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Should Posts on Social Networking Websites be Considered "Printed Publications" Under Patent Law?

By Xiajing Li¹

I. Introduction

Since the 1990's, social networking websites have become increasingly popular among younger generations as platforms where people exchange ideas and make new friends.² A 2011 survey found that 47% of American adults used a social network.³ The most popular sites, such as Facebook, MySpace, Twitter, LinkedIn, already have over 100 million users.⁴ Countless ideas and thoughts are posted on these sites; as a result, a large portion of private information is at risk of being exposed to the public.⁵ The privacy issues lead to many legal questions in a variety of areas, a not-fully-discussed one being patent law.

http://en.wikipedia.org/wiki/Social_network_service.

³ Katherine Rosman, *Eat Your Vegetables, and Don't Forget to Tweet*, Wall St. J. (June 16, 2011), http://finance.yahoo.com/family-home/article/112952/family-that-tweets-wsj?mod=family-kids_parents.

⁵ David Rosenblum, *What Anyone Can Know: The Privacy Risks of Social Networking Sites*, 5 IEEE Security and Privacy 40, 40-49 (2007), *available at*

¹ Chicago-Kent College of Law, J.D. expected 2013. I would first like to thank Professor Scott Salmon for his insightful criticism and encouragement in development of this note, and my mentor Professor David Schwartz for his inspiring suggestion regarding the topics and structure of the note. I would also like to thank my classmates, Grant Ford, and Tony Sarkees, for their invaluable comments and suggestions. Lastly, thanks to my friend Xiaoyi Cao and family for their support.

² Social Networking Service, Wikipedia (July 20, 2011, 5:11 PM),

⁴ List of Social Networking Websites, Wikipedia (July 20, 2011, 5:13 PM),

http://en.wikipedia.org/wiki/List_of_social_networking_websites.

http://www.computer.org/portal/web/csdl/doi/10.1109/MSP.2007.75.

Under patent law, an invention is un-patentable if its idea has been disclosed to the public before a legally-prescribed date.⁶ Most of the time, online material such as posts on blogs, forum, chat rooms, are treated as un-patentable because it is known to the public or disclosed to public.⁷ However, it is not clear whether patent law should treat posts on social networking websites differently than other online material. Admittedly, a post on Lady Gaga's Facebook viewable to her 41 million fans is almost certainly accessible to the public.⁸ But courts may hesitate before reaching the same conclusion under less extreme situations, for example, when a programmer in Silicon Valley shared his new idea with only ten friends on MySpace and withdrew the post after one hour. The question is whether all posts on social networking websites are accessible to the public, and if not, what factors are relevant in deciding the public accessibility of posts. Part I of this Note briefly explains basic principle of patent law, introduces concepts of printed publication and social network websites, and presents cases relevant to website posts. Part II proposes a refined two prong test applicable to social networking websites and argues against the current blanket assumption regarding internet material. Part III discusses some potential objections and concerns.

II. Printed Publication and Social Networking Websites

 $^{^{6}}$ 35 U.S.C. § 102 (2006) ("A person shall be entitled to a patent unless . . . (a) the invention was known or used by others in this country . . . before the invention thereof by the application for patent, or (b) the invention was patented or described in a printed publication in this or a foreign country . . . more than one year prior to the date of the application for patent in the United States.").

⁷ Stamps.com v. Endicia, Inc., 2011 WL 2417044, 4 (Fed. Cir. June 15, 2011) reh'g denied(Aug. 1, 2001) (holding that an article published on a public forum is printed publication because leaders in the field would have had access to the article); *In re* Lister, 583 F.3d 1307, 1312-13 (Fed. Cir. 2009) (determining that manuscript in commercial databases was prior art reference); Amazon.com, Inc. v. Barnesandnoble.com, Inc., 239 F.3d 1343, 1363 (Fed. Cir. 2001) (accepting webpage printout as prior art reference); Guest v. Leis, 255 F.3d 325, 333 (6th Cir. 2001) (holding posts on BBS is printed publication).
⁸ Famecount, http://www.famecount.com (last visited Aug 1, 2011).

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The U.S. Constitution authorizes Congress "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."⁹ Congress has enacted many patent statutes since 1790 and most recently codified the patent law under Title 35 of the United States Code in 1952.¹⁰ The U.S. Supreme Court has recognized that the "twin purposes" of patent laws are to promote disclosure of inventions and to add knowledge to the public domain.¹¹ Although rewarding inventors is not the ultimate goal of the patent system, it serves as a lure to encourage inventors to produce innovations that benefit the general welfare.¹² Therefore in practice, courts have to balance the inventors' interest of enjoying patent gains with the public's interest of keeping public knowledge free.¹³

Under patent law, a patentable invention must not be anticipated or rendered obvious by the teachings of prior art references.¹⁴ An invention is anticipated under §102 if a single prior art reference discloses and enables every elements of the invention either expressly

⁹ U.S. Const. art. 1, § 8, cl. 8.

 ¹⁰ Zhicong Gu, Note, Mercexchange v. Ebay: Should Newsgroup Postings Be Considered Printed Publications as a Matter of Law in Patent Litigation? 25 Golden Gate U.L. Rev. 225, 231 (2005).
 ¹¹ See Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 480-81 (1974) (stating that the Court has articulated

patent law policies as that "the patent laws impose upon the inventor a requirement of disclosure" and " that which is in the public domain cannot be removed therefrom by action of the States").

¹² Joanna T. Brougher, *Publish, Present, or Perish: How the Internet and the "Printed Publication" Bar Affect the Dissemination of Research*, 14 No. 1. J. Internet L. 11, 11 ("the Constitution advocates that an incentive should be provided as a means of encouraging inventors to share their innovations with the public, which in turn fosters the progression of science."); *see* Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S. 327, 330-31 (1945) ("the primary purpose of our patent system is not reward of the individual but the advancement of the arts and sciences. Its inducement is directed to disclosure of advances in knowledge which will be beneficial to society; it is not a certificate of merit, but an incentive to disclosure. Consequently it is not concerned with the quality of the inventor's mind, but with the quality of his product").

¹³ See Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 64 (1998) (staying that patent law "serves as a limiting provision, both excluding ideas that are in the public domain from patent protection and confining the duration of the monopoly to the statutory term").

¹⁴ 35 U.S.C. §§ 102, 103 (2006).

or inherently.¹⁵ An invention is obvious under § 103 if the subject matter sought to be patented, when taken as a whole, would have been obvious to a person having ordinary skill in the art by referring to multiple prior art references.¹⁶ The central question of both § 102 and § 103's requirement of patentability is the finding of prior art.¹⁷ Courts will find prior art under many conditions, disclosed in a "printed publication" being a very common one.¹⁸ A prior art is something that was made available to the public before the filing date or the critical date of patent application.¹⁹

For the purpose of this Note, this section will limit the discussion to "printed publication". Specifically, this section will explain the development of the "printed publication" doctrine under traditional settings, discuss the application of this doctrine to internet publications, and finally introduce the challenges imposed by social networking websites.

A. Determination of Printed Publication

To be considered a "Printed Publication", a reference must have been sufficiently available to the interested public before the critical date.²⁰ The "touchstone" is public

¹⁵ 35 U.S.C. § 102; Kalman v. Kimberly-Clark Corp., 713 F.2d 771, 774 (1983).

¹⁶ 35 U.S.C. § 103; KSR Int'l. Co. v. Teleflex Inc., 550 U.S. 398, 416 (2007) ("The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results."); Graham v. John Deere Co., 383 U.S. 1, 3 (1966) (stating a test of obviousness to decide whether "the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains").

¹⁷ 35 U.S.C. §§ 102, 103 (2011), amended by 35 U.S.C. §§ 102, 103 (Leahy-Smith America Invents Act effective March 16, 2013).

¹⁸ 35 U.S.C. § 102 (2011), amended by 35 U.S.C. § 102 (Leahy-Smith America Invents Act effective March 16, 2013).

¹⁹ *Pfaff*, 525 U.S. at 57-58.

²⁰ SRI Int'l, Inc. v. Internet Sec. Sys., Inc., 511 F.3d 1186, 1194 (Fed. Cir. 2008) (finding a "printed publication" when an item "has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence [could] locate it and recognize and comprehend therefrom the essentials of the claimed invention without need of further

accessibility,²¹ and "[a]ccessibility goes to the issue of whether interested members of the relevant public could obtain the information if they wanted to."²² The determination of a "printed publication" is a factual inquiry and thus must be analyzed on a case-by-case basis.²³ Throughout the case law, public dissemination and public retrievability are two important aspects in the legal determination of "printed publication."²⁴ Public dissemination is analyzed by the number of copies, circulation time, complexity level, and potential audience of the publication at issue. Public retrievability depends on whether the publication has been indexed, or whether the author has intentionally blocked the publication from public search.

1. Public Dissemination

Public dissemination can be achieved by the distribution of physical copies or the widespread distribution of information so that the public could easily obtain copies of the publication.²⁵ However, the copy number does not need to be large to trigger the "printed publication" argument.²⁶ In *MIT v. AB Fortia*, the court found that a paper orally presented at a conference was a "printed publication" because one copy of the paper was

research or experimentation"); Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1568 (Fed. Cir. 1988).

²¹ In re Hall, 781 F.2d 897, 898-99 (Fed. Cir. 1986).

²² In re Natures Remedies, Ltd., 315 Fed. Appx. 300, 303 (Fed. Cir. 2009).

²³ In re Cronyn, 890 F.2d 1158,1161 (Fed. Cir. 1989).

²⁴ See In re Klopfenstein, 380 F.3d 1345, 1348 (Fed. Cir. 2004).

²⁵ Kyocera Wireless Corp. v. Int'l Trade Comm'n, 545 F.3d 1340, 1340 (Fed. Cir. 2008) (holding the description of commercial standard that available to several companies to make free copy is printed publication); Mass. Inst. of Tech. v. AB Fortia, 774 F.2d 1104, 1109 (Fed. Cir. 1985) (holding that paper orally presented at a scientific conference open to all persons interested in the subject, with written copies distributed among people without restriction, is a printed publication).

²⁶ See MIT, 774 F.2d at 1109.

given to the head of the conference before the presentation and copies of the paper were distributed to at least six people upon request without any restrictions for future use.²⁷ Additionally, even when no physical copies are distributed, courts may still find printed publication based on some other factors.²⁸ One factor is the time during which a reference is exposed to the public.²⁹ Generally, the longer the duration, the more likely the reference becomes "printed publication."³⁰ For instance, a transient display of presentation slides was not a printed publication because the public had no access to the slides after the short period of lecturing.³¹ But when the display time extends to three days, the Federal Circuit may consider it as a printed publication.³²

Also, courts will consider the "expertise of the intended target audience" and the complexity of a display to determine "how easily those who viewed it could retain the displayed material."³³ Courts are more likely to find printed publication when audiences are persons of ordinary skill in the art than when audiences are those who are not familiar with the topic.³⁴ The persons of ordinary skill in the art are those who "have the capability of understanding the scientific and engineering principles applicable to the pertinent art."³⁵ Courts may determine the level of ordinary skills by considering "(1) the educational level of the inventor; (2) type of problems encountered in the art, (3) prior art

²⁷ Id.

²⁸ *Klopfenstein*, 380 F.3d at 1348 (finding a poster presentation was a "printed publication" ever no copies were distributed); In re Wyer, 655 F.2d 221, 226 (C.C.P.A. 1981) (stating that the traditional dichotomy between "printing" and "publication" is no longer valid).

²⁹ *Klopfenstein*, 380 F.3d at 1351.

³⁰ *Id.* at 1351-52.

³¹ Regents of the Univ. of Cal. v. Howmedica, Inc., 530 F. Supp. 846, 860 (D.N.J. 1981).

³² *Klopfenstein*, 380 F.3d at 1351-52.

³³ *Id*.

³⁴ Id.

³⁵ Ex parte Hiyamizu, No. 650-06, 1988 WL 252395 (B.P.A.I. Apr. 28, 1988).

solutions to those problems, (4) rapidity with which innovations are made; (5)sophistication of the technology; and (6) education level of active workers in the field.³⁶ When it comes to presentation slides, courts are less likely to find printed publication when the slides are complex and convoluted for the public to capture the information in a short period of time.³⁷

2. Public Retrievability

Public retrievability depends on the existence of indexed publication or the author's intention to block the publication from public search.³⁸ The first determinate in this category is the existence of a feasible means to locate the reference and the questions under traditional setting are whether publications have been sufficiently indexed or cataloged to be publicly accessible.³⁹ On the one hand, courts tend to have a loose index requirement. For example, the Federal Circuit held in *In re Hall* that one copy of a dissertation indexed and placed in a library was qualified as a "printed publication," even when the only copy was written in Germany and placed in a German library.⁴⁰ The court reasoned that the dissertation was accessible to the public because anyone interested in

³⁶ MPEP, §2141.03 (8th ed., Rev. 7, Sept. 2008); See also Envtl. Designs, Ltd. v. Union Oil Co., 713 F.2d 693, 696 (Fed. Cir. 1983), cert. denied, 464 U.S. 1043 (1984).

³⁷ *Klopfenstein*, 380 F.3d at 1351.

³⁸ *In re* Lister, 583 F.3d at 1311 (listing factors when considering whether a reference was public accessible).

³⁹ See In re Natures Remedies, 315 Fed. App'x. 300, 304 (Fed. App'x. 2009) (finding a MediTab application was a "public record" because it was listed in an index of clinical trials which was "open to inspection by the public"); Bruckelmyer v. Ground Heathers, Inc., 445 F.3d 1374, 1379 (Fed. Cir. 2006) (concluding that a reference properly abstracted, indexed and catalogued was public accessible when it was "classified and indexed... providing the roadmap that would allow one skilled in the art to locate [it]...."); *In re* Hall, 781 F.2d 897, 900 (Fed. Cir. 1986) (holding that an indexed thesis in a German university library was public accessible); *cf. In re* Cronyn, 890 F.2d 1158, 1161 (Fed. Cir. 1989) (stating that a thesis in a library with an alphabetical index by the author's name, which of course, bears no relationship to the subject of the student's thesis."); *In re* Bayer, 568 F.2d 1357 (C.C.P.A. 1978) (holding that a graduate thesis in a university library did not constitute a printed publication because the library had not catalogued or placed the thesis on the shelves and only three faculty members knew about the thesis). ⁴⁰ *In re Hall*, 781 F.2d at 900.

the dissertation could locate the piece through the index system and finally get access to it by travelling to the library.⁴¹ In *re Lister*, the Federal Circuit further pointed out that "neither cataloging nor indexing is a necessary condition for a reference to be publicly accessible."⁴² As long as a reasonably diligent researcher with access to a database can find the reference after searching of titles using combination of keywords, the reference is publicly accessible.⁴³

On the other hand, publications have to be indexed in a "meaningful way".⁴⁴ For example, the Federal Circuit held in *Cronyn* that a single copy of a research thesis that was indexed only by the student's name, which "bore no relationship to the subject of the thesis", was not a "printed publication."⁴⁵ The court reasoned that the thesis was not "either catalogued or indexed in a meaningful way" because someone looking for the thesis on a specific topic would not be able to locate the thesis using the index system.⁴⁶

A second determining factor of public retrievability is the authors' intent to share their work with the public, and the questions are whether authors have taken protective measures to restrict public from getting access to the work⁴⁷ and whether inventors have a reasonable expectation that the reference is not publicly accessible.⁴⁸ Authors may explicitly keep the references available to a limited number of people by a binding

⁴⁶ Id.

⁴¹ Id.

⁴² *In re* Lister, 583 F.3d at 1312.

⁴³ *Id.* at 1315.

⁴⁴ See In re Cronyn, 890 F.2d at 1158.

⁴⁵ *Id.* at 1161.

⁴⁷ See In re Wyer, 655 F.2d 221, 221 (Ct. Cust. App. 1981); *Garrett Corp. v. U.S.*, 422 F.2d 874, 878 (Ct. Cl. 1970) (stating that distributing documents "without restriction on use" constitutes publication).

⁴⁸ In re Klopfenstein, 380 F.3d 1345, 1351 (Fed. Cir. 2004) (holding a presenter at a scientific conference failed to create the reasonable expectation because he took no protective measures to prevent the audience from taking the notes).

agreement of confidentiality or some restriction rules.⁴⁹ For example, the Federal Circuit held that such a document kept in a company library that was accessible only to people authorized by the company was not sufficiently available to the public and thus did not qualified as a "printed publication."⁵⁰

Moreover, even when there is no explicit restriction on public access to the work, authors may still have reasonable expectations of confidentiality.⁵¹ Courts are less inclined to find "printed publication" when professional norms entitles an author to a reasonable expectation that the information will not be released to the public.⁵² For example, in *Cordis Corp. v. Boston Scientific Corp.*, the Federal Circuit held that "the distribution to a limited number of entities without a legal obligation of confidentiality does not render that monographys printed publication."⁵³ The court reasoned that it is important to "preserve the incentive for inventors to participated in academic presentations or discussions" by noting that professional norms may support expectation of confidentiality.⁵⁴ And the reasonableness of an author's expectation is factually based.

⁴⁹ N. Telecomm, Inc. v. Datapoint Corp., 908 F.2d 931, 936 (Fed. Cir. 1990).

⁵⁰ N. Telecomm, Inc. v. Datapoint Corp., 908 F.2d 931, 936 (Fed. Cir. 1990).

⁵¹ Cordis Corp. v. Boston Scientific Corp., 561 F.3d 1319, 1327 (Fed. Cir. 2009) ("the mere fact that there was no legal obligation of confidentiality-all that was shown here-is not in and of itself sufficient to show that [the plaintiff]'s expectation of confidentiality was not reasonable"); *Aspex Eyewear, Inc. v. Concepts in Optics, Inc.*, 111 Fed. Appx. 582, 588 (Fed. Cir. 2004) (stating that a meeting without written agreement but understanding of confidentiality could still be he held as confidential).

⁵² *Cordis*, 561 F.3d at 1334 ("[P]rofessional norms may support expectations of confidentiality" to "preserve the incentive for inventors to participate in academic presentations or discussions"); *Klopfenstein*, 380 F.3d at 1348. ("Where professional and behavioral norms entitle a party to a reasonable expectation that the information displayed will not be copied" the court is "more reluctant to find something a "printed publication").

⁵³ *Id*.at 1334.

⁵⁴ *Id*.at 1327.

For example, a simple disclaimer that prohibits audience from copying may be a reasonably precautious method for a small group but not for a large group.⁵⁵

However, releasing one's work to commercial companies without restriction on use usually shows the author's intent to share it with the public.⁵⁶ In *Kyocera Wireless Corp v. Int'l Trade Comm'n*, the Federal Circuit held that a global system for mobile communications (GSM) standard documents are a "printed publication" because it is available to the public without restriction.⁵⁷ The court reasoned that the GSM specifications were visible to several US companies that took part in the project and there were no restrictions that prevented any participating companies from disseminating information to the public.⁵⁸ Finally, when authors did not restrict public access, the actual proof of someone viewing the reference is insignificant.⁵⁹

B. Cases Relevant to Internet Posts

Just like the "printed publication" doctrine in traditional settings such as books, thesis, or copies of conference presentation slides, internet publications can be considered prior art under the United States patent law.⁶⁰ Therefore, the central question associated

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⁵⁵ Sean B. Seymore, Note, 40 Akron L. Rev. 493,496 (2007).

