power or the money to deal with those issues. I'm still fighting and cleaning up sampling issues from 1991."[12]

To help us better understand the role of copyright law in the music business and popular music, this article explores five specific questions: Why do popular songs usually last for less than five minutes? Why are professional songwriters dissatisfied with Pandora and Spotify? Why can we bring EuropeanCDs back to the United States? Why can't YouTube videos be created with blanket licenses offered by the American Society of Composers, Authors and Publishers ("ASCAP") and Broadcast Music, Inc. ("BMI")? Are digital

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[9] *Id*. at 19. According to Paul Miller, a.k.a. DJ Spooky, "some of the key albums and artists from the golden age include De La Soul's *3 Feet High and Rising*, Pete Rock & C. L. Smooth's *Mecca and the Soul Brother*, and Public Enemy's *It Takes a Nation of Millions to Hold Us Back*, among others." *Id*.

[10] As Kembrew McLeod observed:

> You can hear the increasing limitations imposed on mainstream hip-hop stamped on Public Enemy's music. Between 1988 and 1990, Public Enemy released what are considered to be two of hip-hop's greatest albums, *It Takes a Nation* and *Fear of a Black Planet*. Public Enemy's production team, the Bomb Squad, took sampling to the level of high art while still keeping intact its populist heart. But by the time the group's *Apocalypse 91* came out, even the casual listener could hear a dramatic change. Gone were the manic collages that distinguished their previous two albums, where they fused dozens of fragments to create a single song. The new sample-licensing rules didn't differentiate between collaging small sonic chunks and using entire choruses, so by 1991 it became economically prohibitive to release a record such as *It Takes a Nation* or *Fear of a Black Planet*.MCLEOD, *supra* note 6, at 68; *see also* DEMERS, *supra* note 4, at 10 ("[E]xpensive litigation has fundamentally changed Public Enemy's sound by making the group unwilling to sample music anymore."); *id*. at 118–19 ("When Def Jam Records first released *A Nation of Millions*, most hip- hop samples were not licensed at all. To release just one of the songs from *A Nation of Millions* today, Public Enemy would have to pay advance licensing fees exceeding half of the amount the group expected to earn from sales of the entire album.").

[11] MCLEOD, *supra* note 6, at 68. As Hank Shocklese, Public Enemy's producer, elaborated:

> [Unlike the taking of a chunk of a song, as in looping a measure] the kind of things we were doing . . . we were just taking a horn hit here, a guitar riff there; we might take a little speech, part of a speech over here, a kick snare from somewhere else. It was all bits and pieces.*Id*. at 78.

[12] DEMERS, *supra* note 4, at 119.

downloads sales or licenses? And as a bonus, this article includes a rather obscure yet illuminating sixth question: Why does the royalty rate for sheet music stay at 7¢ per copy? It is my hope that answering these questions will enable us to develop a deeper understanding of copyright law and how it can affect both the music business and popular music.

The copyright debate has been repeatedly and frequently framed as one between different stakeholders. In the area of popular music, these stakeholders include record labels, music publishers, professional songwriters, recording artists, individual users, retail stores,[13] online service providers, and other third-party intermediaries. Because the laws we include in Title 17 of the United States Code will affect these stakeholders—both directly and indirectly—they will ultimately affect our music. Thus, the more we understand the copyright law's impact on the music business—and, by extension, our culture—the more we will notice the high cultural stakes involved in striking the proper balance in the copyright system.

Ⅱ. WHY DO POPULAR SONGS USUALLY LAST FOR LESS THAN FIVE MINUTES?

Songs in popular music vary in length. While some begin with a segment of instrumental music and last for as long as seven minutes, others are short, repetitive, and within the range of three to five minutes. There are many reasons why songs are of a certain length. These reasons include artistic choice, historical tradition, past technological constraints,[14] increased radio play, reduced production costs, practical constraints regarding live performances, and, of course, the audience's limited attention span (especially for the Twitter generation). One reason not widely discussed, however, is the role copyright law may have played in determining the length of a sound recording.

Section 114 of the 1976 Copyright Act, the current U.S. copyright statute,[15] covers what is generally referred to as the "mechanical reproductions"[16] of copyrighted music—or, as the statute puts it, the "duplicat[ion of] the sound recording in the form of phonorecords or copies that directly or indirectly recapture the actual sounds fixed in the recording." Such reproductions now take place in a wide range of media, from vinyl albums to cassette tapes and from digital tracks to online streams.

[13] Instead of Tower Records and Sam Goody (or f.y.e.), today's key retail stores include Amazon, Best Buy, Target, Walmart, and, of course, the iTunes Store.

[14] *See* ANDRE J. MILLARD, AMERICA ON RECORD: A HISTORY OF RECORDED SOUND 128 (2005)("The standard Edison cylinders at the turn of the century could play for only about 2 minutes, while 7-inch discs could play a little longer.").

[15] Since its adoption in 1790, the Copyright Act has undergone major revisions in 1831, 1870,1909, and 1976

16 1617 U.S.C. § 114(b) (2012).

The provision on mechanical reproductions dates back to Section 1(e) of the 1909 Copyright Act, which prohibited for the first time the unauthorized mechanical reproduction of a copyrighted work.[17] As stated in the provision:

> [A]s a condition of extending the copyright control to such mechanical reproductions, That whenever the owner of a musical copyright has used or permitted or knowingly acquiesced in the use of the copyrighted work upon the parts of instruments serving to reproduce mechanically the musical work, any other person may make similar use of the copyrighted work upon the payment to the copyright proprietor of a royalty of two cents on each such part manufactured, to be paid by the manufacturer thereof; and the copyright proprietor may require, and if so the manufacturer shall furnish, a report under oath on the twentieth day of each month on the number of parts of instruments manufactured during the previous month serving to reproduce mechanically said musical work, and royalties shall be due on the parts manufactured during any month upon the twentieth of the next succeeding month. The payment of the royalty provided for by this section shall free the articles or devices for which such royalty has been paid from further contribution to the copyright except in case of public performance for profit[18]

Section 1(e) was enacted in response to the United States Supreme Court case of *White-Smith Music Publishing Co. v. Apollo Co.*[19] In this celebrated case, the Court found that the manufacture of player piano rolls did not result in the creation of a "copy" of the copyrighted work.[20] As a result, the manufacturer did not need to obtain a license from the relevant copyright holders. As Justice William Day reasoned:

> It may be true that in a broad sense a mechanical instrument which reproduces a tune copies it; but this is a strained and artificial meaning. When the combination of musical sounds is reproduced to the ear it is the original tune as conceived by the author which is heard. These musical tones are not a copy which appeals to the eye. In no sense can musical sounds which reach us through the sense of hearing be said to be copies, as that term is generally understood, and as we believe it was intended to be

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[17] Copyright Act of 1909 § 1(e), ch. 320, 35 Stat. 1075 (repealed 1976).
[18] *Id.*
[19] White-Smith Music Publ'g Co. v. Apollo Co., 209 U.S. 1 (1908).
[20] *See id.* at 18.

understood in the statutes under consideration. A musical composition is an intellectual creation which first exists in the mind of the composer; he may play it for the first time upon an instrument. It is not susceptible of being copied until it has been put in a form which others can see and read. The statute has not provided for the protection of the intellectual conception apart from the thing produced, however meritorious such conception may be, but has provided for the making and filing of a tangible thing, against the publication and duplication of which it is the purpose of the statute to protect the composer.[21]

In the end, the Court declared: "These perforated rolls are parts of a machine which, when duly applied and properly operated in connection with the mechanism to which they are adapted, produce musical tones in harmonious combination. But we cannot think that they are copies within the meaning of the copyright act."[22]

To overturn *White-Smith*, Congress enacted Section 1(e) of the 1909 Copyright Act and extended coverage to the mechanical reproductions of a copyrighted work. Nevertheless, it feared that the Aeolian Company, the most dominant manufacturer of piano rolls at the time, would have a quasi-monopoly over mechanical reproductions.[23] Congress therefore introduced compulsory licenses for making such reproductions.[24] The rate for these licenses, or "mechanicals" for short, was set at 2¢ per mechanical copy—"the then approximate equivalent of 5 percent of the manufacturer's selling price."[25] This rate remained unchanged for nearly seven decades until 1978, when the 1976 Copyright Act entered into effect.

During the Congressional hearings on this yet-to-enact statute, many copyright experts, in particular those supporting the music industry, questioned

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[21] *Id*. at 17.

[22] *Id*. at 18.

[23] Howard B. Abrams, *Copyright's First Compulsory License*, 26 SANTA CLARA COMPUTER & HIGH TECH. L.J. 215, 219–20 (2010) ("Eighty-seven members of the Music Publishers Association controlling 381,598 compositions had agreed to give the Aeolian Company exclusive rights to manufacture piano rolls of their copyrighted compositions in return for a royalty of ten per cent of the retail selling price of the piano rolls. . . . The Aeolian Company was the dominant manufacturer of player pianos.").

[24] *See generally* STAFF OF S. COMM. ON THE JUDICIARY, 86TH CONG., STUDY NO. 5: THE COMPULSORY LICENSE PROVISIONS OF THE U.S. COPYRIGHT LAW 47 (Comm. Print 1960) (study by Harry G. Henn) (providing an excellent study on the mechanical royalty provision of the 1909 Copyright Act).

[25] *Id*. at 55; *see also id*. at 78 ("In 1909, a buyer of records paid anywhere from $1.50 to $7 for 2 to 4 minutes of music. In 1956, a buyer paid 85 cents for 3 minutes and $3.98 (Federal excise tax and the cost of the album included) for 46 minutes of music." (comments from Ernest Meyers, general counsel of the Recording Industry Association of America)).

the fairness of having such a low flat rate.[26] As Sydney Kaye, chairman of BMI's board, declared in his testimony:

> The present 2 cents per composition per part of instrument payment is outmoded for works of long duration. The trade practice is to pay for such works if included on longplaying records at the rate of 1 cent for each 4 minutes with one-quarter of a cent for additional minutes or factions thereof and a minimum royalty of 2 cents.[27] Sidney Wattenberg, the general counsel for the Music Publishers' Protective Association (now the National Music Publishers' Association), concurred:

> The 2-cent royalty provided for in the statute applies to all compositions and today with the development of the long- playing record, it seems to me to be so unfair as to shock the conscience of a reasonable man that a mechanical company under the compulsory license provision can record a work such as George Gershwin's "Rhapsody In Blue" for the same 2-cent royalty as he is called upon to pay for let us say Elvis Presley's "Hound Dog."[28]

When the 1976 Copyright Act finally entered into effect in 1978, the rate was raised from 2¢ to the greater of "2.75 cents or 0.5 cent per minute of playing time or fraction thereof."[29] This 2.75¢ rate was further increased to 4¢ in 1981, 4.25¢ in 1983, 4.5¢ in 1984, 5¢ in 1986, 5.25¢ in 1988, 5.7¢ in 1990, 6.25¢ in 1992, 6.6¢ in 1994, 6.95¢ in 1996, 7.1¢ in 1998, 7.55¢ in 2000, 8¢ in 2002, and 8.5¢ in 2004.[30] The current rate, which took effect on January 1, 2006, is the greater of "9.1 cents or 1.75 cents per minute of playing time or fraction thereof."[31] Although record labels rarely pay this statutory rate,[32] owing to their

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[26] *See id*. at 55 ("Whether such royalty rate, assuming it was reasonable in 1909, remains reasonable today, would appear worthy of reexamination in view of the decreased purchasing power of money, the subsequently developed types of recordings (assuming the compulsory license provision be applicable to them), and the substantially increased manufacturer's selling prices.").

[27] *Id*. at 70–71.

[28] *Id*. at 76.