⁵⁶ *Garrett*, 422 F.2d at 876.; *Kyocera Wireless*, 545 F.3d at 1351; *But see Cordis*, 561 F.3d at 1327 (holding author has reasonable expectation of keeping the information in private because no similar documents in the past became available to the public as a result of disclosure by the similar commercial entities).

⁵⁷ *Kyocera Wireless*, 545 F.3d at 1344.

⁵⁸ *Id.* at 1351 ("...the primary purpose of the GSM standard was to develop a system interoperable across the national borders. This purpose made it crucial to grant access to any interested parties. ETSI's broad membership is a testament to the fruition of this purpose").

 ⁵⁹ In re Wyer, 655 F.2d at 226 (finding an Australian patent application on microfilm qualified as "printed publication" even without proof of an actual viewing or dissemination of the reference).
 ⁶⁰ MPEP §2128 (stating that electronic documents retrieved from the internet and online databases are

⁶⁰ MPEP §2128 (stating that electronic documents retrieved from the internet and online databases are sources of prior art reference under "Electronic Documents."); *Stamps.com*, 2011 WL 2417044 at *4 (web pages printout as prior art); *Amazon.com*, 239 F.3d at 1363 (posts on public forum as prior art).

with internet publication is still whether the information is disclosed to the public before critical date.

Most Internet cases struggle with the question regarding the reliability of the publication date because websites are constantly updated with limited tracing information.⁶¹ But this Note will only discuss the first part of the question, that is, whether the information on a website is disclosed to the public. Federal and district courts consistently hold that posts on permanent websites are "sufficiently accessible to the public interested in the art" to constitute a printed publication.⁶² In many cases, courts seem to simply adopt the assumption that everything displayed on websites is accessible to the public.⁶³

Courts have applied the printed publication doctrine when the information was published on an online database, a bulletin board system (BBS), a chat room, personal blogs, or a forum.⁶⁴ For example, in In re Lister, the Federal Circuit held that a manuscript on commercial databases was publicly accessible because a person of ordinary skill would have been able to locate the reference through a keyword search.⁶⁵ Similarly in *Guest v. Leis*, the Sixth Circuit held that a message on a password-protected

⁶¹ Internet as a source of prior art, Wikipedia (July 22, 2011, 8:31 PM),

http://en.wikipedia.org/wiki/Internet_as_a_source_of_prior_art (courts may cite posting date or archiving date as evidence showing effective date of publication. In August 2006, The USPTO ordered examiners to stop using Wikipedia as a source of information for determining the patentability of inventions. But in practice, examiners increasingly cite Wikipedia information).

⁶² In re Lister, 583 F.3d at 1311-12 (determining that manuscript in commercial databases was prior art reference); see also Stamps.com, 2011 WL 2417044 at *4 (web pages printout as prior art); Amazon.com., 239 F.3d at 1363 (accepting webpage printout as prior art reference).

⁶³ Stamps.com, 2011 WL 2417044 at *4; Amazon.com., 239 F.3d at 1363.

⁶⁴ Supra note 6.

⁶⁵ In re Lister, 583 F.3d at 1309.

BBS is publicly accessible because the author intended the information to be published online for others to see.⁶⁶

Recently, three cases also determined newsgroup postings as printed publication.⁶⁷ In *Dow Jones & Co., Inc. v. Ablaise, Ltd.*, an inventor posted a link to search program's source code on publicly available newsgroups, including two that were for computer scientists and web programs.⁶⁸ The District Court of D.C. held the source code was printed publication because the newsgroups was public accessible after analyzing the four factors listed in *In re Klopfenstein*.⁶⁹ The court reasoned that all factors support the finding of printed publication because the source code was displayed for over a year before the priority date of the patent in dispute; the newsgroups are accessible to experts in computer science and web programmers; and inventors encouraged newsgroup subscribers to copy and use his code⁷⁰. infringement case claimed that a prior newsgroup posting disclosed the invention and thus rendered the patent invalid.⁷¹ The district court held the internet newsgroup posting qualify as prior printed publication.⁷² The court reasoned that the system allowed a user to search the participating web sites for keywords entered by the user and thus, was not abandoned or concealed from the public.⁷³ Such

⁶⁶ Guest v. Leis, 255 F.3d 325, 333 (6th Cir. 2001).

⁶⁷ See generally EBay, Inc. v. MercExchange, LLC., 547 U.S. 388 (2006); see generally Dow Jones & Co., Inc. v. Ablaise Ltd., 632 F. Supp. 2d 23, 36 (Fed. Cir. 2009); see generally Eolas Tech. v. Microsoft Corp., 274 F. Supp. 2d 972 (N.D. III. 2003).

⁶⁸ Dow Jones & Co., Inc. v. Ablaise Ltd., 632 F. Supp. 2d 23, 36-37 (D.D.C. 2009).

⁶⁹ Id. at 37 (quoting In re Klopfenstein, 380 F.3d 1345, 1350 (Fed. Cir. 2004).

⁷⁰ Id.

 $^{^{71}}_{eBay}$, 547 U.S. at 390.

 $^{^{72}}$ *Id.* at 388.

⁷³ MercExchange, L.L.C. v. eBay, Inc., 271 F. Supp. 2d 795-96 (E.D. Va. 2002), *vacated in part*, 401 F.3d 1323 (Fed. Cir. 2005), *vacated and remanded*, 547 U.S. 388 (2006).

position was also affirmed by USPTO's ruling in *Eolas Tech. v. Microsoft Corp.*⁷⁴ Although both district court and the Federal Circuit had ruled in favor of the claimed infringer, examiner invalidated all the claims in a preliminary ruling on the ground that it was anticipated by a draft description published as a newsgroup posting.⁷⁵

However, court may not find printed publication when the material is disclosed to a less public accessible space.⁷⁶ In *SRI Int'l, Inc. v. Internet Sec. Sys., Inc.*, a website address was distributed to members of review committee through presentations and email and placed on file transfer protocol (FTP) server for seven days as backup to email.⁷⁷ District Court of Delaware granted infringer's motion for summary judgment of invalidity and found the online material was printed publication.⁷⁸ The Federal Circuit vacated the district court's decision and remands for a more thorough determination of the publicity accessibility of the Live paper stored on FTP.⁷⁹ The Federal Circuit reasoned that although paper posted on an open FTP server "might have been available to anyone with FTP knowhow and knowledge of the subdirectory of the [system]," the paper on the FTP server "was most closely analogous to placing posters at an unpublicized conference with no attendees" or "without a conference index of the location of the posters"⁸⁰

C. Challenges Imposed by Social Networking Websites

⁷⁴ Eolas Tech. v. Microsoft Corp, 399 F.3d 1325, 1328 (Fed. Cir. 2005).

⁷⁵ Gu, *supra* note 9, at 245.

⁷⁶ SRI Int'l, Inc. v. Internet Sec. Sys., Inc., 511 F.3d 1186, 1198 (Fed. Cir. 2008).

⁷⁷ Id.

⁷⁸ SRI Int'l, Inc. v. Internet Sec. Sys., Inc. at 1188.

⁷⁹ *Id.* at 1198.

⁸⁰ *Id.* at 1197.

Social networking sites are defined as web-based services that allow users to create a unique online identity, interact with other users, and compile and share lists of contacts.⁸¹ By interacting with existing friends, reconnecting with old friends, or expanding networks and joining groups, users have a virtual networking experience analogous to their real life.⁸² The current user profiles based social networking sites did not began to flourish until the late 1990s⁸³ Facebook, the number one social networking site, claims to have over 750 million active users.⁸⁴ Twitter, created only 5 years ago, has won over 350 million registered accounts.⁸⁵ LinkedIn, a professional networking website, claims over 120 million members.⁸⁶ Even Google+, a site created for about a month, has earned over 25 million users.⁸⁷

These social networking sites share some basic features. First and foremost, individual users join the sites by setting up personal profiles. User profiles may include biographical information, a relationship status, education background, hobbies, and interests.⁸⁸ Next, new users can create a list of contacts by searching their friends, co-

⁸¹ James Grimmelmann, *Saving Facebook*, 94 Iowa L. Rev. 1137, 1143 (2009) (quoting Danah M. Boyd & Nicole B. Ellison, *Social Network Sites: Definition, History, and Scholarship*, J. Computer-Mediated Comm. 13(1) (2007), *available at* http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html.

 ⁸² John M. Miller, Is MySpace Really My Space examining the Discoverability of the Contents of Social Media Accounts, 30 No. 2 Trial Advoc. Q. 28, 28 (2011); Evan E. North, Facebook Isn't Your Space Anymore: Discovery of Social Networking Websites, 58 U. Kan. L. Rev. 1279 1284 (2010).

⁸³ Grimmelmann, *supra* note 80 at 1144.

 ⁸⁴ Facebook Statistics, http://www.facebook.com/press/info.php?Statistics (last visited Aug. 18, 2011).
 ⁸⁵ What does 300 million registered Twitter accounts

mean?,http://www.twopcharts.com/twitter300million?source=nl, (last visited Aug. 19, 2011). ⁸⁶ About Us, LinkedIn, http://www.press.linkedin.com/about (last visited Aug. 18, 2011).

⁸⁷ Rob D. Young, *Google Plus Reaches 25 Million Users, Activity Declines*, SearchEngineJournal.com, Aug. 3, 2011,http://www.searchenginejournal.com /google-plus-reaches-25-million-users-activity-declines/31500 (last visited Aug. 19, 2011).

⁸⁸ Samantha L. Milier, *The Facebook Frontier: Responding to the Changing Face of Privacy on the Internet*, 97 Ky. L.J. 541, 542 (2009).

workers, or people who share their interests.⁸⁹ Then, users can upload photos, post blog entries, comments on other users' posts, or enjoy events or activities.⁹⁰ Some sites allow users to send private messages directly to other users. Some sites also provide instant messages service that only keeps the message temporarily viewable to both parties.⁹¹ Recently, the concept of real-time web and location based web has become popular.⁹² While Real-time web encourages users to broadcast what they are doing or what is on their mind through "tweets" or "Live Feed",⁹³ location based webs allow users to "check in" to places where events are occurring and geotag their personal experiences.⁹⁴ Finally, to protect privacy, most social networking sites allow users to control who can view their profile, get access to certain content, or add them to a contact list.⁹⁵

In addition to basic features, many new uses of social networking sites have been discovered these days.⁹⁶ First, business users can use social networking sites to build brand image, increase brand awareness, advertise product, learn about new technologies and competitors, and most importantly, interact with potential consumers and clients to

⁸⁹ Id.

⁹⁰ *Doe v. MySpace, Inc.*, 474 F. Supp. 2d 843, 845 (W.D. Tex. 2007) (stating a number of social networking websites enable members "to create online profiles, which are individual web pages on which members post photographs, videos, and information ab out their lives and interest"); Milier, *supra* note 87at 544.

^{544.} ⁹¹ Facebook Help Center: Sending a message, Facebook,mhttp://www.facebook.com/help/?page=938 (last visited Nov. 1, 2011); See also, Can You send Messages to Several Friends at a Time?, MySpace, http://faq. myspace.com/app/answers/detail/a_id/262/kw/myspace%20mail/c/%20/r_id/100061 (last visited July 5, 2011); Twitter Support, Twitter, http://help.twitter.com/portal (last visit July 5, 2011).

⁹² Social Network Service, supra note 1.

⁹³ Social Network Service, supra note 1; Twitter Support, supra note 90.

⁹⁴ Social Network Service, supra note 1; M.G. Siegler, Yelp Enables Check-Ins on Its iPhone App; Foursquare, Gowalla Ousted as Mayors (Jan. 15, 2010), http://techcrunch.com/2010/01/15/yelp-iphoneapp-4-check-ins.

⁹⁵ See supra note 90.

⁹⁶ Id.

hear comments on their products.⁹⁷ Second, scientists can use social networking sites to share updated scientific knowledge, cooperation with others in the scientific community, and enjoy a flexible way of learning.⁹⁸ Third, students can use social networking sites to connect with professionals for internship and job opportunities.⁹⁹ Finally, the teachers and parents of school children can also benefit from social networking sites.¹⁰⁰ Teachers can gather feedback or even post assignments, tests through group posts while parents can ask questions and make comments easily without talking face-to-face.¹⁰¹

A key difference between social networking sites and other Internet resources is the user's ability to restrict public access to certain information.¹⁰² Users usually change privacy settings of their profiles and thus decide who has access to a certain type of information.¹⁰³ Therefore, some scholars divide information on networking sites into

⁹⁷ Jody Nimetz, *Social Network Benefits to the B2B World* (Nov. 18, 2007), http://www.marketingjive.com/2007/11/jody-nimetz-on-emerging-trends-in-b2b.html (listing five major uses for businesses and social media: to create brand awareness, as an online reputation management tool, for recruiting, to learn about new technologies and competitors, and as a lead generation tool to intercept potential prospects); Nick Flor, Flor, Nick V. Week 1: The Business Model Approach to Web Site Design" (March 2, 2001), http://www.informit.com/articles/article.aspx?p=20882 (describing autonomous business model used in social networking services).

⁹⁸ supra note 90; Julia P. Liebeskind, et al., Social Networks, Learning, and Flexibility: Sourcing Scientific Knowledge in New Biotechnology Firms, 7 Org. Sci. 428, 428-443 (1996), available at http://www.jstor.org/pss/2635102.

⁹⁹ LinkedIn, Facts, http://www.press.linkedin.com/about (last visited Aug. 19, 2011).

¹⁰⁰ Social Network Service, supra note 1("The National School Boards Association reports that almost 60 percent of students who use social networking talk about education topics online and [surprisingly] more than 50 percent talk specifically about schoolwork.").

¹⁰¹ Social Networking in Schools: Educators Debate the Merits of Technology in Classroom, (Updated May 27, 2011), http://www.huffingtonpost.com/2011/03/27/social-networking-schools_n_840911.html ("Tech savvy administrators are using blogs as a tool to keep parents, teachers, and students informed of the things going on in their schools"); Social Networking Goes to School, Educ. Week (June 14, 2010), http://www.edweek.org/dd/articles/2010/06/16/03networking.h03.html.

¹⁰² See Indep. Newspapers, Inc. v. Brodie, 966 A.2d 432, 438 n. 3 (2009) (describing social networking websites as "sophisticated tools of communication where the user voluntarily provides information that the user wants to share with others").

¹⁰³ North, *supra* note 81at 1288 (discussing privacy controls and the user's expectation of privacy regarding social networking websites).

three categories: public, semi-private, and private.¹⁰⁴ Public information includes text or media that is available to the general public; semi-private information is only shared by a user selected group of "friends" or "friends of friends" depending on user's private setting; and private information includes instant messages and user-to-user messages that are only shared by senders and receivers.¹⁰⁵ According to this theory, both semi-private and private information is not automatically accessible to the public, and thus is not "printed publication."¹⁰⁶ Other scholars, however, argue that once content is shared with another user on social networking sites, it can no longer be considered private.¹⁰⁷ These scholars emphasize that although a social networking site requires a username and password for the user to create a profile, there is no law that prevents those that befriend the user from publishing that is on the user's profile.¹⁰⁸ Under this theory, almost all information on the social networking websites except user-to-user messages is accessible to the public and thus constitutes "printed publication."

While most cases regarding networking websites postings focuses on their evidentiary reliability or procedural sufficiency¹⁰⁹, at least two non-patent law related cases briefly mentioned the issue of public accessibility.¹¹⁰ In *Doe v. Peterson*, a minor uploaded her nude pictures to an online photo website, and sent them to her then-

¹⁰⁴ *Id*.

 $^{^{105}}$ *Id.* at 1288-9

¹⁰⁶ *Id*.

¹⁰⁷ David Hector Montes, *Living Our Lives Online The privacy Implications of Online Social Networking*, 5. Info. Soc'y J.L & Pol. 507, 507-08 (2009).

¹⁰⁸Milier, *supra* note 89; Eric Danowitz, *MySpace Invasion: Privacy Rights, Libel, and Liability*, 28 J. Juv. L. 30, 37 (2007).

 ¹⁰⁹ *Tienda v. State*, 2010 WL 5129722, * 5 (Tex. Ct. App. Dec. 17, 2010) (holding user's name and hometown from a social networking website was sufficiently evidence to authenticate that the account belonged to the defendant); *Griffin v. State*, 19 A.3d 415, 428 (Md. Ct. App. 2010) (finding that printed pages from a social networking website is not sufficiently authenticate and thus not admissible).
 ¹¹⁰ Doe v. Peterson, 784 F. Supp. 2d 831, 835 (E.D. Mich. 2011).

boyfriend via MySpace.¹¹¹ Although the minor immediately deleted all copies of the photos after they were sent and intended the photos to remain private between her and her then-boyfriend, the photos were reposted on another website featuring pornography.¹¹² The Eastern District Court of Michigan stated in dicta that "[d]espite the fact that websites do not actually circulate in public like newspapers and magazines, their accessibility to anyone with access to the internet suggests that their contents should be treated as even more 'widely disclosed' than information or photos portrayed in traditional print material."¹¹³ Similarly in *Cynthia Moreno v. Hanford Sentinel, Inc.*, a newspaper publicized Ms. Moreno's critical comments of her town on her MySpace site.¹¹⁴ Ms. Moreno sued the newspaper for violation of her privacy because she had meant her thought for a limited few people on her MySpace page.¹¹⁵ However, the appellate court of California dismissed the privacy claim and explained that Ms. Moreno's "affirmative act made her article available to any person with a computer and thus opened it to the public eye."¹¹⁶

Both courts did not state whether the plaintiffs had set the MySpace privacy settings and the opinions seem to suggest that any posting on social networking websites are publicly accessible. However, until the Federal Circuit makes a determination regarding whether posts on social networking websites constitute "printed publication", the two arguments will remain.

¹¹¹ Id.

 $^{^{112}}$ *Id.*

¹¹³ *Id.* at 842.

¹¹⁴ Moreno v. Hanford Sentinel, Inc., 91 Cal. Rptr. 3d 858, 861 (Cal. Ct. App. 2009).

¹¹⁵ *Id*.

¹¹⁶ *Id.* at 862.

II. A Refined Two Prong Test to Determine Whether Networking Websites Posts Constitute Printed Publication on a Case-by-case Basis

A. A Two Prong Test to Determine Whether Social Networking Websites Posts Constitute Printed Publication

Although previous cases laid out many useful factors and tests in the determination of printed publication, most of them are not readily applicable to networking websites. For example, most material on social networking websites are not indexed or catalogued as books in the library. Moreover, it is difficult to determine the how long the material has been posted on the website. Therefore, this Note proposes a refined two prong test with multiple factors under each prong for courts to use in determining whether posts on networking websites are printed publication. While none of the factors alone is determinate, a comprehensive analysis of all factors will lead to a just determination of whether social website posts constitute printed publication.

1. Public Dissemination

The first prong requires courts to determine whether the posts are distributed to the interested public. Like the books in a library or presentations at conferences, posts on social networking websites are electronic documents that may be exposed to an unknown audience. Therefore, it is helpful to analyze their copy numbers, circulation duration, or expertise of audience just as in traditional settings. However, unlike the publication in physical format, digitalized information on the social networking websites has its unique feature and thus should be evaluated by two additional factors.

First, courts should consider the policy of different sites. The more a site promotes networking with strangers, the more likely courts will find the posting on the site available to the public. A good example would be the comparison between social networks such as Facebook or MySpace and professional networks such as LinkedIn.¹¹⁷ While the former features reconnecting and communicating with friends or other "people in your life," the latter encourages users to actively meet new people and seek to increase their professional networks.¹¹⁸ Therefore, courts are less likely to treat everything on social networks as public messages than that on professional networks.