[29] *Copyright Royalty Rates: Section 115, the Mechanical License*, U.S. COPYRIGHT OFFICE, http://www.copyright.gov/carp/m200a.html (last visited Sept. 23, 2014).

[30] *Id*.

[31] *Id*.

[32] As Al and Bob Kohn explained:

> [B]ecause of the burdensome procedures required by the compulsory license provision—such as the requirement of monthly, rather than quarterly[,] accounting to copyright owners and notice conforming to strict regulation—the

ability to negotiate for voluntary licenses, this rate has been used as the benchmark, and often the maximum rate, for most recording and songwriter agreements.[33]

Under the current calculation of 1.75¢ per minute of playing time, 9.1¢ equals the mechanical royalty rate for five minutes and twelve seconds. Thus, ifa song lasts for more than five minutes and twelve seconds, the record label, and more likely the recording artist, will be required to pay a higher rate for mechanicals. To be certain, Section 114 of the Copyright Act only allows for the"duplicat[ion of] the sound recording in the form of phonorecords or copies that directly or indirectly recapture the actual sounds fixed in the recording."[34] The provision therefore does not govern the situation when the sound recording was recorded for the first time. In reality, however, the rate for first use is not that different from the rate for later uses. As noted music lawyer Donald Passman observed: "Customarily, the publisher doesn't charge more than the statutory rate, but there's no reason it can't, other than industry custom (and the fact that no one will pay any more than that)."[35]

To complicate matters, many recording artists do not have a full budget to pay for the statutorily stipulated mechanicals for *all* the songs included in their album. Oftentimes, recording contracts will include a so-called controlled composition clause—or "controlled comp clause" for short.[36] Although this clause was introduced to limit the record label's spending per album and to facilitate the acquisition of a discounted rate for mechanicals,[37] it has the perverse

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compulsory license is hardly used. The vast majority of mechanical licenses issued today are negotiated or *voluntary licenses*, not true compulsory licenses. The terms of these voluntary mechanical licenses are given effect, regardless of whether those licenses strictly reflect the terms of the compulsory license provision of the Copyright Act.AL KOHN & BOB KOHN, KOHN ON MUSIC LICENSING 771 (4th ed. 2010); DONALD S. PASSMAN, ALL YOU NEED TO KNOW ABOUT THE MUSIC BUSINESS 217 (8th ed. 2012) (stating that "compulsory license is almost never used"); *see also* Lydia Pallas Loren, *Untangling the Web of Music Copyrights*, 53 CASE W. RES. L. REV. 673, 682 n.38 (2003) ("The preference for obtaining licenses from Harry Fox instead of utilizing the statutory license is largely due to the reduction of transaction costs offered by Harry Fox. Harry Fox does not require monthly reports and royalty payments as required by the Copyright Office, using instead quarterly or semi-annual reports and payments.").

[33] *See* PASSMAN, *supra* note 32, at 228–38 (discussing the maximum rate per song and per album in record deals); *id*. at 287 (noting the potential requirement in songwriter agreements of the delivery of "a minimum percentage of [the] statutory rate").

[34] 17 U.S.C. § 114(b) (2012).

[35] PASSMAN, *supra* note 32, at 217.

[36] *See id*. at 227–28 (discussing controlled composition clauses).

[37] *See* KOHN & KOHN, *supra* note 32, at 787 ("Because many recording artists now tend to write most of the songs they record, record companies take the opportunity to address the issue of mechanical licensing directly in the artist's recording contract. These contracts invariably contain a provision, called a *controlled composition* clause, which effectively limits the amount of money the record company is required to pay in mechanical royalties for each album produced by the artist under the contract."); *see also id.* at 781 (discussing the practice of "asking for a rate").

effect of reducing the income recording artists will earn from their own compositions.

Consider, for example, a recording contract that sets the maximum mechanical royalties paid for all controlled compositions at seventy-five percent of the statutory rate.[38] Because the current statutory rate is the greater of 9.1¢ or 1.75¢ per minute, the discounted rate for each controlled composition is 6.825¢ if no song exceeds five minutes and twelve seconds. If the recording contract further provides that the record label will only provide for a budget of ten times the rate for controlled compositions—known generally as a "cap" at the "ten times rate"[39]—the artist's total budget for mechanicals will be 68.25¢ per album.

Assume that the artist is to record only ten three-to-five-minute songs (as opposed to twelve, which is increasingly common).[40] Assume further that she wrote only five of these songs herself. Under this hypothetical, the artist will have to allocate 45.5¢ (9.1¢ times five) of the budget to paying the copyright holders of those five songs she did not write. The amount she receives for her own compositions will be the remaining 22.75¢—in other words, 4.55¢ per song (as opposed to 9.1¢ under the copyright statute). If two of those songs she did not write last for seven minutes, the extra two minutes from these songs will increase her allocation of the mechanical royalty budget from 18.2¢ to 24.5¢ (assuming the record label does not have a contractual arrangement to limit the rate to a maximum of 9.1¢ per song). Because the artist now has to pay an additional 6.3¢ for the longer songs, the budget for her own compositions will be further reduced to 16.45¢—that is, a meager 2.35¢ per song (a little more than a quarter of what she would have received under the copyright statute).

To be certain, the artist will always have economic incentives to write longer songs, considering the larger sum of mechanical royalties the extended
length will entitle her to receive. This larger sum will, in turn, compensate for the reduced royalties she receives owing to the controlled composition clause in her recording contract. Nevertheless, because other artists and record labels may be reluctant to record songs that last for more than five minutes and twelve seconds, it remains debatable whether the additional royalties, as opposed to creative preferences, would motivate her to write longer songs.[41] In fact, many artists may not even have thought through the complexities surrounding mechanical royalties and controlled composition clauses.

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[38] *See* PASSMAN, *supra* note 32, at 228–32 (discussing the maximum rate per song in record deals).

[39] *See id.* at 232–38 (discussing the maximum rate per album in record deals).

[40] If the artist records more than ten songs, the amount allocated to each song will be even lower.

[41] Thanks to Brandon Clark and Eric Priest for pushing me on this point.

Ⅲ .WHY ARE PROFESSIONAL SONGWRITERS DISSATISFIED WITH PANDORA AND SPOTIFY?

Through a low monthly subscription fee or the willingness to be inundated with advertisements, Pandora, Spotify, and other online streaming services have enabled individual users to listen to music—both songs they like and those they have not yet discovered.[42] These services not only have helped increase diversity in consumer choice, but also seek to respond to the ever- changing consumer lifestyle, habits, and preferences. Although this Part lumps the discussions of Pandora and Spotify together, they offer different types of services and pay royalties at disparate rates.[43]

From the standpoint of professional songwriters, however, it is unclear whether Pandora and Spotify are attractive services. This is particularly true for those songwriters who do not perform or who prefer to spend more time in the studio.[44]

On the recent fortieth anniversary of the Swedish group ABBA's victory in the Eurovision competition, Björn Ulvaeus, the group's former songwriting member, "voiced serious doubts that they would have had the same success if they started out today."[45] As *The Guardian* reported:

He and his co-writer Benny Andersson were more interested in writing great songs than going on tour, but did not start out as fully formed hit songwriters . . . . It took years of trial and error, fine-tuning and studying other songwriters. And, once they became successful, they'd still write every day, nine to five— and only end up with 12 songs a year. Ulvaeus said he doubted spending all that time on writing songs would be possible in a world where Spotify is the main source of income . . . , as they would have had to spend much more time touring in order to make a living.[46]

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[42] *See* Ben Sisario, *As Music Streaming Grows, Royalties Slow to a Trickle*, N.Y. TIMES (Jan. 28, 2013), http://www.nytimes.com/2013/01/29/business/media/streaming-shakes-up-music-industrys- model-for-royalties.html.

[43] While the former is largely a non-interactive webcaster, whose rate is set by the Copyright Royalty Board, the latter is a commercial on-demand streaming service. *See* PASSMAN, *supra* note 32, at 140–41 (distinguishing between interactive and non-interactive webcasting).

[44] *See* Peter K. Yu, *Digital Copyright and Confuzzling Rhetoric*, 13 VAND. J. ENT. & TECH. L. 881,901–07 (2011) (explaining why alternative compensation models that are based on live performances and merchandise sales will not work for all artists).

[45] Helienne Lindvall, *The Music Industry Is Divided Over Streaming—and Heading for a Collision*, GUARDIAN (Apr. 30, 2014), http://www.theguardian.com/media/media-blog/2014/apr/30/music-streaming-revenue-pandora-spotify.

[46] *Id.*

Since the arrival of iTunes, Pandora, and Spotify, record labels and songwriters alike have complained about how the revenue these services provide is not comparable to what they used to earn through album sales.[47] As Robert Levine, the former executive editor of *Billboard,* lamented, the digital transition has forced record labels and songwriters to "trade analog pennies for digital pennies."[48] With the arrival of Pandora and Spotify, "the river of nickels" from iTunes has now been further transformed into "a torrent of micropennies."[49]

On its website, Spotify claims that it "distribut[es] nearly 70% of all the revenues that [it] receive[s] back to rights holders."[50] Combining the free and premium tiers of service, "an average 'per stream' payout to rights holders [is] between $0.006 and $0.0084."[51] These figures are similar to those reported by *The New York Times*: "according to a number of music executives who have negotiated with the company, [Spotify] generally pays 0.5 to 0.7¢ a stream (or $5,000 to $7,000 per million plays) for its paid tier, and as much as 90 percent less for its free tier."[52]

Nevertheless, musicians remain dissatisfied with Spotify, as well as Pandora and other online streaming services. For instance, Taylor Swift recently removed her entire back catalogue from Spotify, just as her new album *1989* was released and was on its way to sell more than 1 million copies in the first week.[53] Thom Yorke of Radiohead, who released *In Rainbows* over the Internet using a name-your-price model,[54] also withdrew his independent work from the service

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[47] *See* ROBERT LEVINE, FREE RIDE: HOW DIGITAL PARASITES ARE DESTROYING THE CULTURE BUSINESS, AND HOW THE CULTURE BUSINESS CAN FIGHT BACK 229 (2011) ("I don't see how you'd get the consumer to agree to pay a sum that would match what we have at present." (quoting Frances Moore, CEO, International Federation of the Phonographic Industry)); Sisario, *supra* note 42 ("No artist will be able to survive to be professionals except those who have a significant live business, and that's very few." (quoting Hartwig Masuch, CEO, BMG Rights Management)). *But see* Sisario, *supra* note 42 (reporting that "a Google executive [saying] . . . that Psy's viral video sensation 'Gangnam Style' had generated $8 million from YouTube, where it had been watched 1.2 billion times, yielding a royalty of about 0.6 cent a viewing").

[48] LEVINE, *supra* note 47, at 145.

[49] Sisario, *supra* note 42.

[50] *Spotify Explained*, SPOTIFY, http://www.spotifyartists.com/spotify-explained/ (last visited Sept. 29, 2014).

[51] *Id.*

[52] Sisario, *supra* note 42.

[53] Hannah Ellis-Petersen, *Taylor Swift Takes a Stand Over Spotify Music Royalties*, GUARDIAN (Nov. 5, 2014), http://www.theguardian.com/music/2014/nov/04/taylor-swift-spotify-streaming- album-sales-snub.