Second, courts should consider how many friends the author has and whether the post has been reposted to decide the potential disclosure level of the post. The more times a post has been forwarded, the larger the possibility that the post has already been exposed to a lot of friends or friends of friends. And the more the friends who have access to the post, the more likely courts may find the post accessible to the public. Therefore, courts may find public accessibility when posts are made by celebrities who have millions of followers on Twitter or hundreds of friends on Facebook.¹¹⁹ However, when the post is made by users with a small number of friends and has not been forwarded, courts may be reluctant to determine such post as public medium.

2. Public Retrievability

When posts are found to be distributed to the interested public, courts have to consider the second prong of the test to decide whether the posts are searchable by interested parties. Unlike the references in a library, information on the internet may not be catalogued or searched by call number.¹²⁰ Although powerful search engines created web directories analogous to the index in the library to foster the search efficiency, these

¹¹⁷ See Milier, supra note 87 at 29.

¹¹⁸ Facebook, http://facebook.com (last visited July 22, 2011).

¹¹⁹ North, *supra* note 81 at 1295 ("Tom Anderson, a co-founder of MySpace, has more than 200 million 'friends."); Ashton Kutcher, @*aplusk*, Twitter (Aug 11, 2011) (Ashton Kutcher, an actor, claims nearly four million "followers" on Twitter); Famecourt, *supra* note 7; Facebook Statistics, *supra* note 83 (The average Facebook user has 130 friends on the site).

¹²⁰ See In re Lister, 583 F.3d 1307 (Fed. Cir. 2009).

engines often produce too many search results that make it extremely difficult for the user to locate the information.¹²¹ Therefore, courts should consider three different factors under the second prong.

First, courts should consider user's private setting for the posts. Relevant facts include: 1) whether the social networking sites provide tools to keep posts private, 2) whether the users successfully enabled private setting, and 3) to whom the user chose to disclose the information and what their private setting is.¹²² For example, the publisher of a "tweet" on Twitter cannot control who can see the post.¹²³ Therefore, courts are more likely to treat Twitter as a web blog site or public forum that is publicly accessible.¹²⁴ In another example, a Facebook user cautiously set the posts viewable only to his friends but one of his friends' profiles is open to the public. Because privacy settings of the original post are not applicable to a third party, courts may still find the protected post available to public through a third party.¹²⁵

Second, courts should consider whether the posts are otherwise not restricted from being searched. Usually it is extremely difficult for the author to wipe off a post completely from internet search. Many search engines may provide a preview of the webpage or cache the page periodically so that interested public may be able to take a quick look at the content of a web page already disappeared or being secured by the

¹²¹ Dana Lynn Driscoll, et al., *Searching the World Wide Web: Overview*, Welcome to the Purdue Owl, http://owl.english.purdue.edu/owl/owlprint/558/.

¹²² Kristen Decker, *Looking for Lagniappe: Publicity as a Culprit to Social Networking Websites*, 6 Okla. J.L. & Tech. 19 (2010), http://www.okjolt.org/index.php?option=com_content&view=article&id=114:6-okla-jl-a-tech-51-2010&catid=36:media-a-comm-tech&Itemid=63

¹²³ Lauren McCoy, *140 Characters or Less: Maintaining Privacy and Publicity in the Age of Social Networking*, 21 Marq. Sports L. Rev. 203, 207 (2010).

 $^{^{124}}$ *Id*.

¹²⁵ Decker, *supra* note 121 at 17-18.

author.¹²⁶ In addition, a third party who has access to the contents may repost the post somewhere else seconds after the post, therefore the post will remain online permanently regardless of the original poster's intent.¹²⁷

Third, even if the information is not restricted for public search, courts should consider whether information can be easily singled out by ordinary people skilled in art through diligent web searches. Powerful search engines nowadays may produce millions of web page addresses in response to a single key word search.¹²⁸ Additionally, specialties in data mining companies may find even more information given sufficient time.¹²⁹ However, the requirement of diligent search under patent law should not include anything more than trying out different combinations of key words, viewing the first ten to a hundred pages in the search result, and using different search engines. Since most social networking sites do not arrange posts by topic or title, courts should evaluate the third factor on a factual basis before reaching any conclusions.

B. The Test Is Better Than a Blanket Assumption that All Posts on Social Networking Websites Are Printed Publication

A blanket assumption that everything posted on websites is accessible to the public has its merit when it applies to public websites, BBS, blogs, and news groups.¹³⁰ Admittedly, the blanket assumption promotes the disclosure of innovation to the public, and thus serve the purpose of printed publication bar, which is to discourage people to wait too long before going to the patent office at the risk of losing their rights altogether.

¹²⁶ Sharon D. Nelson & John W. Simek, *Capturing Quicksilver: Records Management for Blogs, Twittering and Social Networks*, Law Practice, 26, 26 (April/May 2009).

¹²⁷ Decker, *supra* note 121, at 18.

¹²⁸ Eric W. Guttag, *Applying the Printed Publication Bar in the Internet Age: Is It as Simple as Googling for Prior Art?* 16 Va. J.L. & Tech. 66, 109 (2011) (stating courts should resolve the issue of what "unmanageable" and "overwhelming numbers" of search results means as quickly as possible).

¹²⁹ Driscoll, *supra* note 120.

¹³⁰ See generally supra note 6.

However, there are many shortcomings of extending such a blanket assumption to social networking websites.

First of all, the blanket assumption could reduce the incentive for inventors to participate in activities that "promote progress of science and useful art." Social networking sites function as a great platform for scientific communities, and inventors use these sites to discuss their new ideas and cooperate with other people.¹³¹ However, if courts hold that posts a social networking sites host are automatically disclosed to the public and thus un-patentable, such discussion or cooperation will be discouraged.

Moreover, the blanket assumption goes against the factual inquiry of the printed publication doctrine. Unlike a blog entry on a public site, posts on social networking websites may not be available to every internet user. Instead, many factors, such as the privacy settings or the number of times a post is forwarded, are determinate when courts evaluate the public accessibility of the posts. Without permitting the courts to consider all the relevant facts, the blank assumption seems to put the entire burden on the users of social networking sites, and as a result, will be detrimental to the fairness of the legal system.

Finally, the blanket assumption taken by a patent court may raise the risk of technology abuse that may adversely affect internet security and privacy. The blanket assumption allows individuals to conduct extraordinary unreasonable searches in order to prove that a piece of information was posted online. To take one step further, technological companies may even offer services that monitor all the social networking website activities as long as the company has access to the website provider's storage

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¹³¹ See generally Liebeskind, supra note 97.

system.¹³² It is unsettling to consider the possibility that cautious inventors could be deprived of the patent interest because of such technology abuse. Therefore, individuals must be assured by law that their posts on social networking sites are not subject to search without a reasonable basis.

III. Objections and Concerns

Due to the knowledge sharing culture and the potential information leaking of social networking sites, some may argue that all the information on these sites belongs in the public domain. Indeed, social networking websites' inherent purpose is to encourage users to share information and ideas with other users.¹³³ Many websites keep pushing publicity of user's information¹³⁴ and warning users that "information might be re-shared or copied by other users," and the company "cannot ensure that information. . . will not become publicly available."¹³⁵

In addition, many users chose to negate the privacy control in order to maximize the website's socialization function.¹³⁶ One study found that nearly half of social networking sites users do not change the network's default privacy setting.¹³⁷

¹³² See James Ball, Pentagon to Monitor Social Networking Sites for Threats, The Guardian, Aug. 3, 2011, http://www.guardian.co.uk/world/2011/aug/03/pentagon-monitor-social-networking-threats; JD Lasica 10 Paid Social Media Monitoring Services for Nonprofits, Social Brite (Jan. 12, 2011), http://www.socialbrite.org/2011/01/12/paid-social-media-monitoring-services.

¹³³ Grimmelmann, *supra* note 80, at 1142-143.

¹³⁴ Google Plus Official Website, https://plus.google.com/up/start/?et=sw&type=st (last visited Aug. 19, 2011) (Google is pushing all "profiles" pages public July 31, 2011 in the Google+ transition); Christian Torres, *More Drug Companies Close Facebook Pages as Walls Open*, Wash. Post, Aug. 16, 2011, http://www.washingtonpost.com/national/health-science/more-drug-companies-close-facebook-pages-as-walls-open/2011/08/16/gIQA1venJJ_story.html (Facebook is gradually opening pharmaceutical industry pages to public); Facebook's Privacy Policy, http://www.facebook.com/policy.php (last visited Dec. 22, 2010) (Facebook introduced a more sophisticated privacy control in December 2009, the new recommended settings of which open up more personal information to wider groups).

¹³⁵ Facebook's Privacy Policy, Facebook (Oct. 29, 2009),

http://www.facebook.com/note.php?note_id=%20322336955300.

¹³⁶ Grimmelmann, *supra* note 80 at 1140.

¹³⁷ *Id.* at 1185.

Considering that many users have hundreds or thousands of friends who have full access to their profiles,¹³⁸ even if users disclose information to a small number of close friends on these sites, the information may be disseminated to an unlimited group of people if just one "friend" choose a less private setting.¹³⁹ To make things worse, third-party data collectors may use software that automatically examines the information available in the user's profiles.¹⁴⁰ Therefore, information on a temporarily unsecured account is at the risk of being permanently stored by a third party.¹⁴¹

However, the possibility that some information might be disclosed to the public in the future is no substitute for the conclusion that such information is publicly accessible at the moment. The public accessibility of posts is a factual analysis based on objective evidence rather than logical prediction. Therefore, whether a post on social networking websites is publicly accessible should be decided on a case-by-case basis rather than a blanket assumption.

III. Conclusion

The emergence of social networking websites imposes a challenge to patent law. Courts should not make a blanket assumption that everything posted on social websites constitute a printed publication. Rather, courts should adopt a refined multiple factor test to help the analysis. This proposal would result in a balance between private and public interests in an invention, and therefore help achieve the ultimate goal of patent law.

¹³⁸ See supra note 118 at 1290.

¹³⁹ Grimmelmann, *supra* note 80 at 1140.

¹⁴⁰ Nicolas P. Terry, *Physicians and Patients Who "Friend" or "Tweet": Constructing a Legal Framework for Social Networking in a Highly Regulated Domain*, 43 Ind. L. Rev. 285, 295 (2010).

¹⁴¹ Terry, *supra* note 139.

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Deepwater Horizon: Chemical Dispersants and the Future of Oil Spill Response

Methodology

By Keirin P. Ahmad¹⁴²

I. Introduction

America's infinite use and consumption of petroleum products and groundbreaking technological advances have led the oil industry away from land-based production and into deepwater drilling.¹⁴³ British Petroleum ("BP"), a major international oil conglomerate and industry pioneer, began its own deepwater drilling in January of 2001 by settling the *Deepwater Horizon* rig in the Gulf of Mexico. On the evening of April 20, 2010, an explosion on the rig caused the first of four million barrels of crude oil to flood the waters and shorelines of the Gulf.¹⁴⁴ What was once thought of as "a complex, even dazzling, enterprise"¹⁴⁵ is now known as one of the greatest oil disasters in the history of the United States.

The *Deepwater Horizon* oil spill immediately gave rise to infinite controversy, including whether chemical dispersants were used properly during the oil spill clean up

^{142*} J.D. Candidate 2012, Syracuse University College of Law; Executive Editor, Syracuse Science and Technology Law Reporter.

¹⁴³ National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling's *Report to the President, Deep Water: The Gulf Oil Disaster and the Future of Offshore Drilling*, Jan. 2011, p. viii. [hereinafter *Report to the President*]. ("On May 22, 2010, President Barack Obama announced the creation of the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling: an independent, nonpartisan entity, directed to provide a thorough analysis and impartial judgment. The President charged the Commission to determine the cause of the disaster, and to improve the country's ability to respond to spills, and to recommend reforms to make offshore energy production safer." p. vi).

 $[\]frac{144}{145}$ *Id.* at vi.

 $^{^{145}}$ Id. at viii.

efforts. This Article explores whether chemical dispersants were the right response method to use and, if so, whether the dispersants were used in the proper manner. In addition, recommendations will be offered in order to address the discord between the regulatory agencies and oil spill response teams, the effectiveness of the Environmental Protection Agency's ("EPA") current standards for acceptable chemical dispersants, and the antiquated federal legislation and regulation for hazardous substances.

II. Chemical Dispersants: An Overview

The basic composition of a chemical dispersant is one part solvent and one part surfactant.¹⁴⁶ Corexit¹⁴⁷, a chemical dispersant produced by Nalco Company ("Nalco"), was the main chemical dispersant used by BP on the *Deepwater Horizon* spill.¹⁴⁸ Corexit contains six primary ingredients, many of which can be found in everyday products.¹⁴⁹ Examples of these products with specific ingredients in common with Corexit9500 include fruit juice drinks, brand-name skin cream, baby bath liquid, cosmetics and brand-name cleaning products for soap scum removal.¹⁵⁰ In addition, chemical dispersants are frequently used as a clean-up method after oil spills because of their ability to contain spilled oil and reduce the oil's harmful impact on the surrounding environment.¹⁵¹

¹⁴⁷ Two types of Corexit were used on the Deepwater Horizon spill: Corexit 9500A and Corexit 9527A.
¹⁴⁸ Nalco, *Oil Dispersant FAQ*, http://www.nalco.com/applications.4255.htm (last visited Mar. 6, 2011)
[hereinafter Nalco *FAQ*]. ("Nalco has been in the water, oil and gas treatment business for over 80 years.
[They] are the world's leading water treatment and process improvement company . . . [d]ispersants are one very small part of their business.").

¹⁴⁶ International Tanker Owners Pollution Federation Limited, *Dispersants*, http://www.itopf.com/spill-response/clean-up-and-response/dispersants (last visited Nov. 6, 2010) [hereinafter *Dispersants*]. (The molecules of the surfactant part contain both an oleophilic part that is attracted to oil and a hydrophilic part that is attracted to water).

¹⁴⁹*Id*.

¹⁵⁰ Id.

¹⁵¹ Deepwater Horizon Spill Response: Dispersant Use, *Dispersant Background and Frequently Asked Questions*, BP, 2 (June 19, 2010), (*available at*

A. The Role of Dispersants During Oil Spill Response

After an oil spill, natural dispersion occurs when sea surface turbulence (usually waves) breaks up the oil into tiny droplets, which then enter the water column.¹⁵² Chemical dispersants are primarily used to promote separation of the oil from the water by reducing surface tension.¹⁵³ Dispersants may be applied in a variety of ways, depending on the size and location of the oil spill.¹⁵⁴ Chemical dispersants can be used either on the water's surface or underwater to achieve the same goal: speeding up the natural dispersion process.¹⁵⁵

Chemical dispersants may be applied to the surface or the subsurface of the water.¹⁵⁶ Surface application begins by applying the chemicals directly to the spilled oil with specialized equipment mounted on an airplane, helicopter or ship.¹⁵⁷ When the chemicals are applied to the surface of the water, the solvent transports and distributes the surfactants to the oil and water's interface, and the surfactant molecules arrange themselves in a manner that reduces the surface tension, causing tiny oil droplets to disperse from the larger oil slick.¹⁵⁸ Upon entry into the water column, the dispersed oil

¹⁵⁸ *Id*.

 $http://www.bp.com/liveassets/bp_internet/globalbp/globalbp_uk_english/incident_response/STAGING/loc al_assets/downloads_pdfs/Dispersant_background_and_FAQs.pdf).$

 $^{15\}overline{2}$ Dispersants, supra note 4.

¹⁵³ *Dispersants Background*, *supra* note 9, at 1.

¹⁵⁴ *Dispersants, supra* note 4. ("[W]orkboats are more suitable for treating minor spills in harbors or confined waters. Large multi-engine planes are best equipped for handling large off-shore spills. Small, single-engine aircrafts and helicopters are suitable for treating smaller spills and near shore areas.") ¹⁵⁵ *Id.*

 ¹⁵⁶ EPA Response to BP Spill in the Gulf of Mexico, *Questions and Answers on Dispersants*,
 http://www.epa.gov/bpspill/dispersants-qanda.html (last visited Jan. 10, 2011) [hereinafter EPA Q&A].
 ¹⁵⁷ Id.

is rapidly diluted by additional natural processes, including wind, waves and microorganisms.¹⁵⁹

Underwater use of dispersants works in a slightly different manner. When used underwater, dispersants are applied at the source of the leak.¹⁶⁰ This technique, employed by BP during the *Deepwater Horizon* spill, is considered a "novel approach to addressing the significant environmental threats posed by the spill."¹⁶¹ Underwater application not only reduces the amount of oil that reaches the water's surface, but also lessens the amount of dispersant that would be needed for surface application.¹⁶²

B. Toxicity and Hazardous Effects

Nalco's Safety Data Sheets for Corexit9500A and 9527A provide an overview of each chemical including composition, toxicological information, hazard identification for humans, exposure controls, ecological information, and regulatory information.¹⁶³

1. Toxicity

The toxicological information provided on Corexit9500A's safety data sheet indicate that no toxicity studies have been conducted on the product and list the potential human hazard as low.¹⁶⁴ Corexit9527A's safety data sheet indicates that toxicity studies have been done, and based on those studies, the potential human hazard is high.¹⁶⁵

2. Effects on Humans

http://doh.state.fl.us/chd/bay/Documents/Oilspill/Master_EC9527A_MSDS_539295.pdf [Hereinafter *Corexit 9527A Safety Data Sheet*]; Nalco Co., *Corexit 9500A Safety Data Sheet* (May 11, 2010), http://www.nalco.com/documents/9500A_MSDS.pdf [Hereinafter *Corexit 9500A Safety Data Sheet*]

¹⁶⁴ Corexit 9500A Safety Data Sheet, *supra* note 21, at 6.

¹⁵⁹ EPA Q&A, supra note 14.

¹⁶⁰ EPA Q&A, supra note 14.

¹⁶¹ Id.

 $^{^{162}}$ *Id*.

¹⁶³ Nalco Co., Corexit 9527A Safety Data Sheet (May 11, 2010),

¹⁶⁵ Corexit 9527A Safety Data Sheet, *supra* note 21, at 6

Humans can be affected by dispersants through four main exposure pathways: eye

contact, skin contact, ingestion and inhalation.¹⁶⁶ Inhalation can occur at or near the

dispersant application site, and ingestion can occur through consumption of food that has

been tainted with dispersant.¹⁶⁷ Nalco's safety data sheets for Corexit9500A and

Corexit9527A list the acute human health hazards associated with each dispersant. The

human health hazards and symptoms of exposure vary slightly between Corexit9500A

and Corexit9527A, with Corexit9527A seeming to be more hazardous.

Corexit9500A:

Acute Human Health Hazards:

- Eye Contact: Can cause mild irritation.
- Skin Contact: May cause irritation with prolonged contact.
- Inhalation: Repeated or prolonged exposure may irritate the respiratory tract.
- Ingestion: Not a likely route of exposure. May cause nausea and vomiting. Can cause chemical pneumonia if aspirated into the lungs after ingestion.