[54] *See* PATRIK WIKSTRÖM, THE MUSIC INDUSTRY: MUSIC IN THE CLOUD 110 (2009) (providing an estimate from an Internet market research firm that "the album was downloaded approximately1million times and 40 per cent of the downloading fans paid on average $6 for the download"); *see also* GREG KOT, RIPPED: HOW THE WIRED GENERATION REVOLUTIONIZED MUSIC 233–40 (2009) (discussing Radiohead's name-your-price experiment).

in protest,[55] although he did launch a new competing streaming service a couple of days after the withdrawal.[56]

In a candid blog post published on *The Guardian*, English musician Sam Duckworth declared:

4,685 Spotify plays of my last solo album equated to £19.22 (that's 0.004p per album stream). The equivalent to me selling two albums at a show. I think it's fair to say that at least two of those almost 5,000 listeners would have bought the album from me if they knew the financial disparity from streaming.[57]

Damon Krukowski of Galaxie 500 also compared his recent Pandora and Spotify payouts with the sales of his band's very first single in the late 1980s: "Pressing 1,000 singles in 1988 gave us the earning potential of more than 13 million streams in 2012."[58] Finally, Bette Midler complained in a tweet that "Pandora paid her slightly more than $114 for more than 4 million song spins over a three- month period."[59]

On top of these frustrated remarks, "publishers and songwriters [have] question[ed] why record labels should get five to 12 times as much as the writers when a track is streamed," considering the limited costs incurred by the labels.[60] Although the disagreement between music publishers and record labels over how to divide the royalties pie is not new, it is worth looking into why Pandora,Spotify, and other online streaming services have thus far failed to satisfy either record labels or professional songwriters. This section will focus on the latter. In his well-argued book, *Free Ride*, Robert Levine explained the economics behind music disseminated through Spotify and other online streaming services:

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[55] Tim Worstall, *Spotify Royalties Appear to Be Awfully High Despite What Thom Yorke Says*, FORBES (July 17, 2013),http://www.forbes.com/sites/timworstall/2013/07/17/spotify-royalties-appear-to-be-awfully-high-despite-what-thom-yorke-says/.

[56] Tim Worstall, *Thom Yorke Launches Music Streaming Service Mere Days After Criticizing Spotify*, FORBES (July 18, 2013), http://www.forbes.com/sites/timworstall/2013/07/18/amaaazing-thom-yorke-launches-music-streaming-service-mere-days-after-criticising-spotify-the-music-streaming-service/.

[57] Sam Duckworth: *Thom Yorke's Right—Artists Can't Survive on Spotify Streams*, GUARDIAN (July 16, 2013), http://www.theguardian.com/music/musicblog/2013/jul/16/thom-yorke-spotify- ban-right-sam-duckworth.

[58] Damon Krukowski, *Making Cents*, PITCHFORK (Nov. 14, 2012), http://pitchfork.com/features/articles/8993-the-cloud/.

[59] Andy Gensler, *Bette Midler Critiques Pandora, Spotify: "Impossible for Songwriters to Earn a Living"*, HOLLYWOOD REP. (Apr. 6, 2014), http://www.hollywoodreporter.com/earshot/bette-midler-critiques-pandora-spotify-693961.

[60] Lindvall, *supra* note 45.

> [A] service like Spotify could hurt labels if users who don't subscribe choose to buy fewer CDs. As an example, let's imagine a million music fans who spend $60 a year on CDs and iTunes songs—representing $60 million in retail revenue—but might cut that amount by a third once they start using Spotify. If the company can sell subscriptions to 10 percent of its users for $10 a month, it would generate $12 million in fees; those 100,000 customers would spend another $4 million a year buying music, for a total of $16 million. But the other 900,000 customers using the service for free will spend only another $36 million. That adds up to $52 million—only $8 million less than before—except that the first users of Spotify will be the consumers who now spend the most on music.[61]

Although Levine believes that the record labels' revenue will eventually increase with the growth of these services, he forecasted that the labels would have to see a severe drop in revenue before seeing the revenue rising again:

> Consider a streaming music service that charges $5 per month. Its first customers would be dedicated fans, the consumers who might now spend $100 or so a month on music. Once they buy a subscription, they might spend less. In the long run, this might not matter, because other subscribers—the consumers who now buy one or two CDs a year—will spend much more than they did before. The problem is that they might not buy a subscription for some time.[62]

Indeed, Roger Entner of Recon Analytics estimated that "streaming music services should be sustainable when they reach 10 million paying users."[63] Until then, however, professional songwriters are likely to remain dissatisfied with these services.

To be certain, the decline in songwriters' royalties can be attributed to both the decline of the music industry and massive unauthorized copying on the internet. However, one should not overlook the dramatic impact the shift from the album model to the singles model has on the songwriting business.[64] Even if

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[61] LEVINE, *supra* note 47, at 77–78.

[62] *Id*. at 229–30.

[63] Joshua Brustein, *Spotify Hits 10 Million Paid Users. Now Can It Make Money?*, BLOOMBERG BUSINESSWEEK (May 21, 2014), http://www.businessweek.com/articles/2014-05-21/why-spotify- and-the-streaming-music-industry-cant-make-money.

[64] Although this Part focuses primarily on economic impact, one can also notice some non-economic impact. For example, "[f]ans of the Beatles' classic *Sgt. Pepper's Lonely Hearts Club* lamented that the iPod, with its irresistible song-shuffling function, would eliminate the album as

it remains debatable how much of the recent decline in music sales was caused by massive online file-sharing,[65] there is no denying that such unauthorized copying has forced the music industry to embrace distribution models that, at least for now, have resulted in a significant reduction in income. As Robert Pittman, cofounder of MTV, declared: "Stealing music is not [what's] killing music. When I talk to people in the music business, most of them will admit the problem is they're selling songs and not albums. I mean, you do the math."[66]

To a large extent, the new singles model Apple iTunes ushered in a decade ago has turned a "high-margin, high revenue model" of $15–to–$18 transactions into a low-margin model of multiple 99¢ sales.[67] As Peter Mensch, who works with Metallica, the Red Hot Chili Peppers, and others acts, declared: "When they let Steve Jobs roll over us, that was the end. They thought, 'It's another way to sell music.' But now I'm selling singles when I should be selling albums."[68] A 2007 consulting study funded by the U.K. music industry also found that "18 percent of the labels' 2004–2007 revenue loss stemmed from piracy, while the rest was the result of selling music by the track."[69]

To make things worse, the early days of the iTunes Music Store did not allow for so-called variable pricing. As a result, all songs, regardless of their genre or popularity, were sold at the same 99¢ price.[70] The lack of control over prices, to some extent, has created market distortion that ultimately harms the record labels' business models. While fixed pricing undoubtedly provides simplicity and convenience to consumers—the preference of the late Steve Jobs[71]—it ignores the fact that some songs (and albums) are worth more, and sometimes significantly more, than others. Before the arrival of iTunes, for example, record labels frequently differentiated among the different classes of

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an art form." STEVE KNOPPER, APPETITE FOR SELF-DESTRUCTION: THE SPECTACULAR CRASH OF THE RECORD INDUSTRY IN THE DIGITAL AGE 178 (2009).

[65] *See* SIVA VAIDHYANATHAN, THE ANARCHIST IN THE LIBRARY: HOW THE CLASH BETWEEN FREEDOM AND CONTROL IS HACKING THE REAL WORLD AND CRASHING THE SYSTEM 47–48 (2004) (observing that Eminem, Limp Bizkit, Britney Spears, and NSYNC had all sold more than one million albums in the first week after release in the height of online file-sharing through Napster);WIKSTRÖM, *supra* note 54, at 150 ("There has been, and still is, a relatively polarized debate as to whether it is the copyright infringement enabled by P2P networking and other similar technologies, which has caused the downturn of the recorded music industry."); Felix Oberholzer-Gee & Koleman S. Strumpf, *The Effect of File Sharing on Record Sales: An Empirical Analysis*, 115 J. POL. ECON. 1 (2007) (showing that file sharing has only had a limited effect on record sales); Yu,, *Digital Copyright and Confuzzling Rhetoric*, *supra* note 44, at 893 ("[W]ithout empirical proof, it is hard to know whether downloads actually lead to lost sales. In fact, some evidence seems to suggest otherwise.").

[66] KNOPPER, *supra* note 64, at 181.

[67] LEVINE, *supra* note 47, at 44–45 (quoting the observation of Hank Barry, Napster's former interim CEO).

[68] *Id*. at 68.
[69] *Id*. at 70.
[70] *See* KNOPPER, *supra* note 64, at 179–80 (discussing the problems created by the lack of variable pricing on iTunes).*See id*. at 180.

music: singles, albums, compilations, "greatest hits," mid-price records, budget releases, record clubs, box sets, all of which were subject to different royalty rates.[72] Although the fixed 99¢ rate was eventually replaced in 2009 by a variable pricing scheme of 69¢, 99¢, and $1.29,[73] the prices of most best-selling songs were soon raised to the current price of $1.29, leaving again limited price variations amongst songs of different genres and popularity.

To make the life of professional songwriters even more difficult, publishing agreements usually require the output for a specified term to be delivered in exchange for an advance against royalties.[74] The term is set up to enable songwriters to generate enough songs for an album. It is usually based on either a specified period or a specified number of songs, including those that have to be recorded and released. If the concerned songwriter fails to deliver enough songs under the specified term, the output she produces for the next album will still count toward the yet-to-complete term. It is therefore no surprise that Donald Passman cautioned songwriters about the term, lest they deliver "two albums for the price of one."[75]

Because of the importance for songwriters to obtain an advance, music lawyers are eager to negotiate for contracts featuring language that will allow the specified term to move forward—for instance, when the advance has been recouped or when enough songs have been recorded. They may further negotiate for the songwriter to receive an additional advance at the beginning of a new term, especially if the contract for the previous term has already been recouped.[76] Advances are attractive because they are rarely returnable, even when they are recoupable—that is, the songwriter will not be contractually required to return the advance even if she may not receive additional monies from the publisher for the songs she has composed during the term.[77]

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[71] *See* PASSMAN, *supra* note 32, at 151–53, 158–62, 230.

[72] Andrew Edgecliffe-Johnson, *Apple Brings in Variable Pricing on iTunes*, FIN. TIMES (Jan. 6, 2009), http://www.ft.com/intl/cms/s/2/bccbeed0-dc1f-11dd-b07e-000077b07658.html.

[73] *See* PASSMAN, *supra* note 32, at 282 (discussing the "term" in songwriter agreements).

[74] *Id*. at 287.

[75] *See id*. at 286 ("[I]f you have clout, you can sometimes get the publisher to move the term forward if you're recouped, even if you haven't delivered all the songs you promised.").

[76] As Al and Bob Kohn observed:,Though the advance is recoupable, it is not *returnable* (i.e., if the advances turn out to be greater than the amount of royalties ever earned from sales, the writer will not have to pay the unearned balance of the advance back to the person who paid it, unless of course he is otherwise in breach of the agreement . . . , however, the advance may be *returnable* in certain circumstances at the option of the writer, such as when the writer exercises a reversion of rights provision). Thus, an advance is more accurately referred to as a "non-returnable, recoupable advance."
KOHN & KOHN, *supra* note 32, at 111; PASSMAN, *supra* note 32, at 85 (stating that "[w]ith very rare exceptions, advances are nonreturnable").