Symptoms of Exposure:

- Acute: A review of available data does not identify any symptoms from exposure not previously mentioned.
- Chronic: Frequent or prolonged contact with product may defat and dry the skin, leading to discomfort and dermatitis.
- Aggravation of Existing Conditions: Skin contact may aggravate an existing dermatitis condition.¹⁶⁸

Corexit9527A:

Acute Human Health Hazards:

- Eye Contact: Can cause moderate irritation.
- Skin Contact: Can cause moderation irritation. Harmful if absorbed through skin.
- Inhalation: Harmful by inhalation. Repeated or prolonged exposure may irritate the respiratory tract.

¹⁶⁶ Nalco Co., Corexit 9527A Safety Data Sheet, 1-2 (May 11, 2010),

http://doh.state.fl.us/chd/bay/Documents/Oilspill/Master_EC9527A_MSDS_539295.pdf; Nalco Co., *Corexit 9500A Safety Data Sheet*, 1-2 (May 11, 2010),

http://www.nalco.com/documents/9500A_MSDS.pdf.

¹⁶⁷ Dispersant Background, supra note 9, at 5.

¹⁶⁸ Corexit 9500A Safety Data Sheet, *supra* note 21, at 2.

• Ingestion: May be harmful if swallowed. May cause liver and kidney effects and/or damage. There may be irritation to the gastro-intestinal tract.

Chronic Human Health Hazards:

• Contains ethylene glycol monobutyl ether (butoxyethanol). Prolonged and/or repeated exposure through inhalation or extensive skin contact with EGBE may result in damage to the blood and kidneys.

Symptoms of Exposure:

- Acute: Excessive exposure may cause central nervous system effects, nausea, vomiting, anesthetic or narcotic effects.
- Chronic: Repeated or excessive exposure to butoxyethanol may cause injury to red blood cells (hemolysis), kidney or the liver.¹⁶⁹

Based on the hazard characterization of both types of dispersant, Nalco concludes that the potential human hazard for each is low.¹⁷⁰ Similarly, the safety data sheets indicate that, based on Nalco's recommended product application and personal protective equipment, the potential for human exposure is also low.¹⁷¹

3. Effects on the Environment

The EPA has admitted that the long-term effects of dispersants on ocean-dwelling

species have not been extensively studied and are not fully understood.¹⁷² However,

scientists and policymakers agree that the actual oil spilled is the greatest threat to

surrounding wildlife.¹⁷³ Nalco's ecological tests of both Corexit9500A and

Corexit9527A yielded the same result: based on the hazard characterization, the potential

environment hazard is moderate, but the hazard characterization must be read in

conjunction with the recommended product application and the product's

¹⁶⁹ Corexit 9527A Safety Data Sheet, *supra* note 21, at 9.

¹⁷⁰ Corexit 9500A Safety Data Sheet, *supra* note 21, at 9.

 $^{^{171}}$ *Id.* at 4.

¹⁷² EPA Q&A, supra note 14.

¹⁷³ Nalco FAQ, supra at note 6.

characteristics.¹⁷⁴ Taking all of these factors into consideration, Nalco concludes that the overall hazard for environmental exposure is low.¹⁷⁵

The ability to effectively break up large oil sheens make chemical dispersants an ideal remedy for oil spill clean-up, but the decision to use dispersants must always be given great consideration.¹⁷⁶ "A decision to use dispersant involves balancing the risks to certain animals and plants at the water surface and in shoreline habitats against the potential risk to other organisms in the water column and sea floor."¹⁷⁷ According to the EPA, dispersants are generally less toxic than the oil itself, but the use of dispersants is always an "environmental trade-off."¹⁷⁸

One of the trade-offs of exposing subsurface marine wildlife to such chemicals is the benefit of protecting sea birds and other wildlife that may encounter oil on the water's surface and preventing damaging oil from reaching sensitive shoreline habitats.¹⁷⁹ Overall, dispersants prevent large amounts of oil from reaching nearby shorelines, which protects surrounding land wildlife without immediately compromising marine wildlife.¹⁸⁰

C. Regulation of Chemical Dispersants and Oil Spill Response

1. Contingency Plans

¹⁷⁴ Corexit 9500A Safety Data Sheet, *supra* note 21, at 7.

¹⁷⁵ Id.

¹⁷⁶ Dispersant Background, supra note 9, at 3-4.

¹⁷⁷ Id.

 $^{^{178}}$ EPA Q&A, supra note 14.

¹⁷⁹ Dispersant Background, supra note 9, at 4.

¹⁸⁰ *Dispersants, supra* note 4 (Modern chemical dispersants and oil/dispersant mixtures exhibit relatively low toxicity to marine organisms).

The federal government, through the direction of a designated Federal On-Scene Coordinator, oversees the use of chemical dispersants during oil spills.¹⁸¹ The Federal On-Scene Coordinator complies with the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP").¹⁸² The NCP, mandated by the Clean Water Act, is a national response plan developed by the federal government for the purpose of promoting efficiency and coordination after hazardous substance spills and contains a list of pre-approved chemical dispersants and approved methods of dispersant application.¹⁸³

State governments also participate in spill response and regulation through regional and area-specific contingency plans. Regional Response Teams integrate federal and state agency representatives and are co-chaired by the Coast Guard and EPA.¹⁸⁴ These response teams develop Regional Contingency Plans and preauthorization protocols for response strategies.¹⁸⁵ Regional Response Teams are further broken down into Area Committees.¹⁸⁶ The Area Committees, which develop Area Contingency Plans, similarly include federal and state representatives, but are led by the Coast Guard.¹⁸⁷

The oil industry participates in regulation of spill response as well. Oil industries must develop plans that are consistent with the National Contingency Plan, develop appropriate Area Contingency Plans, and gain approval of the Minerals Management Service ("MMS").¹⁸⁸ The MMS's regulations "outline what needs to be included in these

¹⁸¹ National Oil and Hazardous Substances Pollution Contingency Plan Overview, http://www.epa.gov/oem/content/lawsregs/ncpover.htm (last visited Jan. 10, 2011).

¹⁸² *Id.*

¹⁸³ *Id.*

¹⁸⁴ *Report to the President, supra* note 1, at 265-66.

¹⁸⁵ *Id.* at 265.

¹⁸⁶ Report to the President, supra note 1, at 265.

¹⁸⁷ *Id.* at 266.

¹⁸⁸ 30 C.F.R. §254.2(a).

plans and direct the company to include information about the worst case scenario, including how to calculate the volume of oil, determine its trajectory, and a response strategy."¹⁸⁹

2. Other Regulators

The EPA also plays a role in the regulation of chemical dispersants. The EPA requires manufacturers to submit toxicology tests and reports for all dispersants before they are approved and admitted on to the National Contingency Plan's authorized list of dispersants.¹⁹⁰ This method of approval has been widely criticized. Toxicologists have speculated about the reliability and comparability of testing by manufacturers.¹⁹¹ Moreover, the only required toxicity tests are short-term studies on fish and shrimp species; testing on other species of wildlife or long-term effects are neither considered nor required.¹⁹²

III. The Deepwater Horizon Oil Spill

On April 20, 2010, the *Deepwater Horizon's* crew was in the final stages of cementing BP's 18,000-foot-deep Macondo well.¹⁹³ A series of missteps and an overall failure of management caused a blowout of the well, an explosion that sank the *Deepwater Horizon*, the death of eleven men, and the largest offshore oil spill in the nation's history.¹⁹⁴ "During the next few hours, days, weeks, and ultimately months, BP and the federal government struggled with their next great challenge: containing the spill

¹⁸⁹ *Report to the President, supra* note 1, at 266.

¹⁹⁰ EPA Q&A, supra note 14.

¹⁹¹ Report to the President, supra note 1, at 144.

¹⁹² Report to the President, supra note 1, at 144.

¹⁹³ *Id.* at 127.

¹⁹⁴ Id.

and coordinating a massive response effort to mitigate the threatened harm to the Gulf of Mexico and the Gulf coast."¹⁹⁵

Captain Joseph Paradis and the United States Coast Guard Marine Safety Unit led the first response effort, which was a search and rescue mission to find the missing crew members.¹⁹⁶ On April 21, 2010, Rear Admiral Mary Landry took over as the Federal On-Scene Coordinator,¹⁹⁷ and guickly moved to set up Incident Command Posts along the Gulf Coast to serve as centers for response operations.¹⁹⁸ These Incident Command Posts were part of the government's Unified Command, which is an internal command structure implemented by the National Contingency Plan.¹⁹⁹ Landry next established the Unified Command Area (the headquarters for the spill response), which integrated representatives from the federal government, Louisiana, Alabama, Mississippi, Florida and BP.²⁰⁰ Other federal agencies, including the National Oceanic and Atmospheric Administration ("NOAA") and Minerals Management Services,²⁰¹ sent emergency response support to the Incident Command Posts and Unified Command Area.²⁰²

The next tasks were focused on controlling the flow of oil from the well, drilling a primary relief well, and eventually removing the large amounts of oil that had spilled into

¹⁹⁵ *Report to the President, supra* note 1, at 127.

¹⁹⁶ *Id.* at 130.

¹⁹⁷ Id. (Paradis was the first Federal On-Scene Coordinator until April 21 when Admiral Landry took over). ¹⁹⁸ *Id.* at 131.

¹⁹⁹ Report to the President, supra note 1, at 131 (citing 40 C.F.R. §300.305(c)) ("Unified command integrates the 'responsible party' (here, BP) with federal and state officials 'to achieve an effective and efficient response'."). ²⁰⁰ Id.

²⁰¹ Id. ("On June 18, 2010, Secretary of the Interior Ken Salazar ordered that the Minerals Management Service be officially renamed the Bureau of Ocean Energy Management, Regulation, and Enforcement. For [purposes of this Article], the agency [shall be referred to] as the Minerals Management Service or MMS").

 $^{^{202}}$ Id

the Gulf.²⁰³ The National Contingency Plan requires the Coast Guard to supervise oilspill response in coastal waters, but it does not require the Coast Guard to provide all of the response equipment.²⁰⁴ Instead, oil companies contract private organizations to fulfill the dual role of demonstrating the company's response capacity and responding to an oilspill.²⁰⁵ The Marine Spill Response Corporation is BP's main oil-spill removal organization in the Gulf, and it the provided the first response equipment for oil removal in the Gulf.²⁰⁶ BP's oil-spill response plan for the Gulf region claimed that the Marine Spill Response Corporation could provide adequate response equipment in case of an emergency.²⁰⁷ In reality, both BP's plan and the Marine Spill Response Corporation's response technology proved to be outdated and unworkable.²⁰⁸

A. BP's Use of Chemical Dispersants During Deepwater Horizon

Before the *Deepwater Horizon* spill, interagency Regional Response Teams had evaluated and preauthorized specific chemical dispersants for use in the Gulf.²⁰⁹ The Teams had preset geographic limits where the dispersants could be applied, but had no such limits on the amount or duration of use.²¹⁰ Nalco's dispersant Corexit fell under the terms of the Team's preauthorization because it was listed on the EPA's National Contingency Plan.

²⁰³ Report to the President, supra note 1, at131-32.

²⁰⁴ *Id.* at 132.

²⁰⁵ *Id*.

²⁰⁶ Report to the President, supra note 1, at 132. (The Marine Spill Response Corporation is a nonprofit oil-spill removal organization created by the oil industry after the *Exxon Valdez* disaster). ²⁰⁷ Id.

²⁰⁸ *Id.*

 $^{^{209}}$ *Id.* at 143. ("The teams included representatives from relevant state governments and from federal agencies with authority over oil spills, including the Coast Guard, EPA, the Department of the Interior, and NOAA.").

²¹⁰ *Report to the President, supra* note 1, at 132.

This preauthorization allows the Federal On-Scene Coordinator to immediately begin using dispersants after an oil spill, which is critical because dispersants are most effective when oil is fresh.²¹¹ The federal government, through the direction of the Federal On-Scene Coordinator, oversaw the use of chemical dispersants during the *Deepwater Horizon* spill. Even before responders were sure that oil was spilling into the Gulf, vast amounts of dispersants were kept on reserve just in case they were to be used.²¹²

1. Initial Decision to Use Dispersants

The initial direction from the Federal On-Scene Coordinator to employ dispersants for oil removal came on April 22.²¹³ On April 24, Admiral Landry announced: "We have one-third of the world's dispersant resources on standby. . . . Our goal is to fight this oil spill as far away from the coastline as possible."²¹⁴ During the first week of the spill, 14,654 gallons of Corexit were deployed on to the surface of the Gulf.²¹⁵ Dispersant use continued to increase in incredible volumes: from April 27 to May 3, 141,358 gallons were applied followed by 168,988 gallons the next week.²¹⁶

2. The Use of Subsea Dispersants

BP's idea to apply the dispersants directly to the deepwater well was received with cautious optimism.²¹⁷ The Unified Command was optimistic, as this was a way to prevent the oil from reaching the sea's surface and to cut back on the overall use of

²¹¹ Report to the President, supra note 1, at 143-44.

²¹² *Report to the President, supra* note 1, at 143.

²¹³ Id.

 $^{^{214}}_{215}$ Id.

 $^{^{215}}$ *Id.* at 144.

²¹⁶ *Id.*

²¹⁷ Report to the President, supra note 1, at 144

dispersants, but also cautious because there was extremely limited research about the effects of dispersants in the deepwater environment.²¹⁸ NOAA and BP scientists created a monitoring protocol devised to detect adverse environmental effects of subsea dispersant use.²¹⁹ On May 10, the EPA adopted, and later amended, the testing protocol as its directive regarding subsea dispersant use, with application limits set at 15,000 gallons per day and required monitoring and compliance with EPA toxicity guidelines.²²⁰

EPA Administrator Lisa Jackson ultimately gave approval for subsea dispersant use, but only fourteen days later announced that the government was instructing BP to "take immediate steps to significantly scale back the overall use of dispersants" because the subsea dispersants failed to reduce the overall volume of dispersants applied.²²¹ Two days later, the EPA and the U.S. Coast Guard also questioned the amount of dispersion and issued a directive requiring BP to reduce the total amount of subsurface dispersant and to completely cease the use of surface dispersant, except if a case-specific exemption was granted.²²² Despite this directive, BP continually sought exemptions for both subsea and surface dispersant use.²²³

3. Controversy Over Chemicals

BP continued using dispersants, and regularly sought exemptions from the Federal On-Scene Coordinator²²⁴ when no other method of response was available in

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²¹⁸ Id.

²¹⁹ *Report to the President, supra* note 1, at 145.

²²⁰ Id.

²²¹ Report to the President, supra note 1, at 145, 160.

²²² EPA Q&A, supra note 14.

²²³ *Report to the President, supra* note 1, at 160.

²²⁴ At this point, Rear Admiral James Watson had taken over for Admiral Landry as the Federal On-Scene Coordinator. *See* BNO News, *Federal On-Scene Coordinator for BP Oil Spill Will Return to Prior Role to*

specified areas.²²⁵ The chain of authorization for final exemption approval was long, and each authority seemed to have a different opinion on BP's use of dispersants.²²⁶

[The] EPA expressed frustration that BP sought regular exemptions, and it repeatedly asked for more robust explanations of why BP could not use mechanical recovery methods, such as skimming and burning, instead of dispersants. Coast Guard responders, who viewed dispersants as a powerful tool to protect the coastline, wondered why EPA wanted to cast aside the advance planning that went into the preauthorization of surface dispersant use.²²⁷

BP and the Coast Guard thought dispersants were the best way to cure large slicks of oil and agreed that dispersants were the only way to prevent landfall of that oil, but the EPA would not approve.²²⁸ This tension eventually flared into conflict between the EPA and the Coast Guard.²²⁹ For example, after the EPA refused to approve an exemption on June 7, the Coast Guard captain stated, "It would be a travesty if the oil hits the beach because we did not use the tools available to fight this offshore. This responsibility needs to be placed squarely in EPA's court if it does hit the shoreline."²³⁰ In response, and as a result of BP not responding to the EPA's request for additional data, the EPA threatened to issue a directive to completely seize the use of all dispersants.²³¹

Conflict between the agencies settled as the relationship and communication between them had improved.²³² The EPA had also installed a senior official at the Unified Command, and named Mathy Stanislaus the Assistant Administrator for Solid

Prepare for Upcoming Hurricane Season, Wire Update, June 1, 2010, http://wireupdate.com/local/federalon-scene-coordinator-for-bp-oil-spill-will-return-to-prior- role-to-prepare-for-upcoming-hurricane-season/. ²²⁵ Report to the President, supra note 1, at 160.

²²⁶*Id.*

²²⁷ Id.

²²⁸ *Id.*

²²⁹ *Report to the President, supra* note 1, at 160.

²³⁰ *Id*.

²³¹ *Id.*

²³² *Id.* at 161.

Waste and Emergency Response.²³³ But, in mid-July, disagreements came to a boil again when BP made a request to apply 10,000 gallons of dispersants to the oil slicks, which Stanislaus ultimately denied.²³⁴ The Federal On-Scene Coordinator (now Rear Admiral Paul Zukunft²³⁵) replied that he could not stop using dispersants, especially when the oil was still threatening to damage the environmentally sensitive areas in the Gulf and the trade-off of dispersant use weighed heavily in favor of surface application.²³⁶

The discord continued until July 14 when BP was ultimately prohibited from using dispersants all together.²³⁷ The conflict between the agencies ended with the capping of the well on July 15, and the last 200 gallons of dispersants were applied on July 19.²³⁸

Although the conflict between BP, the Coast Guard, the Federal On-Scene Coordinator and the EPA had ended, the concern over health and safety of the Gulf Coast residents and environment only grew. "Some Gulf residents continued to believe that BP had used dispersants onshore, nearshore, at night, and without government approval, and that it had continued using them after it capped the well."²³⁹ Everyone still wanted

²³³ Id.

²³⁴ *Id*.

²³⁵ Federal Oil Spill Response Transitions to Regional Structure, Releases Scientific Report, RestoreTheGulf.gov (Dec. 17, 2010), http://www.restorethegulf.govrelease/2010/12/17/federal-oil-spillresponse-transitions-regional-structure-releases-scientific-rep (Rear Admiral Paul Zukunft served as the Federal On-Scene Coordinator from July 12 through Dec. 17, followed by Captain Lincoln Stroh, who is the current Federal On-Scene Coordinator).

²³⁶ *Report to the President, supra* note 1, at 161 (The trade-off that weighed in favor of dispersants use came from the fact that not using them allowed the oil to reach the shore, which meant more clean-up crews were needed and the persons on those crews were exposed to other dangers. Zukunft said, "We spent over a month cleaning Bacteria Bay with over 1500 people and 600 vessels and still incurred significant wildlife kills while exposing these clean-up crews to extreme heat conditions.").

²³⁷ Report to the President, supra note 1, at 161

²³⁸ EPA *Q&A*, *supra* note 14 (Dispersants are no longer being used at the site of the spill).

²³⁹ Report to the President, supra note 1, at 170.

answers about the environmental effects of the dispersants and whether dispersants were the right choice to begin with.

A few scientists and many members of the public thought dispersants were being used as a public relations strategy to make the oil slick invisible even though the oil still posed an environmental threat.²⁴⁰ BP constantly reassured the nation that all federal regulations were being followed and that part of their clean-up efforts included extensive research, data collection and monitoring "to evaluate the potential impacts from dispersant use in the subsurface."²⁴¹

Many members of Congress and environmental groups claimed that BP's close relationship with Nalco hindered BP's willingness to use alternative dispersants that are not only safer, but also just as effective.²⁴² The Environmental Defense Fund reported, "the EPA has tested eighteen different dispersants for short-term toxicity to fish and shrimp. [The] EPA has also tested the effectiveness of surface spraying in dispersing South Louisiana crude oil."²⁴³ The results showed the effectiveness of Corexit9500 and Corexit9527 against other chemical dispersants, with the Corexit chemicals ranking 13th and 16th in effectiveness, 15th and 18th in fish toxicity, and 7th and 10th in shrimp

²⁴⁰ Brandon Keim, Toxic Oil Dispersant Used in Gulf Despite Better Alternative, Wired Science (May 5, 2010, 5:18 PM), http://www.wired.com/wiredscience/2010/05/gulf-dispersants/.

²⁴¹ Deepwater Horizon Spill Response: Dispersant Use, Dispersant Background and Frequently Asked Questions, supra note 9, at 4. ²⁴² Richard Denison, Compound the Problem: Why Aren't We Using the Safest and Most Effective

Dispersants in the Gulf?, Environmental Defense Fund, May 17, 2010,

http://blogs.edf.org/nanotechnology/2010/05/17/compounding-the-problem-why-aren't-we-using-thesafest-and-most-effective-dispersants-in-the-gulf/.

toxicity.²⁴⁴ The EPA's testing concluded "at least six dispersants are both more effective and less toxic than Corexit dispersants."²⁴⁵

BP, however, maintained that even though extensive research on the long-term effects of the chosen dispersants was unavailable, the dispersants had no short-term toxic effects on humans and wildlife.²⁴⁶ The company also supported their choice of dispersant by stating it was the best choice considering the immediacy of the situation and the quantity of supply available.²⁴⁷

The EPA and the Coast Guard maintained that their goal of a seventy-five percent reduction in dispersant use had nearly been attained (the actual percentage was a seventy-two percent reduction from peak volumes) after the joint EPA-Coast Guard directive to BP was issued.²⁴⁸ Retired Coast Guard Admiral Thad Allen²⁴⁹ stated that the Federal On-Scene Coordinator oversaw the use of chemical dispersants and made the decision to use dispersants using a very disciplined process.²⁵⁰

4. Did BP Abuse Chemical Dispersants?

On August 4, the federal government released a five-page report titled *BP Deepwater Horizon Oil Budget: What Happened to the Oil?* ("Oil Budget"), which provided the government's first public estimate of the total volume of oil discharged

²⁴⁴ Richard Denison, *Compound the Problem: Why Aren't We Using the Safest and Most Effective Dispersants in the Gulf*?, Environmental Defense Fund, May 17, 2010,

http://blogs.edf.org/nanotechnology/2010/05/17/compounding-the-problem-why-aren't-we-using-the-safest-and-most-effective-dispersants-in-the-gulf/. 245

²⁴⁵ *Id*.

²⁴⁶ *Dispersant Background*, *supra* note 9, at 4-5.

²⁴⁷ *Id.* at 7.

²⁴⁸ EPA *Q&A*, *supra* note 14.

²⁴⁹ Allen oversaw the federal response to the BP oil spill until his retirement on June 30, 2010. (*see* Rick Jervis, *Thad Allen's Legacy Still Being Shaped by BP Oil Spill*, USA Today (July 27, 2010), *available at* http://www.usatoday.com/news/nation/2010-09-27-allen27_ST_N.htm).

²⁵⁰ CNN Wire Staff, *Allen 'Satisfied' With Dispersant Use in Gulf Oil Disaster*, CNN U.S., (Aug. 2, 2010), http://www.cnn.com/2010/US/08/01/gulf.oil.spill/index.html.

during the spill (roughly 4.9 million barrels) and a description of the efficacy of different response methods.²⁵¹ The Oil Budget indicated that a total of forty-one percent of the oil was "collected, eliminated, or dispersed . . . , with containment ('direct recovery from wellhead') the most effect method, and chemical dispersants breaking down a substantial fraction.²⁵² Other response technology, like skimming and burning, removed –as opposed to dispersed– only eight percent of the oil.

BP and the other governmental response agencies have been conducting, and continue to conduct, a wide range of sampling and monitoring to evaluate the potential impacts from dispersants use in the Gulf. The EPA, NOAA, United States Coast Guard and the University of New Hampshire's Coastal Response Research Center established a panel of more than fifty scientific experts to evaluate the environmental impacts of dispersant use in the Gulf.²⁵³ So far, the experts have concluded that "the use of dispersants and the effects of dispersing oil into the water column has generally been less environmentally harmful than allowing the oil to migrate on the surface into the sensitive wetlands and near shore coastal habitats."²⁵⁴

Other government officials and environmental experts agree: given the unique and extreme circumstances, the use of dispersants during the *Deepwater Horizon* cleanup mission was the right choice. "[T]he Commission believes that the National Incident Commander, Federal On-Scene Coordinators, and the EPA Administrator made reasonable decisions regarding the use of dispersants at the surface and in the subsea

²⁵¹ *Report to the President, supra* note 1, at 167-69. (NOAA released an updated version of the Oil Budget on November 23 titled *Oil Budget Calculator Technical Documentation*, which was a peer-reviewed report of over 200 pages that gave formulas used and updated the percentages in the original budget).

²⁵² Report to the President, supra note 1, at 169.

²⁵³ Dispersant Background, supra note 9, at 4.

²⁵⁴ *Id.* at 4-5.

environment.²⁵⁵ Dr. Paul T. Anastas, the Assistant Administrator of the EPA, stated, "While more work needs to be done, we see that the dispersants have worked to help keep oil off of our precious shorelines and away from sensitive coastal ecosystems.²⁵⁶ Dr. William Lehr, a Senior Scientist for the Emergency Response Division of NOAA also agrees: "To date, every seafood sample from reopened waters or outside of the closed areas has passed sensory and chemical testing for contamination of oil and dispersant. No unsafe levels of contamination of the seafood have been found."²⁵⁷ Ed Overton, a Professor of Environmental Sciences at Louisiana State University stated that the dispersants saved the shoreline and "that was clearly a good decision. I and a lot of other people were fairly skeptical at the time. . . . But, boy, the use of all that dispersant sure goes look like a good idea right now."²⁵⁸

Prior to the *Deepwater Horizon* spill, the federal government, oil companies and chemical companies had not anticipated the use of chemical dispersants in such great quantities. BP should not be the only entity at blame for any harmful effects the dispersants had or may have on the Gulf's surrounding environment. The decision to use chemical dispersants was made by many different officials, and any accusations of abuse or misuse should fall equally among them. Since it was impossible to immediately acquire conclusive research on Corexit's effects in the Gulf, a difficult decision was made by multiple parties to not only initiate the use dispersants, but also to continue using

²⁵⁵ *Report to the President, supra* note 1, at 270-71.

²⁵⁶ Hearing on The BP Oil Spill: Accounting for the Spilled Oil and Ensuring the Safety of Seafood from the Gulf Before the Subcomm. On Energy and Env't Staff, 111th Cong. 23 (2010) (statement of Dr. Paul T. Anastas, Assistant Administrator, EPA).

²⁵⁷ Hearing on The BP Oil Spill: Accounting for the Spilled Oil and Ensuring the Safety of Seafood from the Gulf Before the Subcomm. On Energy and Env't Staff, 111th Cong. 10 (2010) (statement of Dr. William Lehr, Senior Scientist, Emergency Response Division, NOAA).

²⁵⁸ Was the Oil Disaster Overblown?, CNN (Nov. 15, 2010), http://www.cnn.com/video/#/video/bestoftv/2010/07/30/ac.oil.spill.cnn.

them. Given the totality of the circumstances, the general consensus among the professional community, and agreed upon in this Article, is that the decision to use dispersants was reasonable.

IV. Recommendations

Current proposed legislation pushes for re-regulation of the oil industry, and is primarily concerned with prevention of oil disasters through increased oversight and tighter safety regulations. However, because the frontiers of deepwater drilling have just been discovered and there is little research in the field, costly mistakes and unforeseen negative results are inevitable.

Just as the events of April 20, 2010 exposed a regulatory regime that had not kept up with the industry it was responsible for overseeing, the events that unfolded in subsequent weeks and months made it dismayingly clear that neither BP nor the federal government was prepared to deal with a spill of the magnitude and complexity of the *Deepwater Horizon* disaster.²⁵⁹

The government and the rest of the regulatory agencies need to keep pace with the deepwater drilling industry, plan accordingly to ensure preparedness for large-scale deepwater oil spills and restructure the lines of communication between the regulatory agencies. The National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling offers "recommendations for addressing the causes and consequences of the spill,"²⁶⁰ and many of those recommendations align and integrate with those proposed in this section. This section offers proposals in two areas: research on chemical dispersants and a regulatory structure for effective planning and response.

A. Restructuring the Regulatory Bodies for Greater Planning and Response

Efficiency

²⁵⁹ Report to the President, supra note 1, at 265. ²⁶⁰ Id at 250.

The *Deepwater Horizon* spill led to conflict between many of the regulatory agencies about how to handle the response, especially when it came to using chemical dispersants. "The spill's magnitude calls into question whether the National Contingency Plan establishes an appropriate relationship between the federal government and the responsible party"²⁶¹ and the constant conflict over use of dispersants serves as proof that the relationships between the agencies needs to be stronger.

The National Contingency Plan, Area Contingency Plans and industry spill response plans are supposed to provide specific response plans and risk analysis for oil spills, but it quickly became apparent that neither of the Plans provided such guidance. All of the plans, especially the industry plans, are in need of a stronger review process to ensure their effectiveness and reliability. Congressional investigation has revealed that parts of BP's response plan submitted to MMS before the *Deepwater Horizon* spill were completely inadequate.²⁶²

In the plan, BP had named Peter Lutz as a wildlife expert on whom it would rely; he had died several years before BP submitted its plan. BP listed seals and walruses as two species of concern in case of an oil spill in the Gulf; these species never see Gulf waters. And a link in the plan that purported to go to the Marine Spill Response Corporation website actually led to a Japanese entertainment site.²⁶³

It is worth noting that BP is not the only international oil conglomerate that relied on such a plan. Response plans submitted to MMS by ExxonMobil, Chevron, ConocoPhillips, and Shell were almost identical to BP's, all of which " suggested impressive but unrealistic response capacity and three included the embarrassing reference to

²⁶¹ Report to the President, supra note 1, at 267

²⁶² *Report to the President, supra* note 1, at 133.

²⁶³ Id.

walruses.²⁶⁴ The inadequacies of these industry plans are so clear that they are not only an embarrassment to the oil companies that develop and submit them, but also shameful to the seemingly blind federal agency that approves them.

The federal government, through the Department of the Interior, can cure the deficiencies that make the plans inadequate in the face of a large-scale oil spill. The first step should be the creation of a new process for reviewing the plans. The review process should not only include the Interior staff, but should also include inter-agency review and approval by the Coast Guard, the EPA and NOAA. With an extended review from different agencies that are directly involved in oil spill response, the past failure to integrate multiple response plans can be avoided.

B. Increase in Research on Spill Response Technology

In addition to exposing an uncoordinated regulatory structure, the *Deepwater Horizon* oil spill also revealed the oil industry and the federal government's inability to deal with such an environmental disaster because of the outdated spill response technology.

BP's oil-spill response plan for the Gulf region claimed that the Marine Spill Response Corporation could provide adequate response equipment in case of an emergency.²⁶⁵ In reality, both BP's plan and the Marine Spill Response Corporation's response technology proved to be outdated and unworkable.²⁶⁶

While production technology had made great advances since *Exxon Valdez*, spill-response technology had not. The Oil Pollution Act of 1990 . . . had effectively reduced tanker spills. But it did not provide incentives for industry or guaranteed funding for federal agencies to conduct research on oil-spill response. Though

²⁶⁴ *Report to the President, supra* note 1, at 133.

²⁶⁵ Id. ²⁶⁶ Id.

incremental improvements [in response technology] had been realized in the intervening 21 years, the technologies used in response to the *Deepwater Horizon* and *Exxon Valdez* oil spills were largely the same.

In general, spill response technology is not only outdated, but also outmatched by the oil industry's production technology. As previously discussed, chemical dispersants are a valuable tool to use, especially to deal with a spill of such great magnitude. Chemical dispersants have proven to be reliable and efficient during oil spill response, but the research on dispersants has not proven to be as reliable. The long-term effects of chemical dispersants are unknown because research on the subject is sparse.²⁶⁷

A lot of conflict came from whether to use chemical dispersants or not, how to use them, when to use them, and in what amount. Greater understanding through research will help ease tensions during urgent situations and will further help to ease the public's worry, whose fears were intensified by all of the uncertainty and conflict over dispersants. Higher EPA acceptability standards, stricter regulations on the use of chemical dispersants, and increased federal funding for research are the next preventative steps the federal government must take to protect the health and safety of human and environmental life in the event of another oil spill disaster.

Congress should approve federal funding for oil spill research and development, and adhere to the full amount authorized by the Oil Pollution Act of 1990. This funding should go to the Department of the Interior, the Coast Guard, the EPA, NOAA – the agencies that have the most responsibility for drilling oversight and clean-up responsibilities.²⁶⁸ Also, the EPA should implement higher acceptability standards and

²⁶⁷ EPA Q&A, supra note 14.

²⁶⁸ *Report to the President, supra* note 1, at 270.

routinely review its dispersant testing protocols.²⁶⁹ Higher EPA standards would essentially force chemical companies to conduct more research on toxicity and hazardous effects. With increased funding and routine monitoring of acceptability standards, the federal government, the oil industry and chemical producing companies will be adequately prepared to make informed decisions in extreme and urgent situations.

The effects of the *Deepwater Horizon* explosion are still palpable today. Coordination among federal agencies needs improvement, and relationships between the oil industry and the government need to be strengthened. Oil spill response planning and clean-up technology also needs to be modernized to keep up with the fast-paced oil production industry. The Department of the Interior and the EPA can take the first steps to addressing all of these problems by closing its intra-agency gaps, dedicating federal funding for spill response research and adopting stricter standards for acceptance and use of chemical dispersants.

V. Conclusion

Our nation's current understanding of the real effects chemical dispersants can have on the environment is sadly far behind the advanced technology of deepwater drilling. The government and the oil industry must support one another to close this gap rather than allow scientific research to fall even farther behind. Thorough and meaningful clean-up and response tactics must also support the unfamiliar nature of deepwater drilling.

The largest defect in the federal, regional, and area response plans was the approval and consensus to use dispersants without proper research on the long-term

²⁶⁹ *Id.* at 271.

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effects of such chemicals. This defect resulted in inadequate guidance when it came time to make the decision about dispersant use. The volume of dispersants needed to cure a spill of *Deepwater Horizon*'s magnitude, coupled with the lack of important relevant information or time to gather such information, officials had to make uninformed decisions, the full impact of which will only be realized with time.

Given the uniqueness of the *Deepwater Horizon* oil spill and the outdated oil-spill response technology, chemical dispersants were the most effective method to address the immediacy of the situation. The federal government and BP both made mistakes that transpired into the catastrophic events on and after April 20, 2010, but both remedying these mistakes and better preparing for the future is not far beyond either the federal government or the oil industry's reach.

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What, in the Name of Conception? A Comparative Analysis of the Inheritance **Rights of Posthumously Conceived Children in the United States and the United** Kingdom

By Linda Choe

I. Introduction to Reproductive Technologies and the Posthumously Conceived Child

A posthumous child is one who was conceived before and born after a parent's death.²⁷⁰ It is in the posthumous child's best interest to be treated as in being from the time of conception rather than from the time of birth.²⁷¹ This ensures that the child will be treated as if it was born alive for the purposes of determining inheritance and property rights.²⁷² The Uniform Parentage Act ("UPA"), § 204 "establishes a rebuttable presumption that a child born to a woman within 300 [rather than 280] days after the death of her husband is a child of that husband."²⁷³

However, a posthumously conceived child has not been granted the same access to rights of inheritance and property of a deceased parent as those of a posthumous conceived child. The posthumously conceived child differs in respect to the posthumous child in that the former is both born and conceived after the death of one or both of the child's biological parents.²⁷⁴ Posthumously conceived children have been considered

²⁷⁰ Jesse Dukeminier et al., Wills, Trusts, and Estates 115 (8th ed. 2009).

²⁷¹*Id*. ²⁷²*Id.*

²⁷³ Id.

²⁷⁴ *Id.* at 117: Unif. Parentage Act § 204 (2000, rev. 2002).

non-marital children even though their parents may have been married at the time prior to the child's conception.²⁷⁵

Though there have been cases identifying the rights to property and inheritance for posthumously conceived children, there has been no definitive federal statute addressing the standard of proof necessary to establish a successful claim to a deceased parent's intestate or testate property. The question arises as to whether there should be a time limitation of preserved semen or gamete storage that can be used for future conception.

The issue of property and inheritance rights has become more uncertain with the advent of assisted reproductive technologies. As women are now able to conceive children with embryos and/or sperm from living or deceased persons, the debate continues to what inheritance and property rights posthumously conceived children should be granted. Additional points to consider are what constitutes consent and if a child posthumously conceived should be given the same rights to inheritance and property as a posthumous or naturally conceived sibling. As technology has developed to the extent that sperm can be extracted from dead men, debate further centers on whether a child should have the possibility of receiving anything from a parent whose gametes or embryos were not retrieved with consent.²⁷⁶

This paper will focus on the legal and ethical issues surrounding the inheritance of those posthumously conceived children using the gametes or embryos from a deceased or dying person. It will offer a comparative analysis between the legislation and law reform

²⁷⁵ Id.

²⁷⁶ Lori B. Andrews, *The Sperminator*, N.Y. TIMES MAG., Mar. 28, 1999, at 62; see supra note 1 at 124.

in the United States and in the United Kingdom, and will conclude with a proposal that the United States should follow a rule similar to the United Kingdom's, Human Fertilisation and Embryology [Deceased Fathers] Act of 2008. The recommendation of the United States legislature to adopt a law like the United Kingdom's should alleviate some of the current burdens posed to the courts concerning the issue of the inheritance and property rights of posthumously conceived children.

II. Current Reproductive Technologies in the United States

Modern reproductive technologies have expanded so that physicians and scientists can intervene in procreation through numerous processes.²⁷⁷ Initially, reproductive technology was a method of assisting couples dealing with infertility.²⁷⁸ Though infertility is still the primary reason for use of this technology, it is also used by single women hoping to become mothers, same-sex couples who wish to have children, and men and women who want to prolong their reproductive lifespan.²⁷⁹ Couples who find themselves busy with their careers have the option of freezing embryos for implantation and birth at a later time.²⁸⁰ Artificial insemination and in vitro fertilization are just some of the existing technological procedures available for those who desire to conceive.²⁸¹

Artificial insemination is the oldest and most common form of reproductive technology.²⁸² This process "consists of inserting sperm into the mother's uterus via a

²⁷⁷ Michael Elliot, *Tales of Parenthood from the Crypt: The Predicament of the Posthumously Conceived Child.* 39 Real Prop. Prob. & Tr. J. 47, 48 (2004).

 ²⁷⁸ Stacey Sutton, Note, *The Real Sexual Revolution: Posthumously Conceived Children*, 73 St. John's L. Rev. 857, 861 (1999).

²⁷⁹ *Id.* at 861-62.

 $^{^{280}}$ Elliot, *supra* note 8, at 48.

²⁸¹ Sutton, *supra* note 9 at 862-67.