In recent years, the privileging of the singles model over the album model has greatly changed the dynamics of the songwriting business. To begin with, songwriter agreements for single songs rarely exist, and it is hard to know in advance whether a particular song will succeed commercially. Even if the songwriter manages to obtain a contract for single songs, the advance provided by such a contract is likely to be very limited—in the range of hundreds of dollars as opposed to tens, or even hundreds, of thousands of dollars.[78] Moreover, for contracts featuring specified terms, it remains unclear when the specified term will move forward (assuming that the contract allows for such a move). For example, if the contract requires recording by an artist from a major label, success via independent labels or user-generated content may not suffice even if the song has gone viral.[79]

Obviously, it is hard to generalize the impact of the shift from the album model to the singles model on professional songwriters. Some songwriters, for instance, will work better under the singles model, because they are not interested in writing many songs and have no urgency to move the term forward. Some are also very talented, and the singles model could be quite beneficial if they manage to negotiate for a higher rate in exchange for benchmarks that are tied to commercial success. Meanwhile, other songwriters get used to having a high volume of production in an effort to move the term and to get additional advances. Oftentimes, the push for high volume of output has resulted in the production of a large number of songs with mixed success. Such a push would therefore work better with the old album model, which bundles one or two popular songs together with other mediocre—or, worse, filler—tunes.[80]

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[77] *Compare* PASSMAN, *supra* note 32, at 281 ("The advance for a single-song agreement is usually not very significant. It ranges anywhere from nothing (the most common) to $250 or $500, if we're talking about unknown songwriters and no unusual circumstances (such as a major artist who's committed to record the song, which of course changes the whole ball game). Major songwriters rarely sign single-song agreements other than for films . . . ."), *with id*. at 283 ("[N]ew writers signing to a major publisher might get an advance in the range of $18,000 to $100,000 per year, and less if you sign to a smaller publisher. . . . If you are an established writer, the advances . . . can range from $2,000 to several thousand dollars per month, and up. Some superstar writers get hundreds of thousands of dollars per year.").

[78] *See id*. at 287 ("[I]f you're not [a recording] artist but agreed that a certain number of your songs must be released on a major label, you could be stuck in the first period, despite giving the publisher hundreds of unrecorded songs. Or if you're getting songs released digitally only, or outside the United States only, or on indie labels.").

[79] *See* KNOPPER, *supra* note 64, at 106 ("By the late 1990s, the record business had boiled down much of the business to a simple formula: 2 good songs + 10 or 12 mediocre songs = 1 $15 CD,meaning billions of dollars in overall sales.").

Ⅳ. WHY CAN WE BRING EUROPEAN CDS BACK TO THE UNITED STATES?

Copyright is territorial by nature.[81] There is no unitary protection throughout the world, and U.S. and Canadian copyright holders often do not have rights in Europe. While some European rights holders are part of a large United States–based global conglomerate—Warner Music France being part of Warner Music Group, for example—the creation of separate companies for tax, business, and other reasons have resulted in the existence of territorially based rights holders.

The geographical constraints on the use of copyrighted works are sometimes counterproductive. Although distribution rights are regionally exhausted within the European Union, there is no guarantee that legally purchased music can be portable across state lines. The Union does not have unitary copyright titles,[82] and many different collective management organizations ("CMOs") exist.[83] As the European Commission lamented in *A Digital Agenda for Europe*:

Consumers expect, rightly, that they can access content online at least as effectively as in the offline world. Europe lacks a unified market in the content sector. For instance, to set-up a pan-European service an online music store would have to negotiate with numerous rights management societies based in 27 [now 28] countries. Consumers can buy CDs in every shop but are often unable to buy music from online platforms across the EU because rights are licensed on a national basis. This contrasts with the relatively simple business environment and

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[80] *See* Berne Convention for the Protection of Literary and Artistic Works art. 5(3), Sept. 9, 1886, 828 U.N.T.S. 221 (revised at Paris July 24, 1971) [hereinafter Berne Convention] ("Protection in the country of origin is governed by domestic law.").

[81] *See* FREDERICK M. ABBOTT, PARALLEL IMPORTATION: ECONOMIC AND SOCIAL WELFARE DIMENSIONS 5 (2007), *available at* http://www.iisd.org/pdf/2007/parallel_importation.pdf ("Under a 'regional' exhaustion policy, the IP holder's right is extinguished when a good or service is put onto the market within any country of a defined region, such as the European Union. 'Parallel imports' are permitted, but only with respect to goods first placed on the market within the regional territory."); Irene Calboli, *Market Integration and (the Limits of) the First Sale Rule in North American and European Trademark Law*, 51 SANTA CLARA L. REV. 1241, 1256–58 (2011) (explaining the differences among national, international, and regional exhaustion); Ryan L. Vinelli, Note, *Bringing down the Walls: How Technology Is Being Used to Thwart Parallel Importers amid the International Confusion Concerning Exhaustion of Rights*, 17 CARDOZO J. INT'L & COMP. L. 135, 148–51 (2009) (same).

[82] For discussions of CMOs, see generally COLLECTIVE MANAGEMENT OF COPYRIGHT AND RELATED RIGHTS (Daniel J. Gervais ed., 2d ed. 2010) [hereinafter COLLECTIVE MANAGEMENT]; Robert P.,Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CALIF. L. REV. 1293 (1996).

distribution channels in other regions, notably the US, and reflects other fragmented markets such as those in Asia[84]

The existence of multiple CMOs, indeed, has led to the creation of "thickets" and high transaction costs that make it difficult for rights to be exploited.[85] As William Patry observed:

In order to have a music service offered to the public, all possible rights holders must sign off. It does no good to get the right to stream performances of sound recordings unless you have the right to also stream the underlying musical composition. Unless you get both rights, you can't offer the service. Given that you want to offer as wide a service as possible, you have to obtain licenses from everyone. If a single important licensor says no, you're sunk.[86]

In Canada, for example, the Copyright Board of Canada had to use the pressure of issuing a single tariff to bring together different CMOs under "shotgun marriages."[87] In the words of Daniel Gervais:

[T]he Copyright Board of [Canada] has essentially forced CMOs to work together to offer a single fee license to users who need multiple right fragments. This allows them to pay a single fee and it allows the Board to determine the entire value of the copyright bundle (all of the fragments) needed by the user. The bundle must then be split for distribution purposes (as the Board

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[83] *A Digital Agenda for Europe*, at 7, COM (2010) 245 final (Aug. 26, 2010); *see also* PATRY, *supra* note 3, at 186 ("[M]any tens of millions of dollars are left on the table in Europe alone because of the inability to get pan-European licenses. Instead, licensees have to negotiate on a country-by- country basis with national collecting societies, music publishers, and record labels (to name only the top three groups), to say nothing of countries where there are no collecting societies. Authors lose because deals aren't done; the public loses because there is a dearth of authorized, complete services; copyright law as a system loses for both these reasons.").

[84] *See* MCLEOD & DICOLA, *supra* note 4, at 13 (noting the problems in the area of digital sampling caused by the legal and bureaucratic pressures of licensing). For excellent discussions of "thickets" in the intellectual property area in general and biomedical research in particular, see generally MICHAEL HELLER, THE GRIDLOCK ECONOMY: HOW TOO MUCH OWNERSHIP WRECKS MARKETS,STOPS INNOVATION, AND COSTS LIVES 49–78 (2010); Michael A. Heller & Rebecca S. Eisenberg,,*Can Patents Deter Innovation? The Anticommons in Biomedical Research*, 280 SCI. 698 (1998).

[85] PATRY, *supra* note 3, at 185.

[86] Mario Bouchard, *Collective Management in Commonwealth Jurisdictions: Comparing Canada with Australia*, *in* COLLECTIVE MANAGEMENT, *supra* note 83, at 307, 320.

did) between the various CMOs representing different groups of right holders. But that is of no concern to the user.[88]

In the past few years, the European Commission introduced efforts to make it easier for EU nationals to obtain music online. From December 2013 to March 2014, the Commission held a consultation on the modernization of the EU copyright regime. A key focus of this consultation was "to increase the cross- border availability of content services in the Single Market, while ensuring an adequate level of protection for right holders."[89] This consultation built on the practical industry-based solutions explored in the recently concluded "Licences for Europe" Stakeholder Dialogue, which the Commission launched in February 2013.[90] To facilitate the cross-border portability of subscription services, the consultation also explored the need for the development of region-wide unitary copyright titles.[91]

To some extent, the recent EU effort dovetails with the call by Francis Gurry, the director general of the World Intellectual Property Organization ("WIPO"), for the creation of "a seamless global digital marketplace" during the 2013 WIPO General Assembly.[92] As he recently explained in an interview with the *Intellectual Property Watch*:

> For as long as it is easier to get content illegally than it is to get it legally, there is an encouragement to piracy. We have to make the conditions to get it legally better than illegally and that is the global digital marketplace.

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[87] Daniel Gervais, *Collective Management of Copyright: Theory and Practice in the Digital Age*, *in*COLLECTIVE MANAGEMENT, *supra* note 83, at 1, 13.

[88] COMM'N EUROPEAN COMMUNITIES, PUBLIC CONSULTATION ON THE REVIEW OF THE EU, PYRIGHT RULES 8 (2013), *available at* http://ec.europa.eu/internal_market/consultations/2013/ copyright-rules/docs/consultation-document_en.pdf [hereinafter EU CONSULTATION DOCUMENT].

[89] *See Licences for Europe: Ten Pledges to Bring More Content Online*, EUROPEAN COMMISSION (Nov. 13, 2013), *available at* http://ec.europa.eu/internal_market/copyright/docs/licences-for-,europe/131113_ten-pledges_en.pdf.

[90] As the consultation document stated:The idea of establishing a unified EU Copyright Title has been present in the copyright debate for quite some time now, although views as to the merits andthe feasibility of such an objective are divided. A unified EU Copyright Title would totally harmonise the area of copyright law in the EU and replace national laws. There would then be a single EU title instead of a bundle of national rights. Some see this as the only manner in which a truly Single Market for content protected by copyright can be ensured, while others believe,that the same objective can better be achieved by establishing a higher level of harmonisation while allowing for a certain degree of flexibility and specificity in Member States' legal systems.,EU CONSULTATION DOCUMENT, *supra* note 89, at 36.

[91] Francis Gurry, *Address by the Director General*, WORLD INTELL. PROP. ORG. (Sept. 23, 2013), http://www.wipo.int/about-wipo/en/dgo/speeches/a_51_dg_speech.html.

Let me give you [an] example: if one of the HBO series comes out in a new season in, for example, the US but is not available in the new season in certain other countries. What do people do? Do they wait patiently for three months? No, because they are addicted! So this is where I think our objective ought be a seamless global legal digital marketplace and I think everyone has agreed on this.[93]

Although Gurry did not believe the creation of this new marketplace should be "a legislative exercise," he noted the need to establish "a multi-stakeholder dialogue" to facilitate such creation.[94]

Given the territorial nature of copyright law and the complications raised by state borders, one has to wonder why U.S. tourists can bring back books, CDs, computer software, and other copyrighted works from Europe.[95] After all, Section 602(a)(1) of the Copyright Act, which focuses on "infringing importation or exportation of copies or phonorecords," expressly provides:

> Importation into the United States, without the authority of the owner of copyright under this title, of copies or phonorecords of a work that have been acquired outside the United States is an infringement of the exclusive right to distribute copies or phonorecords under section 106, actionable under section 501.[96]

Section 602(a)(2) further states:

> Importation into the United States . . . without the authority of the owner of copyright under this title, of copies or phonorecords, the making of which either constituted an infringement of copyright, or which would have constituted an infringement of copyright if this title had been applicable, is an infringement of the exclusive right to distribute copies or phonorecords under section 106, actionable under sections 501 and 506.[97]

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[92] Catherine Saez, *WIPO Director Gurry Speaks on Naming New Cabinet, Future of WIPO*, INTELL. PROP. WATCH (May 8, 2014), http://www.ip-watch.org/2014/05/08/wipo-director-gurry- speaks-on-naming-new-cabinet-future-of-wipo/.

[93] *Id.*

[94] Let's ignore, for now, the potential additional complications from territorially based lockout codes, which have been widely deployed to protect movies, television shows, music, computer software, and online games. *See* Peter K. Yu, *Region Codes and the Territorial Mess*, 30 CARDOZO ARTS & ENT. L.J. 187, 257 (2012).

[96] 17 U.S.C. § 602(a)(1) (2012).

[97] *Id*. § 602(a)(2).