²⁸² *Id.* at 862.

pipette while she is ovulating. It is a relatively simple procedure that does not require a physician's assistance but . . . is usually performed by one, especially if sperm from an anonymous donor is used or if the parties wish to freeze sperm for future use.²⁸³ Artificial insemination remains a popular treatment for males suffering from infertility, as it may be the sole option for conceiving a child.²⁸⁴ For those who desire to conceive through artificial insemination, some states have adopted the UPA.²⁸⁵ In accordance with the UPA, a consent form must be signed by both parties and the physician coordinating the procedure to establish the mother's husband as the child's legal father.²⁸⁶

In vitro fertilization ("IVF") commences with the removal of a woman's eggs that have been taken during her menstrual cycle or after using hormonal injections or oral medications.²⁸⁷ Subsequently, the eggs are combined with the sperm of her husband or a donor in a culture dish simulating the fallopian tubes of the woman.²⁸⁸ Ideally "within a total of approximately 48 hours from the time the sperm and egg are combined, a preembryo of between two and eight cells will develop . . . [and] . . . then introduced into the women's uterus by catheter with the hope it will implant and grow."²⁸⁹ Although there is a sixty to eighty percent rate of successful implantation, many of those do not result in pregnancy.²⁹⁰ Because of this, the success rates of conception for IVF are low.²⁹¹ With the lack of success, multiple implantations are common to increase the

²⁸³ Id.

- ²⁸⁵ *Id.*
- $^{286}_{207}$ Id. at 863.
- $^{287}_{288}$ Id. at 865. Id.
- 289 Id.
- ²⁹⁰ *Id.* at 866.

²⁸⁴ Sutton, *supra* note 9, at 864.

²⁹¹ Id.

chance of actual pregnancy.²⁹² IVFs can result in multiple pregnancies, and stories from women having more than three children in one pregnancy have reached national headlines and even premiered in popular television shows.²⁹³

IVFs and artificial inseminations present multiple issues for the court in terms of property and inheritance rights. The possible parental combinations arising from donated egg and sperm raises questions of who the legal mother and father of the conceived child[ren] could be.²⁹⁴ Could these embryos or sperm be the property of the egg donor, the clinic, or the sperm provider?²⁹⁵ What are the rights to such embryos and sperm in terms of their utilization, storage, and their destruction?²⁹⁶

Scientific technology allows postmortem conception where a donor has voluntarily and purposefully given his sperm over to specific types of storage, such as cryopreservation or banking.²⁹⁷ There are multiple reasons why someone may pursue this course. Sperm may have been preserved in a bank before a vasectomy so that the possibility of fatherhood is left open for the future.²⁹⁸ A male can also choose to have his sperm preserved before undergoing sessions of chemotherapy and radiotherapy that could consequently leave him sterile or cause genetic

²⁹² Stacey, *supra* note 9, at 866.

²⁹³ *Id.* at 866.

²⁹⁴ Stacey, *supra* note 9, at 866-67.

²⁹⁵ *Id.* at 867.

²⁹⁶ *Id*.

 ²⁹⁷ Katheryn Katz, Note, Parenthood From the Grave: Protocols for Retrieving and Utilizing Gametes from the Dead or Dying, U. Chi. Legal F. 289, 292 (2006).
 ²⁹⁸ Katz, supra note 28, at 292.

damage to his sperm.²⁹⁹ Some American soldiers deployed to the Middle East have deposited their sperm for later use in storage facilities, due to their concern of the potential exposure to chemical or biological weapons.³⁰⁰ In "each of these instances, another motive may also be present: preserving their genetic potential in case the sperm bankers die from . . . disease, do not return from space, or are killed in war."³⁰¹

The possibility of procreating long after death presents additional problems to the courts in the United States today. The advancement of reproductive technologies and its widespread use have developed at such a fast pace that the law has been unable to keep up with the rights over reproductive materials and the rights of children.³⁰² In the absence of specific instructions for what to do with preserved gametes after a period of time or in the event of death, these circumstances permit the courts and the legislature to exercise subjectivity in deciding the intention of the parties to procreate after death.³⁰³ However, in some instances, there are consent forms for cryopreservation of gametes or pre-embryos carrying instructions for the handling of the gametes or the pre-embryos if their progenitors die leaving genetic material in storage.³⁰⁴ The "very limited decisional law . . . establishes that public policy is not violated when the decedent has expressly stated that a named individual may be impregnated with the sperm."³⁰⁵ Issues related to a posthumously conceived child's inheritance, survivor's benefits, and parentage are

³⁰¹ *Id*.

²⁹⁹ Id.

³⁰⁰ *Id*.

 $^{^{302}}_{202}$ Elliot, *supra* note 8, at 49.

³⁰³ Katz, *supra* note 28, at 292-93.

 $^{^{304}}_{305}$ *Id.* at 293.

gradually being answered by legislatures and the courts.³⁰⁶ However, courts have not adequately addressed these issues in light of the popularity of assisted reproductive techniques and their increased use.

III. Preservation of Genetic Material from the Deceased and Comatose

Technology has now made it possible to preserve the gametes or the embryos of one who is deceased, brain dead, comatose, or in a persistent vegetative state.³⁰⁷ Sperm from a man in one of the aforementioned areas can be retrieved by "stimulated ejaculation, micro surgical epidymal sperm aspiration or testicular sperm extraction."³⁰⁸ Though this increases the risk of birth defects in children, insemination is to use intra cytoplasmic sperm injection where an egg is fertilized using a single sperm.³⁰⁹ Though a woman's reproductive tissue cannot be taken in the same capacity and effectiveness as those of a man; a woman, on the other hand, can have her ovaries removed and cryopreserved or have her tissue transplanted if she wanted to preserve her reproductive organs and/or ovarian tissue.³¹⁰

IV. Direction of State Legislatures and Courts Today in Cases Dealing with Posthumously Conceived Children

With little legislative guidance, courts have been struggling with the idea of reproductive technologies and the escalating legal issues it has brought forth.³¹¹ The rights of posthumously conceived children and control over reproductive materials have

³⁰⁶ Katz, *supra* note 28, at 293.

³⁰⁷ *Id.* at 293.

³⁰⁸ *Id.* (quoting The Ethics Committee of the American Society for Reproductive Medicine, *Posthumous Reproduction*, 82 Fertility and Sterility Supp. 1 (Sept 2004)).

 $[\]frac{309}{210}$ Id. at 293.

³¹⁰ *Id.* at 293-94.

³¹¹ Sutton, *supra* note 9, at 876.

formed the basis of a developing area of litigation.³¹² Cases of first impression are approaching the courts "involving the rights of mothers and fathers, surrogate mothers, egg donors, sperm donors, homosexual and heterosexual unmarried partners, husbands and wives, fertility clinics and sperm banks, potential relatives, children of artificial conception, and more."³¹³ This has "resulted in a patchwork approach that provides few assurances to the . . . number of couples entering into these procedures, to the clinics and doctors who treat them, or to the children who are conceived through them."³¹⁴

Family scholars have recognized that the rights of posthumously conceived children are inundated with moral, religious, and cultural overtones and implications.³¹⁵ Because they involve issues of sexuality, reproduction, and family, courts seem reluctant to set definitive standards to what posthumously conceived children can inherit. Definitions of "family and procreation, both social and legal, serve primarily as limits; limits on what society, at any given point in time, will sanction both morally and legally."³¹⁶ Discussing and answering these questions are critical to the development of social policy, because of its potential on society and the reproductive choices of many individuals.³¹⁷ Though courts have little direction when it comes to posthumously conceived children, there have been several courts that have addressed their rights.

In *Woodward v. Commissioner of Social Security*, a widow conceived twin girls through artificial insemination of her husband's preserved semen two years after his

³¹² Elliott, *supra* note 8, at 49.

³¹³ Sutton, *supra* note 9, at 877.

³¹⁴ *Id.* at 877-78.

³¹⁵ Andrea Corvalan, Comment, *Fatherhood After Death: A Legal and Ethical Analysis of Posthumous Reproduction*, 7 Alb. L.J. Sci. & Tech. 335, 336 (1997).

³¹⁶ Corvalan , *supra* note 46, at 336.

³¹⁷ Id.

death.³¹⁸ She was denied Social Security benefits for her twins because of her inability to establish that the twins' were her deceased husband's children under Massachusetts intestacy and paternity laws.³¹⁹ The lower court held that the husband was not the children's legal father for the purposes of the distribution of his intestate property.³²⁰ In determining whether posthumously conceived, genetic children may enjoy inheritance rights under the Massachusetts intestacy statutes, the court set a three-part test to see whether a posthumously conceived child could inherit from a deceased parent.³²¹ The three requirements were that: 1) a genetic relationship must have been in existence between the child and the decedent; 2) there must have been consent of the decedent; and 3) there must have been a time limit on the claim.³²² The Supreme Judicial Court of Massachusetts held that this test would be applicable in cases where the decedent died without a will or without accounting for the child in the will.³²³ Further, the court held that the person who thought about the possibility of conceiving children in the future could always make provisions for the child in a will.³²⁴

Gillett-Netting v. Barnhart is another case that dealt with the rights of posthumously conceived children in the Arizona courts. The Arizona district court held that under Arizona intestacy statutes, a posthumously conceived child could not be considered an heir for probate and non-probate purposes.³²⁵ However, the United States Court of Appeals reversed and remanded the case, and held that posthumously conceived

³¹⁸ Woodward v. Comm'r of Soc. Sec., 760 N.E.2d 257, 260 (Mass. 2002).

³¹⁹ *Woodward*, 760 N.E.2d at 260.

³²⁰ Id.

³²¹ *Id.* at 259.

³²² Id.

³²³ *Woodward*, 760 N.E.2d at 259 & 272.

³²⁴ See generally Woodward v. Comm'r of Soc. Sec., 760 N.E.2d 257 (Mass. 2002).

³²⁵ See generally Gillett-Netting v. Barnhart, 231 F. Supp. 2d 961 (D. Ariz. 2002).

children did not need to meet any additional requirements to be considered dependents under the Social Security Act.³²⁶ It further held that the two posthumously conceived children were the biological, genetic children of the deceased and were therefore entitled to the benefits.³²⁷

From *Woodward* and *Gillett-Netting*, the implications from these cases concerning posthumously conceived children is that there is no set rule determinative of how to devise the property and inheritance interests of children. However, there are some things to consider when dealing with these types of cases. If there is a question to the genetic parentage of the child, then with proper DNA testing, proof of the genetic relationship between the mother and/or father and the posthumously conceived child is relatively easy.³²⁸ DNA testing is 99-100% certain, and for most courts, this meets a clear and convincing standard of proof.³²⁹ The only concern is that "the blood must be drawn under strictly controlled laboratory conditions and the chain of custody [be] meticulously documented."³³⁰

Though state court cases have dealt with the issues presented from rights of inheritance for posthumously conceived children, there have been no uniform federal guidelines for how the courts should handle this growing issue. The Uniform Probate Code states that "[...] an individual in gestation at a particular time is treated as living at that time if the individual lives 120 hours or more after birth."³³¹ The UPA states that the deceased spouse will not be considered the parent of the resulting child unless the

³²⁶ Gillett-Netting v. Barnhart, 371 F.3d 593, 597, 599 (9th Cir. 2004).

³²⁷ *Id.* at 596.

³²⁸ In re Santos, 768 N.Y.S.2d 272, 274 (Sur. Ct. Kings County 2003).

³²⁹ *Id.* at 272.

³³⁰ *Id.* at 275.

³³¹ Unif. Probate Code §2-108 (amended 2008).

deceased spouse consented to be the legal parent of the child in cases of conception after death.³³² The Restatement differs from the UPA in that it addresses the issue of whether or not the gametes or embryo are from a spouse. The Restatement states that the individual is the child of his or her genetic parents, regardless of whether their parents were married to each other.³³³ The comment of this Restatement reads that the child produced from assisted reproduction must be born within a reasonable time after the deceased's death as long as the decedent approved of the child's right to inherit.³³⁴ The Restatement provides far more flexibility in comparison to the UPA; where there is no requirement of a record, and is also flexible in terms of setting a reasonable time to conceive a child.³³⁵ States have adopted varying policies in scope and degree in recognizing posthumously conceived children as rightful, legal heirs. Though some states have adopted the UPA, and others are considering doing the same; other states have set their own laws and statutes concerning inheritance and property rights.

Georgia revised its probate code in 1996 and accounts for children that were conceived through posthumous methods by limiting inheritance to children conceived prior and born after the decedent's death.³³⁶ Similarly, in North Dakota, the parentage statutes codify that a person dying before a child's conception after providing genetic material will not be considered the child's parents.³³⁷ The Ohio statutes seem uncertain to the subject of posthumously conceived children. The statute seems to preclude

³³² Unif. Parentage Act §701 (amended 2002).

³³³ Restatement of Prop.: Wills & Other Donative Transfers §2.5 (1999).

³³⁴ *Id*.

³³⁵ *Id.*

³³⁶ Susan Gary, *Posthumously Conceived Heirs: Where the Law Stands and What to do about it Now.* 19
Prob. & Prop. 32, 34 (2005); Ga. Code Ann. §53-2-1 (West 2006).
³³⁷ Garv, *supra* note 67 at 34; N.D. Cent. Code § 14-18-04 (2005).

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inheritance, for it states descendants born after the deceased's life will inherit as if born in the lifetime of the intestate and surviving him.³³⁸ However, Ohio enacted this statute in the 1950s, so it is unlikely that the legislature considered the issue of posthumously conceived children.³³⁹

Louisiana, Texas, California, and Florida have specific statutes dealing with the inheritance rights of posthumously conceived children.³⁴⁰ Louisiana has set a time limit of when a posthumously conceived child can be conceived.³⁴¹ The posthumously conceived child will have the same right as those of a child born during the lifetime of the parent as long as there is written consent by the deceased parent that permits the surviving spouse to use his genetic material within a three year time period after the decedent's death.³⁴² California sets more regulations and requirements in comparison to Louisiana. The California Probate Code Section requires written consent of the decedent for the use of his or her genetic material and a person who is allowed to control the use of the genetic material.³⁴³ Additionally, the posthumously conceived child must be conceived within two years after the parent's death and the person who is given control of the deceased's genetic material must give notice within four months of the parent's death to the one controlling the decedent's assets of the existence and potential future use of the deceased's genetic material.³⁴⁴ In Texas, the Family Code Section states that as long as individuals, whether married or single, give their consent to have their genetic

³³⁸ Gary, *supra* note 67 at 34-35; Ohio Rev. Code § 2105.15 (West 2005).

³³⁹ Id.

³⁴⁰ Gary, *supra* note 67, at 34.

³⁴¹ *Id.* at 34-35; La. Rev. Stat. Ann. § 9:391:1.

³⁴² Gary, *supra* note 67, at 34; La. Rev. Stat. Ann. § 9:391:1.

³⁴³ Gary, *supra* note 67, at 34.

³⁴⁴ *Id*.

material used in conception, then that child will be considered a child of the decedent.³⁴⁵ In Florida, a posthumously conceived child can only inherit from a parent if the parent anticipated and provided for such child in his or her will.³⁴⁶

As shown from above, there are a variety of state statutes concerning posthumously conceived children and their rights to inheritance and property. By having individual states regulate this area rather than having a uniform national policy, states run the risk of confusion when it comes to inheritance rights in estate planning.³⁴⁷ Some have suggested proposals in place of state policies, advocating a national policy. The Uniform Status of Children of Assisted Conception Act ("Uniform SCACA"), the American Bar Association ("ABA"), and the Joint Editorial Board for Uniform Trust and Estate Acts ("JEB") have their own recommendations

for what the United States legislatures and courts should do in response to posthumously conceived children.

The Uniform SCACA is one such proposal developed to provide some guidance in this area and a handful of states have adopted it.³⁴⁸ The weakness of the Uniform SCACA is that it excludes a child posthumously conceived by a married couple if conceived through assisted reproductive techniques.³⁴⁹ Furthermore, § 4(b) of the Act states that "an individual who dies before implantation of an embryo, or before a child is conceived other than through sexual intercourse, using the individual's egg or sperm, is

³⁴⁵ Tex. family Code Ann. §160.707 (2007).

³⁴⁶ Fla. Stat. Ann. §742.17 (2010).

³⁴⁷Kristine Knaplund, *Postmortem Conception and a Father's Last Will.* 46 Ariz. L. Rev. 91, 103-04 (2004).

³⁴⁸</sup> Elliot,*supra*note 8, at 49.</sup>

³⁴⁹ Id.

not a parent of the resulting child.³⁵⁰ Consequently, any child conceived after a parent's death, is not considered the child of the genetic parents.³⁵¹ The Uniform SCACA is not an adequate standard of measure to gauge the inheritance rights of posthumously conceived children.³⁵²

The ABA's, Model Act Governing Assisted Reproductive Technology ("Act") defines key terms and concepts of the relevant definitions of what the ABA deems important, explicitly detailing words such as assisted reproduction, assisted reproductive technology, child, collaborative reproduction, and the meaning of an intended parent.³⁵³ The Act's requirements for posthumous conceived children are that there be: 1) informed consent; 2) record authorization; 3) disclosures; and 4) that all parties must undergo a mental health evaluation.³⁵⁴ In terms of time frame, the Act states that all the requirements will last for a period of five years or as another time agreed to by the parties involved.³⁵⁵ Though the Act is specific to posthumous children, it indirectly addresses posthumously conceived children. This is shown by the note that the parent is not considered the biological parent of the posthumously conceived child unless there was consent that the deceased person would be the parent of the child if conception were to occur after death.³⁵⁶

³⁵⁰ *Id.* at 49-50.

 $^{^{351}}$ *Id.* at 50.

³⁵² *Id.*

³⁵³ See generally American Bar Association Model Act Governing Assisted Reproductive Technology, 42 Fam. L.Q.171 (2008).

 ³⁵⁴ Am. Bar Ass'n Model Act Governing Assisted Reproductive Tech., 42 Fam. L.Q., at 178-82.
 ³⁵⁵ Id. at 188.

³⁵⁶ See generally Am. Bar Ass'n Model Act Governing Assisted Reproductive Tech., 42 Fam. L.Q.171 (2008).

The JEB has begun a project that has the potential to result in model statutory language and contains three requirements: 1) that the parent and child be biologically related; 2) that there be parental consent; and 3) that the conception occurred within a specified or reasonable period after the decedent's death.³⁵⁷ Though these proposals may appear facially sound, there are several problems with this. For instance with the JEB, what constitutes a reasonable time period?; and for the ABA, what constitutes a level of sufficient mental health to be deemed able to conceive a child?

Some people, such as Ronald Chester ("Chester"), have addressed the weaknesses to the Restatement by suggesting alternative proposals.³⁵⁸ Chester explicates an in-depth proposal that focuses on when the posthumously conceived child's paperwork can be filed in the court by specifying the importance of a three-year time frame to conceive the child.³⁵⁹ Others, such as Michael Elliot ("Elliot"), stress that providing for the posthumously conceived children is an issue that society must face.³⁶⁰ Elliot believes that the most logical solution to the problems facing posthumously conceived children is looking at the intent of the decedent.³⁶¹ If the decedent's intent is in question, then the court should look at a will or examine the facts and circumstances surrounding the individual's desire to procreate in the event of his or her death.³⁶² Elliot believes that because parents make the choice to conceive and bear children posthumously by reproductive assistance methods, children should be allowed the benefits that they would

³⁵⁷ Gary, *supra* note 68, at 35.

³⁵⁸ Ronald Chester, *Posthumously Conceived Heirs Under a Revised Uniform Probate Code*, 38 Real Prop. Prob. & Tr. J. 727 (2004).

³⁵⁹ *Id.* at 735-36.