The answer to this question is simple. Section 602(a)(3) contains three exceptions to these two sections.[98] Section 602(a)(3)(B) specifically provides:

> [I]mportation . . . for the private use of the importer . . . and not for distribution, by any person with respect to no more than one copy or phonorecord of any one work at any one time, or by any person arriving from outside the United States . . . with respect to copies or phonorecords forming part of such person's personal baggage.[99]

This provision covers what is generally known as the exception for "private use," "personal luggage," or "de minimis importation." This exception allows individuals traveling with goods purchased from abroad to bring these goods back to the United States even if they have not received authorization from the relevant copyright holders.

During the negotiation of the Anti-Counterfeiting Trade Agreement (ACTA),[100] the potential removal of this exception sparked quite a controversy.

From the standpoint of combating piracy and counterfeiting, such removal is understandable because many rights holders viewed the exception as an unnecessary loophole.[101] They also feared that the exception would send a wrong

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[98] *Id*. § 602(a)(3)(A)–(C).

[99] *Id*. § 602(a)(3)(B).

[100] Anti-Counterfeiting Trade Agreement, *opened for signature* May 1, 2011, 50 I.L.M. 243 (2011) [hereinafter ACTA]. ACTA is a plurilateral intellectual property agreement negotiated by the United States and ten other developed or likeminded countries. For the Author's earlier discussions of this agreement, see generally Peter K. Yu, *ACTA and Its Complex Politics*, 3 WIPO J. 1 (2011);
Peter K. Yu, *Enforcement, Enforcement, What Enforcement?*, 52 IDEA 239 (2012); Peter K. Yu, *Six Secret (and Now Open) Fears of ACTA*, 64 SMU L. REV. 975 (2011) [hereinafter Yu, *Six Secret Fears*].

[101] *See* TIMOTHY P. TRAINER & VICKI E. ALLUMS, PROTECTING INTELLECTUAL PROPERTY RIGHTSACROSS BORDERS § 6:50, at 703 (2008) ("Although it might be viewed as draconian, one way to close a loophole when there is no uniform standard is to eliminate the exemption altogether. The de minimis exemption is one that, perhaps, should be eliminated and subject all trade in counterfeit and pirate products to the enforcement measures."). As Timothy Trainer, the former president of the International AntiCounterfeiting Coalition, declared in his testimony before the U.S.-China Economic and Security Commission:
[I]f we do not wish to impose penalties [on buyers of counterfeit goods], perhaps we should, at least, eliminate the personal use exemption in the Customs law and regulations that allow individuals to keep the counterfeit.,goods purchased abroad. The Customs law and regulation could be changed to require the confiscation of any counterfeit product and impose an administrative fine on persons entering the United States and in personal possession of any counterfeit or pirated product, including in their luggage.,Timothy Trainer, Testimony Before the U.S.-China Economic and Security Commission, Hearing on Intellectual Property Rights Issues and Dangers of Counterfeited Goods Imported into the

message that in turn would slow down efforts to combat piracy and counterfeiting.[102] In addition, the removal of the personal luggage exception was supported by those countries that had already prohibited the possession of counterfeit goods, such as France and Switzerland, or had other similarly stringent requirements.[103] If possession of counterfeit goods was illegal, it was only logical that travelers were disallowed to carry these goods in their personal luggage.

Nevertheless, many considered the personal luggage exception commonsensical. In their view, the removal of this exception was onerous, unnecessary, and draconian. The exception was also consistent with international standards. Article 60 of the Agreement on Trade-Related

Aspects of Intellectual Property Rights ("TRIPS Agreement") of the World Trade Organization specifically provides: "Members may exclude from the application of the above provisions small quantities of goods of a non-commercial nature contained in *travellers' personal luggage* or sent in small consignments."[104]Moreover, tourists are not in the best position to assess whether proper authorization has been obtained for intellectual property goods. A seemingly legitimate product could easily have infringed on the rights of others. The

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United States 8–9 (June 8, 2006) [hereinafter Trainer's USSC Testimony], *available at* http://www.uscc.gov/sites/default/files/06_06_7_8_trainer_tim.pdf (written testimony of Timothy Trainer, President, Global Intellectual Property Strategy Center).

[102] *See* Michael Geist, *Canada's ACTA Briefing, Part Five: The Fight Over a De Minimis Exception*, MICHAEL GEIST'S BLOG (Apr. 6, 2009), http://www.michaelgeist.ca/content/view/3834/ 125/ ("[S]ome groups [are] concerned that it would send a signal that purchasing counterfeit products for personal use is acceptable or that it could lead to the importation of counterfeit,medicines."); *Global Organizations Provide Governments with Recommendations on Anti-Counterfeiting Trade Agreement*, BUS. ACTION TO STOP COUNTERFEITING & PIRACY (June 25, 2010), http://www.iccwbo.org/News/Articles/2010/Global-organizations-provide-governments- with-recommendations-on-anti-conterfeiting-trade-agreement/(stating in the joint recommendations and comments on ACTA submitted by Business Action to Stop Counterfeiting and Piracy and the International Trademark Association the belief that "making an explicit exception that permits travelers to bring in goods for personal use sends a wrong message to consumers that buying counterfeits is accepted by the government").

[103] *See* Trainer's USSC Testimony, *supra* note 101, at 8 ("France and Italy have been extremely aggressive in imposing fines on consumers of counterfeit merchandise."); *see also* TRAINER & ALLUMS, *supra* note 101, § 6:50, at 703 ("Because of the growing trade in counterfeit and pirate products, there are some governments, notably France, that have decided to take stringent measures,by targeting tourists who may have only one counterfeit item. Switzerland appears to be following France's example." (footnote omitted)).

[104] Agreement on Trade-Related Aspects of Intellectual Property Rights art. 60, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299 (1994) [hereinafter TRIPS Agreement] (emphasis added); *see also* Council Regulation 1383/2003,of 22 July 2003 Concerning Customs Action Against Goods Suspected of Infringing Certain Intellectual Property Rights and the Measures to Be Taken Against Goods Found to Have Infringed Such Rights, art. 3(2), 2003 O.J. (L

196) 7 (“Where a traveller’s personal baggage contains goods of a non-commercial nature within the limits of the duty-free allowance and there are no materialindications to suggest the goods are part of commercial traffic, Member States shall consider such goods to be outside the scope of this Regulation.”).

removal of the personal luggage exception might also have appeared worse than it seemed when such removal was viewed against a background of highly secretive, unaccountable, and undemocratic negotiations.[105] Given the highly unappealing nature of the ACTA negotiations, it is no surprise that many inferred from these negotiations that something shady had been going on. As Cory Doctorow declared, tongue in cheek, "What's in ACTA? Well, it kind of doesn't matter. If it were good stuff, they'd be negotiating it in public where we could all see it."[106]

In the end, because of the wide public protests against ACTA, the removal of the personal luggage exception was made only optional, similar to the TRIPS Agreement.[107] Although it may never be publicly known whether the optional exception was retained as a compromise—and if so, how this compromise was reached—countries were expressly allowed to retain the personal luggage exception under the joint consolidated draft, which was released after the eighth round of negotiations in Wellington, New Zealand.[108] The final text of ACTA, which was adopted on April 15, 2013, also retains this optional requirement. Article 14(2) of ACTA now provides: "A Party may exclude from the application of this Section small quantities of goods of a non- commercial nature contained in travellers' personal luggage."[109]

V. WHY CAN'T YOUTUBE VIDEOS BE CREATED WITH ASCAP/BMI LICENSES?

Although YouTube videos consist of mostly audiovisual content, they have created a unique challenge for the protection of copyrighted music compositions and sound recordings. This challenge was indeed the reason why the National Music Publishers' Association and other music publishers jointly

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[105] For discussions of the lack of transparency in the ACTA negotiations, see generally David S. Levine, *Bring in the Nerds: Secrecy, National Security and the Creation of International Intellectual Property Law*, 30 CARDOZO ARTS & ENT. L.J. 105 (2012); David S. Levine, *Transparency Soup: The ACTA Negotiating Process and "Black Box" Lawmaking*, 26 AM. U. INT'L L. REV. 811 (2011); Yu, *Six Secret Fears*, *supra* note 100, at 998–1019.

[106] Cory Doctorow, *Big Entertainment Wants to Party Like It's 1996*, INTERNET REVOLUTION (Apr. 21, 2009), *quoted in* Yu, *Six Secret Fears*, *supra* note 100, at 976.

[107] *See* Yu, *Six Secret Fears*, *supra* note 100, at 1000 ("To alleviate [public] concern, ACTA negotiators . . . quickly reached a consensus on the de minimis provision, notwithstanding the negotiating parties' initial disagreement over the scope of such a provision, as well as some lingering concerns from selected industry groups—most notably INTA and the U.S. Chamber of,Commerce" (footnote omitted)).

[108] *See* Anti-Counterfeiting Trade Agreement art. 2X, *opened for signature* May 1, 2011 (Apr. 2010 draft), *available at* http://www.ustr.gov/webfm_send/1883 ("Parties may exclude from the application of this Section small quantities of goods of a non-commercial nature contained in travelers' personal luggage [or sent in small consignments.]").

[109] ACTA, *supra* note 100, art. 14(2).

filed a putative class action lawsuit against YouTube for copyright infringement in *Football Association Premier League Ltd. v. YouTube, Inc*.[110]

For recorded popular music, there are usually two different layers of copyright: one for the sound recording and the other for the underlying musical composition, which includes both the musical notes and the lyrics.[111] While the former was not protected until the passage of the Sound Recording Act of 1971,[112] which entered into effect on February 15, 1972, the latter has been protected for almost two centuries since the 1831 Copyright Act.[113] Because the 1976 Copyright Act allows for the divisibility of copyright,[114] copyright holders can freely transfer their reproduction, adaptation, distribution, public display, public performance, and digital audio transmission rights.[115] Section 201(d)(2) specifically states:

> Any of the exclusive rights comprised in a copyright, including any subdivision of any of the rights specified by section 106, may be transferred . . . and owned separately. The owner of any particular exclusive right is entitled, to the extent of that right, to all of the protection and remedies accorded to the copyright owner by this title.[116]

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[110] *Football Association Premier League Ltd. v. YouTube, Inc*., 633 F. Supp. 2d 159 (S.D.N.Y. 2009).

[111] *See* 17 U.S.C. § 102(a)(2), (7) (2012) (separating "musical works, including any accompanying words" from "sound recordings" in the categories of copyrightable subject matter); *see also* Newton v. Diamond, 349 F.3d 591, 592–93 (9th Cir. 2003) ("Sound recordings and their underlying compositions are separate works with their own distinct copyrights.").

[112] Pub. L. No. 92-140, 85 Stat. 391 (1971).

[113] Act of Feb. 3, 1831, ch. 16, 4 Stat. 436.

[114] *See generally* STAFF OF S. COMM. ON THE JUDICIARY, 86TH CONG., STUDY NO. 11: DIVISIBILITY OF COPYRIGHTS (Comm. Print 1960) (study by Abraham L. Kaminstein) (providing an excellent study on the divisibility of copyright). As Abraham Kaminstein, a future Register of Copyrights, explained: When copyright consisted solely in the right to multiply copies, transfers were generally of the entire copyright; as long as the rights and the uses of copyright material remained few, the problems incident to transferring one of a bundle of rights were of little consequence. The present difficulty arises from the fact,that a theory enunciated during the period of a limited number of rights and uses of copyright material has been applied to the great proliferation of rights and uses which have developed since the turn of the century. The concept of indivisibility tends to force all sales or transfers of copyrights or rights in copyrights into one of two molds, (a) assignment, a complete transfer of all rights, or (b) license, a transfer of any portion of those rights. An assignment carries all rights; a license is really a contract not to sue the licensee, and the licensee cannot fully enforce his rights against third parties.*Id*. at 1.