 $[\]substack{360\\361}$ Elliot, *supra* note 8, at 50.

 $[\]frac{361}{362}$ *Id.*

³⁶² Id.

be entitled to as heirs, and that "it should not be society's responsibility to support these children."³⁶³ Though Elliot makes valid points, there are some weaknesses to his approach. One of them is that he fails to address the proper amount of time that an individual could use a deceased or comatose individual's reproductive material to conceive a child, especially because reproductive technology has allowed for gametes of individuals to be stored for a substantial period of time. However, his points of equity are sound and important in voicing the concerns of many individuals who are partaking in assisted reproductive technology.

V. 1990 Human Fertilisation and Embryology Act

The Human Fertilisation and Embryology Act ("HFE Act") was mandated into law on November 1, 1990 in the United Kingdom.³⁶⁴ The HFE Act created the Human Fertilisation and Embryology Authority ("HFEA") whose purpose is to license and monitor fertility clinics and all research involving human embryos.³⁶⁵ Providing information to the public, the HFEA and the HFE Act mandated the creation, licensing, and monitoring of clinics that assisted with and performed assisted reproductive techniques such as IVF, artificial insemination, human embryo research, and the regulation of gametes.³⁶⁶ However, the HFE Act does not exclude the existence of private clinics.³⁶⁷

³⁶⁴ Twenty Years since the Human Fertilisation and Embryology Act receives Royal Assent, Human Fertilisation and Embryology Auth., http://www.hfea.gov.uk/6166.html, (last visited Nov. 1, 2010).
 ³⁶⁵ All about the HFEA: How we Regulate (treatment & research), Human Fertilisation and Embryology Auth., http://www.hfea.gov.uk/25.html, (Last visited Jan. 1, 2011).

³⁶⁶ *Twenty Years since the Human Fertilisation and Embryology Act receives Royal Assent*, Human Fertilisation and Embryology Auth., http://www.hfea.gov.uk/6166.html. (Last updated Nov. 1, 2010).

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³⁶³ *Id*.

³⁶⁷ For Patients and their Supporters: Funding & payment issues: Private treatment, Human Fertilisation and Embryology Auth., http://www.hfea.gov.uk/fertility.html. (Last visited Jan. 1, 2011).

The HFEA currently has 138 licensed centers and research establishments throughout the United Kingdom.³⁶⁸ With the HFEA's assistance, more than 200,000 babies have been born as a result of IVF.³⁶⁹ The HFEA's website provides information about infertility and to those who may be experiencing problems with infertility and want to conceive.³⁷⁰ The website gives information about treatment options, storage options, and support networks to those who are thinking about or are undergoing assistance with reproductive technologies, and even provides funding options for women who qualify for it.³⁷¹

In 2003, Diane Blood ("Blood") encouraged the movement towards amending the HFE Act when she won the legal battle to have her deceased husband recognized as the legal father of her posthumously conceived children.³⁷² Blood's husband died from bacterial meningitis after falling into a coma in 1995.³⁷³ The couple had been trying to have a baby, and while he was in a coma, Blood convinced doctors to extract some of his sperm.³⁷⁴ Blood experienced difficulty in storing the gametes of her deceased husband, for the HFE Act prevented Blood from holding the sperm in a storage facility in the United Kingdom because he had not given his written consent.³⁷⁵ Blood sought to export the sperm to Belgium, where the law there would permit her to use her deceased

 ³⁶⁸ Twenty Years since the Human Fertilisation and Embryology Act receives Royal Assent, Human Fertilisation and Embryology Auth., http://www.hfea.gov.uk/6166.html. (Last updated Nov. 1, 2010).
 ³⁶⁹ Id.

³⁷⁰ For Patients and their Supporters, Human Fertilisation & Embryology Auth.,

http://www.hfea.gov.uk/fertility.html (last visited Jan. 1, 2011).

³⁷¹ *Funding & Payment Issues*, Human Fertilisation and Embryology Auth., http://www.hfea.gov.uk/fertility-treatment-cost.html (last visited Jan. 1, 2011).

³⁷² Clare Dyer, *Diane Blood law victory gives her sons their "legal" father*. Guardian, Sept. 19, 2003, http://www.guardian.co.uk/science/2003/sep/19/genetics.uknews.

³⁷³*Id.*

³⁷⁴*Id.*

³⁷⁵ Katz, *supra* note 28, at 297.

husband's sperm.³⁷⁶ The HFEA ruled that "Mrs. Blood was barred from taking the sperm abroad for use on the ground[s] that she should not be able to avoid the specific requirements of the Human Fertilisation and Embryology Act by exporting the sperm to a country to which she had no connection."³⁷⁷

After Blood sought judicial review of the HFEA's decision, the Court of Appeal upheld the HFEA on the issue of consent, but found that she won the right, under the European Community Treaty, for the freedom of movement for goods and medical services among member states.³⁷⁸ She subsequently took the frozen sperm to Belgium and conceived her two sons at a Brussels clinic.³⁷⁹

Blood faced yet another legal obstacle when she was not permitted to put her deceased husband's name on her sons' birth certificates.³⁸⁰ The HFEA previously held that any baby conceived after the father's death had no biological father for the purposes of succession and inheritance.³⁸¹ Because of this, her sons' births had to be recorded with a blank space on the certificate where her deceased husband's name would have been.³⁸² Arguing that this infringed on her rights to private and family life under the European Convention on human rights, she succeeded in getting the HFE Act amended to provide that children conceived postmortem would be recognized as the legal heirs of their deceased father.³⁸³ Blood achieved the ultimate success when the House of Lords

³⁷⁶ Id.

³⁷⁷ *Id.* at 297-98.

³⁷⁸ Katz, *supra* note 28, at 297-98; Dyer, *supra* note 103.

³⁷⁹ Katz, *supra* note 28, at 298; Dyer, *supra* note 103.

³⁸⁰ Katz, *supra* note 28, at 298; Dyer, *supra* note 103.

³⁸¹ Katz, *supra* note 28, at 298.

³⁸² Dyer, *supra* note 103.

³⁸³ Katz, *supra* note 28, at 298.

instituted a bill amending the HFE Act that eventually became law.³⁸⁴ The bill amended the HFE Act of 1990 "under which a man is not considered a child's legal father if the child is conceived from frozen sperm or a frozen embryo after the man's death."385 Recognizing the parents of posthumously conceived children even after their death, it was estimated that the bill's amendment immediately benefited up to fifty families with posthumously conceived children.³⁸⁶

VI. **HFE Act 2008**

The subsequent HFE Act 2008 was enacted in three parts.³⁸⁷ The three parts are as follows: 1) amendments to the HFE Act of 1990; 2) parenthood; and 3) miscellaneous and general.³⁸⁸ Though extensive, the main, new elements of the 2008 HFE Act are that it requires clinics take into account the welfare of the child when providing fertility treatment.³⁸⁹ It also takes away the previous requirement that they take into account the child's need for a father.³⁹⁰ It enables people in same-sex relationships and unmarried couples to be treated as parents of a child born through the use of a surrogate.³⁹¹

There are those who believe that it would be difficult to imagine that individuals in the United States submit their reproductive decisions to government authority, especially because the right to procreate has never been one to submit to federal regulations or authority. It is thought that the legal resolution of the [Blood] case

 $^{^{384}}$ Id

³⁸⁵ Dyer, *supra* note 103.

³⁸⁶ Dyer, *supra* note 103.

³⁸⁷ The HFE Act (and other legislation), Human Fertilisation and Embryology Act. (Jan. 2011), available *at* http://www.hfea.gov.uk/134.html. *388 Id.*

³⁸⁹ *Id*. ³⁹⁰ Id.

³⁹¹ See Id. § 121.

"however, is of little help in the United States, where the very idea of a central licensing authority for reproductive technology is [an] anathema to our belief in state, as opposed to federal, control of medical practice and parentage issues."³⁹²

The American Society for Reproductive Medicine ("ASRM") has noted that medical professionals are not required to honor a surviving spouse's request for postmortem gamete retrieval and unitization if the patient has not given consent or somehow made his wishes known.³⁹³ The ASRM deems that these issues should be decided on a case by case basis and follow the applicable state laws.³⁹⁴ There is some legislative and judicial direction for inheritance after posthumous conception, but nothing in particular addresses postmortem gamete retrieval and utilization.³⁹⁵

Unfortunately, in some of these cases of postmortem gamete retrieval and unitization, time is of the essence when it comes to requests to physicians and doctors.³⁹⁶ Unlike "removing a respirator or discontinuing nutrition or hydration, where the status quo continues while decisions are made, with postmortem gamete retrieval and unitization, there is a very small window of opportunity to act."³⁹⁷ Oftentimes, the situations in which these occur are tragic, and involves the sudden death of a loved one.³⁹⁸ Absent statutory regulations, physicians often experience difficulty in resisting the pleas of a wife, parent, or lover who request postmortem gamete retrieval and unitization and physicians oftentimes do not object because they assume that there are no significant

- ³⁹³ *Id.* at 299.
- ³⁹⁴ Id. ³⁹⁵ Id.
- ³⁹⁶ *Id.*
- ³⁹⁷ *Id.*
- 398 Id.

³⁹² Katz, *supra* note 28, at 298.

legal objections.³⁹⁹ Physicians' decisions may be a function of their impulses and the offering of help to those who are suffering.⁴⁰⁰

Because there is a lack of understanding and acknowledgement about what to do in cases of postmortem gamete retrieval and unitization, some medical institutions have developed their own plans on what to do when individuals request postmortem gamete retrieval and unitization.⁴⁰¹ At the first instance that there was a request for postmortem gamete retrieval and unitization, the New York Presbyterian Hospital composed a team of medical and legal professionals who created a set of guidelines for hospital staff despite the uncertainty of the legality of post-mortem gamete retrieval.⁴⁰²

VII. Procreative Liberty

Does the United States Constitution protect the rights of individuals to procreate after death? "Procreative liberty" is a broad term that, at a minimum, includes the freedom to reproduce and the freedom to avoid reproduction.⁴⁰³ The idea of procreative liberty commences with the idea of protections as guaranteed by the Constitution that have been established by the

courts.⁴⁰⁴ The Supreme Court has never explicitly recognized a right to procreate, but has held that all individuals are guaranteed the constitutional protection accorded to a person's liberty interest relating to intimate relationships, the family, and whether to bear a child.⁴⁰⁵

400 Id.

³⁹⁹ Katz, *supra* note 28, at 299.

⁴⁰¹ Katz, *supra* note 28, at 300.

⁴⁰² Id.

 $^{^{403}}$ Elliot, *supra* note 8, at 55.

⁴⁰⁴ Elliot, *supra* note 8, at 55.

⁴⁰⁵ *Id.* at 55-56.

With the constitutional protections afforded to an individual's liberty, the question when it comes to children who have been posthumously conceived is if an individual has a constitutional right to posthumously reproduce.⁴⁰⁶ The Supreme Court has never addressed the rights of children conceived through posthumously conceived reproductive methods.⁴⁰⁷ However "if the decision to bear a child is a constitutionally protected choice, then it is logical . . . that the manner in which a child is conceived, [either by sexual intercourse or utilizing reproductive assistance], it is also a constitutionally protected decision."⁴⁰⁸ With the use of reproductive technologies becoming more common, posthumous reproduction and the children created thereby should be afforded the same constitutional protections that traditional reproductive methods and the children conceived therefrom receive.⁴⁰⁹

VIII. Concluding Remarks

Posthumously conceived children should be afforded the same measures of constitutional protections as those children who have been conceived through traditional methods. Though it would be difficult for the United States to have broad, expansive federal regulation of reproductive agencies and laws, in looking at the reproductive systems and relevant laws in both the United States and the United Kingdom, the United States should adopt a similar system to that such as the HFEA. In no way should the United States regulate the number of children a person should have, for that is a decision solely up to an individual's own choice and is a right guaranteed by the Constitution. But in looking at the limitations and inequities that posthumously conceived children face in

⁴⁰⁶ Elliot, *supra* note 8, at 56.

⁴⁰⁷*Id.*

⁴⁰⁸ *Id*.

⁴⁰⁹ Id.

comparison to their naturally conceived siblings, it would be beneficial to have some type of federal regulation in place that addresses the inheritance and property rights of these children. Provided that the parents had the intent and consent to conceive posthumously, the interests of the posthumously conceived child should be placed on an equal footing as their siblings who were alive and conceived before their deceased parents' death. This ensures that these children are given and provided equal opportunities and afforded like constitutional protections.

The system would be similar to that of the United Kingdom's, HFEA. A federal system would be in place that all participating, reproductive facilities would abide by. Facilities would work together to ensure that patients or those thinking of undergoing any type of assisted reproductive technique would be adequately informed of the mental and physical risks associated with undergoing such a procedure. Additionally, if an individual decided to undergo the procedure, then there would be mandated written consent form of all the involved parties; specifically addressing such issues as the time period of storage, the desire for gamete destruction, and what to do in the event of one's death and whether the frozen gametes could be used for posthumously conceiving a child. With the combination of these types of rules, the courts could then use the relevant consent forms, wills, and testimony of the parties as a means of deciding what to do in determining the property and inheritance rights of posthumously conceived children.

The recommendation for these types of federal guidelines ensures that posthumously conceived children can be treated with as much equity in property and inheritance rights in comparison to their naturally conceived siblings. With these mandated, federal regulations, this should provide the courts some measure of aid in

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making their decisions and ideally would provide cohesion in an area of law that is in need of direction.

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Advertising Prostitution: Potential Criminal Liability for Craigslist

By Nathan Assel*

I. Introduction

The internet has proven to be an amazing instrument. A myriad of information can be easily attained within a matter of moments. Individuals can manage bank accounts, purchase groceries, or meet new people from their residences or any other location with accessibility to wireless internet. The availability of these resources allows for convenience along with heightened risks of criminal activity.

Money can be stolen without ever reaching into another's pocket. The criminal activity facilitated on the internet is as varied as any other utensil provided by the pervasive services and platforms of the internet. Websites can be formatted to perform illegal functions, such as illegal downloading, or can have illegal content, such as child pornography. Websites like Craigslist, which provide a platform for other users to sell and purchase items, have made legality on the internet a difficult issue. The government seeks to promote the use of the internet for its assortment of benefits and services, and especially to emphasize the free marketplace of ideas that has always been deeply valued in this country.⁴¹⁰ Thus, some acts have tried to limit the civil liability for providers and

^{410*} The author would like to thank his wife Melissa Assel, his parents Thomas and Barbara Assel, and his brother Christopher Assel for all their invaluable support. The author would also like to thank Professor Aviva Abramovsky for her suggestions and guidance regarding the topic. Communications Decency Act, 47 U.S.C. § 230 (1998).

users of computer services.⁴¹¹ These acts explicitly have no effect on criminal laws.⁴¹² The enforcement of criminal laws against assorted arrangements of websites can be problematic. This is especially true in the instance of websites designed like Craigslist.

Craigslist provides, in some capacity, a forum for prostitution on the internet. One difficulty with regulating the problem is assigning criminal liability for the crime. Posters of ads are anonymous, so the best way to regulate under this format would be to ascribe liability to the website itself. However, does this offend the government's promotion of a free marketplace of ideas? Or, if unregulated does it lead to occurrences of outright prostitution offered on the internet on a forum that is easily accessible to anyone? It is improper to have open advertisements for prostitution and even more deplorable when those ads feature minors. Someone must take responsibility for the content on these types of websites. Craigslist's allowance of a wide spectrum of goods and services to be advertised is a large part of its efficacy, but it also leads to postings of illegal nature.

By creating a forum, which includes separate categories and sub-categories, should Craigslist be responsible for the consequences. Craigslist benefits from more visitors to its website by incorporating these categories and increasing its overall popularity. Craigslist is not ignorant of these illegal acts originating from ads on its website. Should there be recourse for creating a vehicle for potential illegal activities and then continuing to exist even when one is aware that these activities in fact occur? It would be difficult to blame every crime that resulted from the ads on the website itself, but there should be some form of filter that does not allow posts that are overtly eliciting

⁴¹¹ Communications Decency Act, 47 U.S.C. § 230 (1998). 412 $_{IJ}$

illegal acts like prostitution. Without any liability for the websites, there is no real disincentive for allowing this type of content on websites. Lawbreakers are allowed to use highly accessible mediums to advertise illegal behavior while concealing their identities which can be difficult to trace and monitor.

Craigslist and similar websites generate a unique legal concern. The issue is challenging to address, but inaction could lead to grave consequences. Due to the format of Craigslist, the only party open to regulation is the website itself, which leaves few options for those who wish to curtail the online sex trade that exists on legitimate websites. Imposing criminal liability on Craigslist may result in a harsh regulatory standard for the website, but it may also be necessary to circumvent further illegal activities.

II. **Problem**

The issue of prostitution on Craigslist is not a hypothetical mental query, but is instead a very real conundrum. In the recent case of *Dart v. Craigslist* Sheriff Thomas Dart depicts a disconcerting image of the incongruence between Craigslist and law enforcement efforts.⁴¹³ Sheriff Dart observes that "erotic services consistently garner the highest number of individual visitors ... almost twice as much as the next ranking category."⁴¹⁴ Every visitor the erotic services category on Craigslist is not looking to advertise or obtain sexual services for monetary benefit; however the attraction of the category contributes to the significance of the problem. First, the high volume of visitors makes it difficult to identify individual users so that it is tough to determine who is

⁴¹³ Dart v. Craigslist, Inc., 665 F.Supp.2d 961 (N.D.Ill. 2009.

⁴¹⁴ John E.D. Larkin, *Criminal and Civil Liability for User Generated Content: Craiglist, A Case Study*, 15 J. Tech L & Pol'y 85, 88 (2010).

selling and purchasing sexual favors. It also makes it difficult to monitor every advertisement that is placed on the website, but that is not sufficient to allow Craigslist to operate outside of any criminal liability for crimes committed via the forum it provides. Second, the popularity of the category compared to the others shows that Craigslist must be aware of one of the potentially chief reasons visitors browse its site. Asking Craigslist to better monitor the advertisements in that section seem much less harsh when acknowledging the benefit incurred by Craigslist for including the category on its website. With the knowledge of people's interest in the category, Craigslist continues to keep the category to entice visitors.

The high interest in Craigslist makes its use for illegal activities so treacherous. The complaint in the *Dart* case boldly stated that "the popularity of this section makes Craigslist 'the single largest source for prostitution, including child exploitation, in the country."⁴¹⁵ The problem of the sex trade on Craigslist goes beyond the less morally reprehensible act of prostitution between consenting adults and includes more inexcusable acts including minors. Sheriff Dart contended that "Craigslist and similar sites account for 85% of the sexual liaisons men arrange in Atlanta with boys and girls."⁴¹⁶ When advertisements are made online, individuals can hide behind a veil of anonymity and peddle all manners of troubling carnal amenities. This can potentially lead to the escalating of illegal activities that are correlated to the sex trade of both minors and adults. The complaint supports this logical progression, "Authorities across the country have also found Craigslist's erotic services to be popular with sex

⁴¹⁵ John E.D. Larkin, Criminal and Civil Liability for User Generated Content: Craiglist, A Case Study, 15
J. Tech L & Pol'y 85, 88 (2010).
⁴¹⁶ Id

traffickers.⁴¹⁷ When illegal actors have a convenient venue for hawking their sexual wares, the illegal acts can only propagate. "On February 20, 2009, federal and local authorities participated in a nationwide sting, arresting more than 571 individuals on prostitution related charges. They also uncovered 48 teenage prostitutes, some as young as thirteen."⁴¹⁸ From January of 2007 to the time of the complaint, Sheriff Dart alone had apprehended over 200 people by using Craigslist on charges varying from prostitution, juvenile pimping of girls as young as 16 and even 14, and human trafficking.⁴¹⁹ The arrests show the pervasiveness and intolerable nature of these activities since police have arranged nationwide stings to combat individuals perpetuating these crimes.