[115] 17 U.S.C. § 106 (2012) (stipulating these rights).

[116] *Id*. § 201(d)(2).

The ability to transfer these various exclusive rights has therefore made monitoring and collection of royalties especially cumbersome and time- consuming. The need for monitoring and royalty collection, in turn, necessitates the assistance of CMOs.

As far as music in the U.S. market is concerned, there are three different groups of CMOs, each handling different types of rights and beneficiaries. The Harry Fox Agency, a wholly owned subsidiary of the National Music Publishers' Association, handles the wide majority of mechanical and synchronization licenses on behalf of music publishers.[117] Meanwhile, ASCAP, BMI, and the Society of European Stage Authors and Composers (SESAC) collect public performance royalties for publishers and songwriters. Out of these three performing rights organizations, ASCAP is "the oldest and by far the largest in terms of billings," while BMI is the largest when "measured by [the] number of 'affiliates.'"[118] Together, they "collect over 95% of all U.S. performance royalties, with [SESAC] receiving the remainder."[119] Finally, SoundExchange was created in the early 2000s to collect digital performance royalties on behalf of recording artists and record labels.[120] Among the royalties collected were those originating from "Pandora, SiriusXM, webcasters and cable TV music channels."[121]

The origin of ASCAP as a CMO began with the frustration a group of songwriters had over their inability to collect royalties for the performance of their music compositions.[122] Such frustration eventually led to the formation of ASCAP in 1914,[123] which was quickly followed by the now-famous United States Supreme Court case of *Herbert v. Shanley*.[124] In this case, the Court determined whether the performance of a copyrighted musical work in a restaurant or hotel without admission charges infringed on the right to perform publicly for profit. Writing for a unanimous court, Justice Oliver Wendell Holmes declared:

> If the rights under the copyright are infringed only by a performance where money is taken at the door, they are very imperfectly protected. Performances not different in kind from those of the defendants could be given that might compete with

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[117] *See* HAROLD L. VOGEL, ENTERTAINMENT INDUSTRY ECONOMICS: A GUIDE FOR FINANCIAL ANALYSIS 255 (8th ed. 2011).

[118] *Id*. at 254.

[119] *Id*.

[120] *See* Peter DiCola & Matthew Sag, *An Information-Gathering Approach to Copyright Policy*, 34 CARDOZO L. REV. 173, 230 (2012).

[121] *About Digital Royalties*, SOUNDEXCHANGE, http://www.soundexchange.com/artist-copyright-owner/digital-royalties/ (last visited Sept. 30, 2014).

[122] *See* KOHN & KOHN, *supra* note 32, at 1247–48. Among this group were Irving Berlin, Gene Buck, Nathan Burkan, Victor Herbert, John Philip Sousa, and Jay Witmark. *Id*. at 1248.

[123] *See id*. at 1249.

[124] Herbert v. Shanley, 242 U.S. 591 (1917).

and even destroy the success of the monopoly that the law intends the plaintiffs to have. It is enough to say that there is no need to construe the statute so narrowly. The defendants' performances are not eleemosynary. They are part of a total for which the public pays, and the fact that the price of the whole is attributed to a particular item which those present are expected to order is not important. It is true that the music is not the sole object, but neither is the food, which probably could be got cheaper elsewhere. The object is a repast in surroundings that to people having limited powers of conversation or disliking the rival noise, give a luxurious pleasure not to be had from eating a silent meal. If music did not pay, it would be given up. If it pays, it pays out of the public's pocket. Whether it pays or not, the purpose of employing it is profit, and that is enough.[125]

As a result, restaurants, hotels, and other similar businesses that performed music in public (such as concert halls, dance halls, theaters, cabarets, and night clubs) had to pay performance royalties to copyright holders even when they did not charge admission fees for the performances.[126]

In the late 1930s, backed by court decisions that deemed broadcasting a "for-profit" public performance, ASCAP became more aggressive, raising its fees repeatedly and substantially. As David Bollier recounted:

> At the time, ASCAP required artists to have five hits before it would serve as a collection agency for them, a rule that privileged the playing of pop music on the radio at the expense of rhythm and blues, jazz, hillbilly, and ethnic music. Then, over the course of eight years, ASCAP raised its rates by 450 percent between 1931 and 1939—at which point, ASCAP then proposed *doubling* its rates for 1940.[127]

In protest to these ever-increasing fees, many radio stations boycotted ASCAP and turned to Latin music as well as musical works that did not belong to ASCAP members.[128] In addition, they formed BMI as their own CMO.[129] This

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[125] *Id.* at 594–95.

[126] *See* KOHN & KOHN, *supra* note 32, at 1249.

[127] DAVID BOLLIER, VIRAL SPIRAL: HOW THE COMMONERS BUILT A DIGITAL REPUBLIC OF THEIR OWN 156 (2008).

[128] *See* JULIE E. COHEN ET AL., COPYRIGHT IN A GLOBAL INFORMATION ECONOMY 455 (3d ed. 2010) ("[O]n January 1, 1941, radio stations began a boycott of ASCAP music, instead broadcasting almost exclusively Latin music, which ASCAP had thus far ignored."); K.J. Greene, *"Copynorms," Black Cultural Production, and the Debate Over African-American Reparations*, 25 CARDOZO ARTS & ENT. L.J. 1179 (2008) (noting that black artists were excluded from

ASCAP).

new organization "sought to break the ASCAP monopoly by offering free arrangements of public-domain music to radio stations. [It] also charged lower rates than ASCAP for licensing music and offered better contracts for artists."[130]

Although ASCAP and BMI had greatly reduced the transaction costs incurred by obtaining licenses to perform songs in the covered repertoire,concerns arose over their potential to abuse their dominant position—for example, when they pooled together thousands of copyrighted musical works and offered blanket licenses on an all-or-nothing basis.[131] As Glynn Lunney observed:

In the United States, these CMOs are viewed as something of a necessary evil. By reducing the transaction costs entailed in enforcing and licensing the public performance of musical works, they create a market in which otherwise there would be only infringement. But they do not merely reduce the transaction costs associated with the public performance right, they also eliminate competition between the individual copyright owners over public performance licensing terms and pricing. Because of this anti-competitive potential, copyright collectives in the United States have faced recurring litigation over whether their licensing practices violate the anti-trust laws.[132]

Following antitrust litigation launched by the United States Department of Justice in the early 1930s and then the 1940s, both ASCAP and BMI now abide by consent decrees.[133] Under these decrees and their subsequent amendments,[134] "a potential licensee may apply to a federal court for a binding

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[129] *See* KOHN & KOHN, *supra* note 32, at 1250 ("[I]n anticipation of a breakdown in negotiations with ASCAP over the rates to be charged for the following year, a group of broadcasters, including the major radio networks and nearly 500 independent radio stations, established an organization called Broadcast Music Incorporated . . . .").

[130] BOLLIER, *supra* note 127, at 156.

[131] *See* Loren, *supra* note 32, at 685 ("The practice of pooling thousands of copyrighted musical works and then offering blanket licenses did not go unnoticed by the Antitrust Division of the U.S.Justice Department.").

[132] Glynn Lunney, *Copyright Collectives and Collecting Societies: The United States Experience*, *in* COLLECTIVE MANAGEMENT, *supra* note 83, at 339, 340.

[133] As Professor Lunney recounted:The first such lawsuit was initiated by the Department of Justice in the early 1930s. In the lawsuit, the Department of Justice alleged that ASCAP was an unlawful combination, in the vein of Standard Oil. In the 1940s, the Department of Justice initiated a second set of lawsuits against both BMI and ASCAP, alleging that the collectives' licensing practices unreasonably restrained trade. The parties settled the litigation in 1941 and entered into consent decrees that have

governed the licensing practices of ASCAP and BMI ever since. *Id*. at 340 (footnote omitted).

[134] As Professor Lunney elaborated:

determination of 'reasonable' fees in the event that the licensee and the CMO cannot come to an agreement on the fee to be paid."[135]

Since the mid-1990s, the growing popularity of the internet has led to further complications with respect to copyrighted works disseminated over theinternet. In addition to challenges concerning copyright enforcement in the digital environment, dissemination over this new medium has implicated many different rights protected under Section 106 of the 1976 Copyright Act. Thus,while ASCAP, BMI, or SESAC may own the performance right, the right to make mechanical reproductions may belong to record labels or the Harry Fox

Agency. The new medium of the internet has also generated considerable uncertainty over the act of making content available. Does this act involve the distribution right, the performance right, the right of communication to the public as protected by the Berne Convention for the Protection of Literary and Artistic Works (of which the United States is a member),[136] or the right of making available as recognized in the 1996 WIPO Internet Treaties (of which the United States is also a member)?[137]

Even more troubling, many of these rights overlap with each other, making their control highly uncertain in the new digital environment. As Mark Lemley observed in relation to overlapping rights in the early days of the World Wide Web:

Consider the licensing of rights to musical works. ASCAP controls and licenses the right to publicly perform most musical compositions, while a different group (the publishers or record labels) generally controls the right to reproduce such works. These groups will likely fight vigorously over who has the right to license the network transmission of musical compositions (and to receive revenue from that transmission). The answer cannot be found in the license agreement, nor is it likely to be found in some presumed "intent" of the parties. The question will have to be answered as a policy ma

tter, by courts or by Congress.[138]

Over the years, the terms of the consent decrees have been adjusted to reflect the developments of new technologies and new markets. Yet, although their precise terms have varied over time, their thrust has remained consistent. In essence, the consent decrees validate the essential role of the collectives in creating a workable market in the public performance right, and then attempt to regulate their pricing and licensing terms in order to limit the collective's anti- competitive potential.*Id*. at 340–41.

[135] Loren, *supra* note 32, at 685.

[136] Berne Convention, *supra* note 81, arts. 11, 11*bis*, 11*ter*, 14.

[137] WIPO Copyright Treaty arts. 6, 8, Dec. 20, 1996, S. Treaty Doc. No. 105-17, at 1 (1997); WIPO Performances and Phonograms Treaty arts. 8, 10, 12, 14, Dec. 20, 1996, S. Treaty Doc. No. 105-17, at 18 (1997).

[138] Mark A. Lemley, *Dealing with Overlapping Copyrights on the Internet*, 22 U. DAYTON L. REV. 547, 574 (1997); *see also* Gervais, *supra* note 88, at 10 ("Right fragments such as 'reproduction' or

licensing department of a full-service music firm, licensing opportunities . . . are the bread and butter of their business. There is simply no other kind of income besides the royalties paid by the licensees. From the record labels' point of view, the licensing has a completely different purpose, and that purpose is to promote an act. The licensing fee paid by the licensee is only the icing on the cake, since the record label's core business is the selling of audio recordings (primarily CDs) to consumers. In a competition to have a song included in a film etc., the record label might be inclined to waive the fee in order to win the competition and achieve the much desired presence.[140]

Although music publishers and record labels used to have wider differences in their approaches, the significant reduction of music sales in recent years has led the latter to pay greater attention to licensing revenue. As Donald Passman observed: "Nowadays, all of the major record companies have what's called a *special markets* or *catalog* division, whose job is to take existing recordings and come up with ways to squeeze money out of them."[141] Moreover, as music fans migrate from physical albums to digital singles and now to licensed performances via Pandora, Spotify, and other online streaming services, the differences between the two groups have considerably narrowed.

As if these complications were not challenging enough, no U.S. CMO has thus far been established to grant synchronization licenses to audiovisual contents, such as MTV or YouTube videos.[142] Synchronization licenses, or "synch licenses" for short, are similar to performance licenses except for their tailoring to the specific use of the relevant copyrighted content—for example, in motion pictures, television programs, commercials, or video games.[143] Thus,although individual users do not always time the visual images to the licensed music,[144] the "synchronization" label notwithstanding, it is understood that a synchronization license granted for Video A may not be used for Video B.Given the lack of preexisting synchronization licensing arrangements— compulsory or otherwise—copyright holders of audiovisual works are free to

[139] WIKSTRÖM, *supra* note 54, at 97.

[140] PASSMAN, *supra* note 32, at 138.

[141] *See id*. at 259 ("[T]here's no central place for the YouTubes of the world to make a deal for all their music (Fox doesn't represent all the publishers). It also means the publishers who don't use Fox have to do tons of licenses for tiny money."); *see also id*. at 326 ("There's no compulsory license for video streaming, whether it's interactive or not. So the companies can charge whatever they can extort.").

[142] *See id*. at 248–53 (discussing synchronization and transcription licenses).

[143] *See* KOHN & KOHN, *supra* note 32, at 368 ("Technically, the music is not always 'synchronized' or recorded, as some licenses say, 'in timed-relation with' the motion picture, but these terms convey the notion that the permission to make reproductions of the music is strictly limited to copies embodying the specified motion picture together with the music.").

negotiate their own licenses. Such freedom, in turn, has greatly increased the transaction costs incurred in securing these licenses. As the need for performance and synchronization licenses in the digital environment continues to grow,[145] transaction costs are likely to substantially increase.

In the early 2010s, after years of copyright litigation, YouTube (and Google) finally reached agreements with music publishers and record labels.[146] Although these agreements vary, the agreement between YouTube and the Harry Fox Agency, which is publicly available, provided an instructive example of how YouTube's advertising revenue is to be divvied up:

a. If it's a user-created video that includes a commercial recording of the song (remember, this doesn't include record company–created videos, where the record company pays the publisher), the video streaming service pays the publisher 15% of net ad revenues.
b. If it's a new recording of the song . . . , the publisher gets 50% of net ad revenues. But if the uploader gets some of the ad revenue . . . , YouTube deducts whatever it pays [the uploader] from the publisher's 50%. However, this deduction is subject to a limit of 15%, meaning the publisher never gets less than 35% of net ad revenue.[147]

Notwithstanding the licenses YouTube negotiated with both music publishers and record labels, it remains unclear whether these licenses would allow individual users to create so-called "user-generated content," such as remixes, mash-ups, cut-ups, spoofs, parodies, satires, caricatures, pastiches, and machinimas. This ambiguity was indeed the reason why internet user groups have actively pushed for the adoption of exceptions for non-commercial user- generated content,[148] such as Section 29.21 of the recently adopted Canadian Copyright Modernization Act.[149]

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[144] *See* WIKSTRÖM, *supra* note 54, at 93 ("While mechanical royalties have diminished along with the physical sales of recorded music, both performance and synchronization royalties have increased since the turn of the millennium."); Brustein, *supra* note 63 ("[In 2003], digital music downloads decreased for the first time, with sales of digital tracks falling 5.7 percent. Streaming consumption increased 32 percent, to 118 billion songs, . . . according to Nielsen.").
[145] The agreement the National Music Publishers' Association and the Harry Fox Agency reached with YouTube is available at http://youtubelicensingoffer.biz/.

[146] PASSMAN, *supra* note 32, at 259–60.
[147] For the Author's discussions of the exception for non-commercial user-generated content, see generally Peter K. Yu, *Can the Canadian UGC Exception Be Transplanted Abroad?*, 26 INTELL. PROP. J. 177 (2014); Peter K. Yu, *The Confuzzling Rhetoric Against New Copyright Exceptions*, 1 KRITIKA (forthcoming 2015).
[148] Copyright Modernization Act, S.C. 2012, c. 20, § 29.21 (Can.).

VI. ARE DIGITAL DOWNLOADS SALES OR LICENSES?

The "sale versus license" debate has been ongoing since copyright issues involving computer software began to attract legislative and policy attention.[150] There is also a raging debate about the scope and limits of the first sale doctrine in the digital environment.[151] Codifying this doctrine, Section 109(a) of the 1976 Copyright Act provides:

> Notwithstanding the provisions of section 106(3), the owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.[152]

Although the first sale doctrine is available to all copyrighted works, it does not apply if the content is disseminated under a license, as opposed to sold as a good. As a result, we can lend books to friends or sell them on eBay (books, not friends), but we may not be allowed to sell computer software online.

The same issue arises with respect to iTunes tracks. The question of "whether a digital music file, lawfully made and purchased, may be resold by its owner . . . under the first sale doctrine" was recently addressed in *Capitol Records, LLC v. Redigi Inc.*[153] In this case, a record label sued Redigi Inc. for copyright infringement based on its provision of a virtual marketplace for internet users to sell pre-owned iTunes tracks. As the United States District
Court for the Southern District of New York declared:

> [T]he first sale doctrine does not protect ReDigi's distribution of Capitol's copyrighted works. This is because, as an unlawful reproduction, a digital music file sold on ReDigi is not "lawfully made under this title." Moreover, the statute protects only distribution by "the owner of a particular copy or phonorecord . . . of that copy or phonorecord." Here, a ReDigi user owns the phonorecord that was created when she purchased and downloaded a song from iTunes to her

[149] *See* Joseph P. Liu, *Owning Digital Copies: Copyright Law and the Incidents of Copy Ownership*, 42

WM. & MARY L. REV. 1245, 1290 (2001) ("Several federal courts have held that the first sale doctrine does not apply to software users who have licensed the software, because they have not acquired title to a particular copy.").

[150] For discussions of the first sale doctrine in the digital context, see generally U.S. COPYRIGHT OFFICE, DMCA SECTION 104 REPORT 78–105 (2001); Liu, *supra* note 150; Aaron Perzanowski & Jason Schultz, *Digital Exhaustion*, 58 UCLA L. REV. 889 (2011); Aaron Perzanowski & Jason Schultz, *Legislating Digital Exhaustion*, 28 Berkeley Tech. L.J. (forthcoming 2015); R. Anthony Reese, *The First Sale Doctrine in the Era of Digital Networks*, 44 B.C. L. REV. 577 (2003).

[152] 17 U.S.C. § 109(a) (2012).

[153] Capitol Records, LLC v. Redigi Inc, 934 F. Supp. 2d 640, 648 (S.D.N.Y. 2013).

hard disk. But to sell that song on ReDigi, she must produce a new phonorecord on the ReDigi server. Because it is therefore impossible for the user to sell her "particular" phonorecord on ReDigi, the first sale statute cannot provide a defense.[154]

Apart from *Redigi*, there is the now-famous discussion about whether Bruce Willis should be able to leave the tracks he lawfully purchased to his children.[155] Whether he can do so based on the first sale doctrine will depend on whether digital downloads constitute sales or licenses. The doctrine will apply if the downloads are goods sold, but will not if they are mere licensed contents. If the doctrine does not apply, whether Willis can transfer ownership will depend on the terms of the iTunes license, which currently does not allow for such a transfer.

Disturbingly, as much as record labels want to consider iTunes tracks licensed contents in the context of the first sale doctrine, they refuse to do so in the context of royalty calculation. Under most recording contracts, artists will get only a small percentage of the sales as royalties—usually ten to twenty percent.[156] By contrast, these same artists will get a much higher percentage of the licensing revenue—usually under a fifty-fifty split.[157] This different treatment of sales and licensing revenue makes sense, considering that the licensing arrangement does not require record labels to make further investments (although these labels have noted the various expenses incurred in online distribution[158]). Thus, if revenues from iTunes tracks are considered license fees, as opposed to sales, record labels will have to provide artists with a substantially larger sum of royalties. As William Patry pointed out:

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[154] *Id*. at 655 (citations omitted).

[155] *See* Brandon Griggs, *Can Bruce Willis Leave His iTunes Music to His Kids?*, CNN (Sept. 4, 2012),http://www.cnn.com/2012/09/03/tech/web/bruce-willis-itunes.

[156] As Harold Vogel observed in regard to royalty rates for recording artists:

Rates for new artists signed to independent companies might range from 9% to 13% of [the suggested retail price], while rates for new artists signing with a major label might be 13% to 14%, and rates for superstars 18% to 20%. Yet for Internet downloads, such rates will often be 20% to 50% less.VOGEL, *supra*

note 117, at 264.

[157] *See* PASSMAN, *supra* note 32, at 138 ("Historically, when masters were licensed by a record company for motion pictures, television shows, and commercials, the company credited the artist's account with 50% of the company's net receipts . . . .").

[158] As Donald Passman explained:[In addition to the usual mechanicals and union charges, record labels] argue that they have expenses for digitizing product, adding *metadata* . . . , storing digital files, setting up *SKUs* [Shop Keeping Units] for each title [which keep track of who gets paid] . . . as well as monitoring the sales and licensing of millions of micro-transactions. In addition, they need to allocate some portion of the cost of their staff that does marketing, sales, etc.*Id*. at 146.

It has been estimated . . . that artists might receive $2.15 billion if they are successful in their current disputes with record labels over whether to categorize the deals with iTunes as involving a license (where 50 percent royalties are typically paid) rather than as a sale of copies (where royalties of 10–15 percent are typically paid).[159]

How digital downloads should be treated was under heavy dispute in the early days of iTunes. A leading case in this area is *F.B.T. Productions, LLC v. Aftermath Records*.[160] At issue was whether the permanent digital downloads and mastertones[161] of songs performed by the chart-topping rap artist Eminem constituted records sold or master licenses. The royalty rate was twelve to twenty percent for the former, but fifty percent for the latter.[162] While the United States District Court for the Central District of California found for the record label, the United States Court of Appeals for the Ninth Circuit reversed the case. As Judge Barry Silverman declared:

It is easily gleaned from these sources of federal copyright law that a license is an authorization by the copyright owner to enable another party to engage in behavior that would otherwise be the exclusive right of the copyright owner, but without transferring title in those rights. This permission can be granted for the copyright itself, for the physical media containing the copyrighted work, or for both the copyright and the physical media.

When the facts of this case are viewed through the lens of federal copyright law, it is all the more clear that Aftermath's agreements with the third-party download vendors are "licenses" to use the Eminem master recordings for specific purposes authorized thereby—i.e., to create and distribute permanent downloads and mastertones—in exchange for periodic payments based on the volume of downloads, without any transfer in title of Aftermath's copyrights to the recordings. Thus, federal copyright law supports and reinforces our conclusion that Aftermath's agreements permitting third parties to use its sound

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[159] PATRY, *supra* note 3, at 8.

[160] F.B.T. Prods., LLC v. Aftermath Records, 621 F.3d 958 (9th Cir. 2010).
[161] Mastertones are ring tones or ring-back tones involving master recordings.
[162] *Id*. at 961; *see also* Eriq Gardner, *Leaked Audit in Eminem Royalty Suit Highlights Huge Stakes for Record Industry*, HOLLYWOOD REP. (Feb. 22, 2012), http://www.hollywoodreporter.com/thr-esq/eminem-royalty-lawsuit-aftermath-records-fbt-productions-293881(suggesting that "the plaintiffs believe that the difference in treating digital music as a 'sale' instead of a 'license' during [the period between July 1, 2005 and December 31, 2009] is worth $3,810,256").

recordings to produce and sell permanent downloads and mastertones are licenses.[163]

Although the Ninth Circuit remanded the case to the lower court, and a new trial was set to assess proper damages, the dispute was eventually settled.[164]

F.B.T. Productions generated a lot of attention and sparked additional individual and class action lawsuits.[165] Nevertheless, Donald Passman noted that the case involved a short-form contract and therefore might have been an outlier.[166] In most other—usually lengthier—contracts, the terms are spelled out in greater detail even though some gray areas may invariably exist. More importantly, record labels have since managed to renegotiate most of their recording contracts—through new contracts, settlement, or otherwise.[167] According to Passman, the current royalty arrangement for digital download is as follows:

For iTunes-type *permanent downloads*, the record companies get what they call a "wholesale price" of 70% of the retail price, meaning they get around 70¢ for a 99¢ download. In the case of downloads, the record companies get the money for both themselves and the songwriters [or publishers], then turn around and pay [them].[168]

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[163] *F.B.T. Prods.*, 621 F.3d at 965–66.
[164] *See* Eriq Gardner, *UMG Reaches Settlement in Trendsetting Suit Over Digital Revenue from Eminem Songs*, HOLLYWOOD REP. (Oct. 30, 2012), http://www.hollywoodreporter.com/thr-esq/umg-reaches-settlement-trendsetting-lawsuit-384381 (reporting the settlement).
[165] As observed in the *Hollywood Reporter*:
Other musicians continue to fight to apply the 9th Circuit ruling on "licenses" to their own contracts. Class actions from the likes of The Temptations and
Rob Zombie are still being litigated. Other artists such as REO Speedwagon,
Kenny Rogers, Sister Sledge, James Taylor and on and on have brought a barrage of lawsuits on this front. Some entities in the music business such as
Sony Music have made class action settlements.
Id.
[166] *See* PASSMAN, *supra* note 32, at 145.
[167] As Donald Passman observed:[M]ost of the bigger artists have renegotiated their deals in the last five to ten years, and when that happened, the companies stuck in clauses that specified what they got for digital exploitations, regardless of whether it was a sale, a license, or a horned toad. . . . [E]ven if the artist didn't renegotiate, the successful artists have *audited* their record companies . . . . When the

artists settled these audits . . . , most companies fixed the digital royalty rate from the end of the audit period into the future. And even if they didn't do that, they settled all the claims for the past, so there isn't a lot of back money sitting out there.*Id*.

[168] *Id*. at 144.

VII. BONUS QUESTION: WHY DOES THE ROYALTY RATE FOR SHEET MUSIC STAY AT 7¢ PER COPY?

One surprising development (or its lack thereof) in music law concerns the royalty rate for sheet music, which stays at 7¢ per copy[169] and only reaches 10–12¢ per copy for a very rare minority.[170] Interestingly for us—and disappointingly for songwriters—this rate did not increase with inflation. While one was able to buy something with 7¢ in the early days of rock 'n roll, one certainly cannot buy much today with the same amount. Even the statutory rate for mechanical reproductions has been increased from 2¢ per mechanical copy in 1978 to 9.1¢ or more today, thanks to the periodic adjustments by the Copyright Arbitration Royalty Board and now the Copyright Royalty Board.[171]

The answer to this bonus question has to do with what have been termed "most favored nation" ("MFN") clauses.[172] Similar to their counterparts in international agreements,[173] these clauses allow beneficiaries to obtain preferential treatments that have been granted to third parties in other agreements. As a result of these MFN clauses, an increase in royalty rate for one songwriter will have to be immediately and unconditionally extended to all other songwriters whose contracts include an MFN clause—an extension that is highly costly and, for some publishers, unaffordable. The rate for sheet music has

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[169] An example of this clause is as follows:Seven cents ($.07) per copy for each copy of sheet music in standard piano- vocal notation of the Composition printed, published and sold in the United States and Canada by Publisher or its affiliates, for which payment has been received by Publisher, or been finally credited to Publisher's account in reduction of an advance after deduction of reasonable returns. (Wherever the terms "paid," "received," or the equivalent appear in this agreement, they shall be deemed to include such final credit.)KOHN & KOHN, *supra* note 32, at 113.

[170] *See* PASSMAN, *supra* note 32, at 278 ("Historically, sheet music royalties have hovered in the range of 7¢ per copy. Occasionally some superstars got as high as 10¢ to 12¢ . . . ."); *see also* KOHN & KOHN, *supra* note 32, at 114 ("Only writers with a high degree of bargaining leverage should expect to negotiate more than 10 or 12 cents per copy, but not much more.").

[171] *See* 17 U.S.C. §§ 801–805 (2012) (providing for the proceedings of the Copyright Royalty Board); *see also* Copyright Royalty and Distribution Reform Act of 2004, Pub. L. No. 108-419, 118 Stat. 2341 (replacing Copyright Arbitration Royalty Panels with the Copyright Royalty Board).

[172] *See* PASSMAN, *supra* note 32, at 278 (attributing the practice to "*favored nations* (meaning a contract

that says its rate goes up if anyone ever gets more) [music publishers have] with a number of old writers" and noting that "raising the pennies for the new guys would cost them a fortune on the older deals").

[173] *See* TRIPS Agreement art. 4 ("With regard to the protection of intellectual property, any advantage, favour, privilege or immunity granted by a Member to the nationals of any other country shall be accorded immediately and unconditionally to the nationals of all other Members.").

therefore remained more or less the same despite inflation, new uses, and new markets.

The discussion of MFN clauses in music contracts is particularly timely. Only recently, independent labels complained about how they had been forced into accepting the same deals YouTube offered to major record labels. In their view, such an arrangement had generated the opposite of MFN treatments—"least favored nation" (LFN) treatments, perhaps.[174] Of particular concern was aclause that gave Google the right to reduce the rates for independent labels when any major record label or publisher agreed to a lower rate.[175]

To some extent, LFN treatments for indie labels make sense in the current market. Given the significantly greater leverage the majors have vis-à-vis YouTube, what bargaining advantage would independent, and often weaker,labels have if the majors could not even negotiate for a higher rate? Nevertheless, the contracts negotiated by the majors may not fully reflect their bargaining power. With a large number of works in play, and therefore substantial revenue at stake, the majors may be more reluctant than the indies to drag out the negotiation process or become holdouts in the negotiations. Moreover, if the current rate is unfavorable, the majors will be powerful enough to renegotiate this rate in the near future. Thus, unlike the rate for the indies, thelower rate given to the majors would result in only a short-term loss that may be offset by later gains. The same unfortunately may not be said of the indies.

Admittedly, this bonus question is somewhat obscure, considering that sheet music is not as important in the commercial market as it used to be (although the demand for sheet music in the digital environment seems to haverejuvenated recently).[176] The question is also somewhat outdated as many publishers have moved away from paying the penny rates, as opposed to apercentage of the license fees they have received.[177] The latter is particularly

[174] *Independent Music Labels Want EU to Intervene in YouTube Row*, REUTERS (June26,2014), http://www.reuters.com/article/2014/06/26/us-eu-youtube-impala-idUSKBN0F12DJ20140626; *see also* Ed Christman, *Disgust, in Digest: The Top Five Reasons Indies Are Mad at YouTube*, BILLBOARD (June 23, 2014), http://www.billboard.com/biz/articles/news/indies/6128773/top-five- reasons-indies-are-mad-at-youtube (alluding to the "negative most-favored-nation" clause).

[175] *See* Christman, *supra* note 174 ("Several indies Billboard spoke with are furious at a 'negative most-favored-nation' clause, which favors the majors. Meaning: If any major label or publisher

agrees to rates that are lower than the indies' rates set forth in the YouTube contract, then Google will have the right to reduce the indie labels' analogous rate accordingly.").

[176] *See* Bill Briggs, *Musicnotes Trumpets 25% Digital Sheet Music Growth*, INTERNET RETAILER (Jan. 28, 2011), http://www.internetretailer.com/2011/01/28/musicnotes-trumpets-25-digital-sheet-music-growth (reporting about the growth of sales in digital sheet music); *Frozen Sheet Music Breaks Sales Records*, MUSICNOTES BLOG (Feb. 24, 2014), http://blog.musicnotes.com/2014/02/24/ news-frozen-sheet-music-breaks-sales-records/ (reporting that sheet music for the song "Let It Go," from Disney's animated feature *Frozen*, "has sold more than 25,000 copies since it was added to the Musicnotes catalogue early this year").

[177] As Donald Passman observed:

common in international and digital publishing.[178] Moreover, as Donald Passman pointed out: "[T]here are only three major manufacturers of secular printed music in the United States these days, namely Hal Leonard, Alfred, and Music Sales. That means that, unless [the] publisher is one of these companies, it will be licensing print rights to one of them."[179]

Nevertheless, this bonus question is quite important from the standpoint of understanding copyright law and the music business. The answer illustrates the archaic and path-dependent nature of some music business practices. It also reminds us of the need to understand both the laws governing musiccompositions and sound recordings as well as the business established around these laws. In addition, it shows, somewhat paradoxically, that the old can be new again. As shown in the contracts YouTube recently offered to the indie
labels, LFN, or negative MFN, treatments are still alive and well in the digital environment.

VIII. CONCLUSION

In his widely used book on entertainment industry economics, Harold Vogel observed:

[M]usic is the most easily personalized and accessible form of entertainment, and it readily pervades virtually every culture and every level of society. Indeed, prior to the advent of recording technology, music was an integral and inseparable part of the social fabric. As such, music may be considered the most fundamental of all the entertainment businesses.[180]

Music is undeniably an essential part of our culture, but it is also a major business. As with all twenty-first century businesses—a multi-billion one no less—the music industry is heavily affected by copyright law. The more we know about

this law, the more we will know about the operation of the music business. Such knowledge, in turn, will allow us to better understand the link between copyright law and the music (and culture) we now have.

Except for one major publisher, the penny terms now only apply to sheet music actually manufactured and distributed by the publisher. . . . [M]ost every publisher now licenses out their print rights, meaning the writer gets 50% of the money paid by the printer to the publisher, and not these stupid penny rates. In fact, some publishers are doing away with the penny rates altogether and splitting the licensed incomes, or paying the same royalty as they pay on folios.PASSMAN, *supra* note 32, at 279.

[178] *See id*. ("With respect to digital print rights, the publishers treat the income just like any other licensed income, and the writer gets 50%.").

[179] *Id*. at 278.

[180] VOGEL, *supra* note 117, at 244 (footnotes omitted).

In recent years, there have been extensive discussions about the need for copyright law reform. Such reform is important because it affects the different stakeholders within the field—be they record labels, music publishers, professional songwriters, recording artists, individual users, retail stores, online service providers, or other third-party intermediaries. The reform is also important because it will not only affect our creative experience, but also the culture we end up with. In examining six questions concerning copyright law and the music business, this article shows how copyright law reform could affect the music we pay for and listen to. It not only illustrates the unintended, and oft- unexpected, reach of copyright law, but also why the public at large, including individual users, have high stakes in copyright law reform.

EDITORIAL NOTE ON THE VOLUME 4 NUMBER 1 ISSUE OF 2015

Editorial Note

Dr. Christy, Yachi Chiang[1]
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The editorial board is proud to announce that since the beginning of 2015, this journal has successfully passed the evaluation of world recognized academic publishing teams, and has been included in the SCOPUS and WESTLAW databases. It marks our continuous efforts in maintaining the standard and quality of academic publications, also increases the visibility of published articles. We want to express our gratitude to all authors, reviewers, editors, and advisors of this journal.

Notably, the board welcomes submissions from legal, managerial and interdisciplinary perspectives on IP issues across the world. In order to cover IP issues, we will not limit the scope of this journal to a single jurisdiction. In addition, the board has decided to open a new international section in this journal and ask renowned scholars to authorize us to reproduce their publications in light of knowledge sharing. We are grateful that Professor Peter K. Yu at Drake University is our first author of this section. Lastly and importantly, special thanks to Dr. Chien-Pu Chin for his financial contribution to this journal.

Appendix

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Dear

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[1] Director of executive board of Asia Pacific Association of Technology and Society (registered in HK). Appointed expert of domain name disputes resolution center (Taiwan).

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