Craigslist's defense of First Amendment speech protection is a controversial wall to attempt to knock down. The importance of free speech is unchallenged, however different forms of speech merit divergent levels of protection. Political speech has always been heralded as the most important type of speech, with commercial speech receiving a lower degree of protection. Thus, the advertisements on Craigslist may be more susceptible to challenges than other forms of protected speech, and the illegal nature of the advertisements in question force them outside the realm of any First Amendment protection.

The website would correctly be classified as commercial speech since the structure of the site resembles the classified section from a newspaper.⁴²⁰ When visiting the website, the main page immediately matches to the version specific to the area where you connected to the internet. This allows individuals to browse for advertisements from

⁴¹⁷ *Id*.

⁴¹⁸ *Id.*

⁴¹⁹ Larkin, *supra* note 5, at 89.

⁴²⁰ Craigslist, http://craigslist.org (last visited Mar. 5, 2011).

other individuals who are actually in their vicinity. This helps to limit the advertisements to a viable market. Contacts between the posters are not theoretical, but possible and encouraged. The categories under personal section, which is colored differently to catch the eye, include "casual encounters."⁴²¹ Clicking this leads to a warning a disclaimer preparing the visitor for potential "adult content" and requests that the user release Craigslist from any potential liability that may arise from the use of the site.⁴²² Progressing past the disclaimer subjects the visitor to a barrage of adult advertisements seeking an extensive spectrum of "casual encounters." The website has a small number of employees to actually monitor the postings, and the advertisements are very explicit in what is expected. Illegal actors could easily use specific terminology or deception to elude authorities. The website has a history of issues with its impersonal nature which have led to problems of housing fraud and even a string of murders committed by the "Craigslist killer."

As a result of the diverse and ubiquitous problems that have arisen from Craigslist, some have brought legal action against the website for the illegal acts facilitated by Craigslist and for being a public nuisance.⁴²³ The challenges alleged in *Dart* target three activities; first the creation of an "Erotic" services category where thirdparty posts for prostitution were published; second, the inclusion of sexual predilection subcategories within the broader Erotic services category; third, the construction of a search function allowing individuals to search for precise types of prostitutes or acts or

⁴²¹ *Id.*

⁴²² craigslist personal, Craigslist, http://www.craigslist.org/cgi-bin/personals.cgi?category=cas (last visited Mar. 5, 2011).

⁴²³ Dart v. Craigslist, Inc., 665 F. Supp.2d 961, 961 (N.D. Ill. 2009)

prostitution.⁴²⁴ The suit seeks a declaration that Craigslist's conduct is a public nuisance, to award Sheriff Dart his costs in abating the nuisance, and to enjoin Craigslist from engaging in similar conduct in the future.⁴²⁵ Craigslist supporters could contend that provisions of the "Erotic" services category and subsequent subcategories are no different than the normal functions of a newspaper editor and publisher when they establish categories for classified advertisements, allowing customers to determine the content included in each particular ad. "Erotic" services need not necessarily refer to prostitution, but could denote platonic escort services, sexual exchanges without monetary compensation, erotic dancing, or other acts that are not prohibited by local laws.⁴²⁶ It is the customers of the website, not Craigslist, that make the decisions to use the category in the devious manner of posting illegal content. Although the customers post the illegal content, Craigslist provides the vehicle for marketing the illegal activity. Craigslist is aware of these ongoing activities, and even potentially benefits by attracting more posters and customers to use and view its website.

Craigslist has taken measures to help combat the unlawful activities that have plagued its website. Craigslist replaced the "Erotic Services" category with an "Adult Services" category.⁴²⁷ Is there any substantial difference with this change? "Erotic" may express more of a sexual connotation than "Adult," but merely changing the name of a category does not change its content. It is implausible that individuals who use Craigslist

http://www.digitalmedialawyerblog.com/2009/09/dart_v_craigslist_competing_vi.html. ⁴²⁵ Dart, 665 F.Supp.2d at 962.

⁴²⁴ David Johnson, Dart v. Craigslist: Competing Views of Craigslist's Liability for Creating its "Adult" Service Section, Digital Media Lawyer Blog, (Sept. 1, 2009),

⁴²⁶ Johnson, *supra* note 15.

⁴²⁷ David Johnson, Dart v. Craigslist: Competing Views of Craigslist's Liability for Creating its "Adult" Service Section, Digital Media Lawyer Blog (Sept. 1, 2009),

 $http://www.digitalmedialawyerblog.com/2009/09/dart_v_craigslist_competing_vi.html.$

for these types of illegal acts would be deterred from persisting in this manner by a meager change in title. Those that congregated in one space would simply inhabit the same place under a new designation. When prostitution had possibly thrived on Craigslist, simple changes that are overcome without any great effort will not thwart the continuation of the illegal activities. As a means of stopping illegal activities that are known to exist, a modest name change would not satisfy any reasonability standard.

Craigslist has also begun charging fees for posts in the "Adult Services" category.⁴²⁸ This provides authorities with the capability of tracing individuals through electronic payments. This attempts to break down the veil of anonymity. Individuals involved with the nefarious acts of online prostitution may circumvent this type of identification through the use of stolen credit cards. Criminals involved with online crimes may possibly be more technologically advanced and could be capable of utilizing fake or untraceable credit or debit cards. Even without supposing that the criminals possess extensive technological knowledge, stolen credit cards could easily be used to sidestep any potential tracing ability of authorities. It would be difficult to require a valid form of identification to advertise in the category due to similar authentication issues. In a world where credit cards and even identities seem to be stolen frequently, while Craigslist's insertion of this additional requirement is done with the best intentions, it does not seem adequate to prevent the specific class of individuals from pursuing their objectives.

⁴²⁸ Id.

Another change made by Craigslist in response to the problem of prostitution is the commencement of a screening process of posts for nudity and illegal content.⁴²⁹ Is this change practical or even possible when the website has such a small staff? It would be difficult, with a small number of individuals, to review every advertisement posted on the website. It is likely with a small staff that advertisements would slip through the screening and reach the internet. Is that a valid excuse? Should Craigslist be responsible for properly reviewing every advertisement on its website? Does Craigslist have a duty to its users to employ enough individuals to ensure that advertisements for prostitution do not slip through the review process? Does taking this step open Craigslist up for greater liability for missing obvious advertisements for prostitution and allowing them to reach the internet in spite of an attempted screening process? By actually taking action, is Craigslist more liable if that action proves deficient? Craigslist's screening process would naturally miss encoded advertisements for prostitution that may be obvious to those involved in the sex trade. The issue of a screening process raises more questions than it answers. Although there is a warning and disclaimer, the "casual encounters" section on Craigslist still includes a copious amount of nudity that is easily accessible.⁴³⁰ While nudity is not new to the internet which contains a plethora or pornography, it is deviously incorporated on a website providing a substitute for the classifieds. It is simply out of place and displays a lack of modesty. The potentially offensive nature of the

⁴²⁹ David Johnson, *Dart v. Craigslist: Competing Views of Craigslist's Liability for Creating its "Adult" Service Section*, Digital Media Lawyer Blog (Sept. 1, 2009), http://www. digitalmedialawyerblog.com/2009/09/dart v craigslist competing vi.html.

⁴³⁰ Personals: Casual Encounters, Craigslist.org, http://www.craigslist.org/cgibin/personals.cgi?category=cas (last visited Mar. 5, 2011).

photos is not the problem, instead the issue is feigning as an entity that is more reserved and subjected to a screening process.⁴³¹

III. Issues of Liability

Craigslist is potentially subject to both civil and criminal liability. The arguments in favor of subjecting Craigslist to liability, as well as the cases in contrary, are somewhat complicated and nuanced. The contentions rest on concerns of what exact conduct is prohibited by statutes, and issues of authorship and publishing. Regardless of how complex these arguments can get, it is always compelling that Craigslist provides a forum that did not previously exist in such a popular manner without affording an adequate means of regulating the elicitation for prostitution, which Craigslist has actual knowledge that it exists and is proliferated on its website. There is an inherent need for an entity to be subject to consequences of deeds that occur as a result of services that it supplies. This simplistic equation is complicated by the insertion of third-party posters who are the authors, or possibly co-authors, of the content on the website. However, regardless of the authorship, how much responsibility should be levied upon the website for displaying and making the content available to others? Is there too much protection for websites that provide ideal platforms for criminal advertisements and then rely upon the argument of third-party posters as walls of fortification from being held liable for any of the foreseeable consequences? Or, adversely is free speech, or commercial speech, so vital to society that suffering negative side effects is a necessary evil of such an unprecedented free marketplace of ideas? Both sides of the dispute have strong moral concerns,

⁴³¹ Craigslist (Mar. 5, 2011), http://www.craigslist.org.

preventing the prostitution of adults and minors and the protection of free speech, to establish sturdy foundations for their contentions.

IV. Civil Liability

The issue of civil liability is separate from criminal liability. It is possible to be liable in one sense and be completely free of any accountability in the other realm. Proving civil liability does not make one per se criminally liable. Civil and criminal liabilities rest upon different sets of standards, but finding liability for one could theoretically offer support for finding liability for the other. This is especially true in regards to an area as complex and still somewhat novel as websites like Craigslist. As law makers still toil to architect the proper rules and regulations for the internet it is reasonable that they might look to one set of liability to inform the other.

The complaint in *Dart* contended that Craigslist amounted to a public nuisance under Illinois law.⁴³² The definition of public nuisance is provided by Restatement (Second) of Torts § 821B:

(1) A public nuisance is an unreasonable interference with a right common to the general public.

(2) Circumstances that may sustain a holding that an interference with a public right is unreasonable include the following:

(a) whether the conduct involves a significant interference with the public health, the public safety, the public peace, the public comfort or the public convenience, or

⁴³² Dart v. Craigslist, Inc., 665 F.Supp.2d 961 (N.D.Ill. 2009).

(b) whether the conduct is proscribed by a statute, ordinance or administrative regulation, or

(c) whether the conduct is of a continuing nature of has produced a permanent or long-lasting effect, and, as the actor knows of has reason to know, has a significant effect upon the public right.⁴³³

Based upon the definition given by the Restatement, Craigslist could be characterized as a public nuisance. It would be too broad to contend that the advertisement of prostitution on Craigslist interferes with a right common to the general public. One could argue that there is an intrusion with the right to have the laws upheld or generate an argument incorporating the other illegal activities that accompany prostitution, but this would be a stretch of the definition. This means that Craigslist would most likely not violate (1) or (2)(a). Craigslist would potentially violate (2)(b) and (2)(c). The website contains content that is undoubtedly illegal, prostitution, the content is of a continuing nature, and Craigslist knows that it has an effect on individuals, such as the minors who are forced to participate in the sexual activities.

Although Craigslist may have been considered a public nuisance, the complaint in *Dart* eventually failed as a result of the immunity provided to Craigslist pursuant to Section 230(c) of the Communications Decency Act.⁴³⁴ "Craigslist contends that \$230(c)(1) 'broadly immunizes providers of interactive computer services from liability for the dissemination of third-party content."⁴³⁵ The protection of this section stipulates that "no provider or user of an interactive computer service shall be treated as the

⁴³³ RESTATEMENT (SECOND) OF TORTS: PUBLIC NUISANCE § 821B (1979).

 ⁴³⁴ Dart v. Craigslist, Inc., 665 F.Supp.2d 961 (N.D.III. 2009).
 ⁴³⁵ Id. at 965.

publisher or speaker of any information provided by another information content provider.^{*436} This grants an unflinching immunity for individuals concerning content that is not supplied by them. The chink in the armor of this imperviousness is the imprecision with which the word "provides" describes authorship. Can a poster provide content, yet could a website also be the publisher of that same content if they offer some level of authorship to the content? As with the screening process, would edits made to content be substantial enough to dictate authorship for a provider of an interactive computer service? Section 230(e)(1) states that the previous sections have "no effect on criminal law.'⁴³⁷ This qualification refers to Federal criminal statutes. However, section 230(e)(3) clarifies that "no cause of action may be brought and no liability may be imposed under any State or local law that is inconsistent with this section.'⁴³⁸

These immunities depend upon what type of offense is being alleged. It is frequently stated that a cause of public nuisance is always a criminal offense, however this is not true since the Restatement (Second) of Torts refers to tortious liability, and not the standards that amount to a criminal offense that are stated at common law or under statute. In a civil claim against Yahoo!, Under 18 U.S.C. § 2252A(f), *Doe v. Bates* stated that "permitting civil actions against those who violate the criminal provisions of the same statute, did not constitute 'enforcement' of a criminal statute for the purposes of Section 230(e)(1)."⁴³⁹ In regards to civil liability "Congress decided not to allow private litigants to bring civil claims based on their own beliefs that a service provider's actions

⁴³⁶ Communications Decency Act, 47 U.S.C.A. § 230 (1998).

⁴³⁷ *Id*.

⁴³⁸ *Id.*

⁴³⁹ Dart v. Craigslist, Inc., 665 F.Supp.2d 961, at 965 (N.D.Ill. 2009).

violated the criminal laws."⁴⁴⁰ This forces individuals to rely only upon civil statutes when trying to impose civil liability upon service providers like Craigslist instead of criminal statutes.

The effect of this requirement was evident in *Dart*. Sheriff Dart "alleges for example that Craigslist knowingly 'arranges' meetings for the purpose of prostitution and 'directs' people to places of prostitution."⁴⁴¹ Sheriff Dart's allegations of violations of criminal laws cannot be used to support his efforts to prove civil liability. The court notes a "reluctance' to expand the public nuisance tort beyond claims involving the defendant's use of land and/or violation of a statute or ordinance."⁴⁴² This makes proving civil liability without a specific statute on point impossible. It seems unjust to not hold Craigslist civilly liable if Sheriff Dart could supply enough evidence to support his allegations. In Dart, the court also identified Craigslist as an intermediary which is "not culpable for 'aiding and abetting' their customers who misuse their services to commit unlawful acts."443 It seems that the courts want to force all legal issues regarding websites like Craigslist under criminal liability instead of civil liability. This is accomplished by equipping the websites with the exceedingly broad immunity of Section 230(c) of the Communications Decency Act.⁴⁴⁴ The courts are then content with providing websites further immunity from State laws that are inconsistent with Section 230(c). Although the protection cannot trump Federal criminal statutes, the court is

⁴⁴⁰ *Doe v. Bates*, 2006 WL 3813758, 22 (E.D.Tex. 2006).

⁴⁴¹ Dart, 665 F.Supp.2d at 967.

⁴⁴²*Id.*

⁴⁴³ Id.

⁴⁴⁴ Communications Decency Act, 47 U.S.C. § 230 (1998).

satisfied to proclaim that Craigslist is not the author of the advertisements.⁴⁴⁵ Admittedly, the case for civil liability is strained and as a result the case for any type of liability seems dire. Is that proper considering the fact that under the Restatement (Second) of Torts the advertisement of prostitution on Craigslist could be classified as a public nuisance and the magnitude of the issue involved?

V. Criminal Liability

Criminal liability inherently corresponds to the issue at hand more than civil liability since the heart of the problem, prostitution, is a crime. The speech at issue is not simply the ideas and opinions that are found on a forum providing a free marketplace for ideas. The speech is not among the highest tier of protected speech, instead the speech has a commercial element. As advertisements, the speech as a whole has less protection and is more predisposed to liability generally. The main issue with criminal liability here is whether Craigslist can be ascribed any of the authorship of the advertisements. There is a persistent sense that Craigslist's inadequate actions or inactions justify criminal liability. A push to break down the protective trench of immunities is evidenced by reports "that state officials are now 'looking for creative ways to charge the company."⁴⁴⁶ The negative media attention and pressure resulting from suits like *Dart* resulted in some of the voluntary changes that Craigslist made in an attempt to deal with the problem of prostitution. "Ironically, these decisions may ultimately weaken, instead of strengthening Craigslist's criminal defenses."⁴⁴⁷

⁴⁴⁵ Dart, 665 F.Supp.2d at 969.

 ⁴⁴⁶ John E. D. Larkin, Note, Criminal and Civil Liability For User Generated Content: Craigslist, A Case Study, 15 J. Tech. L. & Pol'y 85, 88 (2010).
 ⁴⁴⁷ Id. at 90.

What is Craigslist's role when these criminal activities take place on its website? How is Craigslist related to the content published on its site?⁴⁴⁸ The court refused to treat Craigslist as if it had created the offending advertisements in *Dart*.⁴⁴⁹ The court took a different approach in Braun v. Soldier of Fortune Magazine, Inc., where the court stated that "Craigslist is like a newspaper, and unlike a phone company or computer manufacturer, in that it publishes information supplied by its users. Newspapers and magazines may be held liable for publishing ads that harm third parties."⁴⁵⁰ This distinction is important to understand. As Craigslist provides the forum for these advertisements, they furnish more than just a means of communication. Craigslist has a closer relation to the content on it than an internet provider would have to the content that it streams into its customers' homes. Craigslist does not innocently and impartially offer access to information that it had no hand in creating. Instead, Craigslist is more like a newspaper where the advertisements may have a third-party author, but the decision of publishing rests solely with the website. Publishing the content imputes liability to Craigslist because it assigns the website with some authorship. In the instance of the newspaper, both the third-party author of an advertisement and the newspaper itself would be held liable for harm caused by the advertisements. Craigslist inclusion of these advertisements causes harm to society, not to mention the adults and minors forced into the sex trade.⁴⁵¹ Craigslist should be made to pay its debt to society and that begins with incurring criminal liability.

⁴⁴⁸ Casual Encounters: Warning & Disclaimer, Craigslist.com, http://www.craigslist.org/cgibin/personals.cgi?category=cas (last visited Mar. 5, 2011).

⁴⁴⁹ Dart v. Craigslist, Inc., 665 F.Supp.2d 961, 969.

⁴⁵⁰ Dart, 665 F. Supp. 2d at 967.

⁴⁵¹ *Larkin*, *supra* note 5, at 89

Publishing is distinguishable from distributing. Although in *Bates* the court suggested that "Congress made no distinction between publishers and distributors in providing immunity from liability," common sense suggests that this is improper.⁴⁵² "The courts have reasoned that 'distributor liability' is 'merely a subset, or a species, of publisher liability, and is therefore also foreclosed by § 230."⁴⁵³ Different meanings are implicit when the words are used. Without extrapolating too much from theoretical ideas, the distributors are more analogous to the phone company, while publishers are more akin to the newspapers.⁴⁵⁴ Distributors are not ascribed authorship in the same manner as a publisher. The only creation involved with the word distributors is limited to tangible goods. Publishers are associated with ideas and the content of their product. The courts have found it appropriate to merge the concepts instead of properly sifting through the true connotations. In some situations it may be suitable to combine the separate groups, but in an attempt to solve the multifaceted issue afflicting society in this case it would be incongruous to conjoin the meanings.

Online service providers were treated as publishers of harmful information created by third-party users that they negligently published in both *Barnes v. Yahoo!, Inc.* and *Chicago Lawyers' Committee for Civil Rights Under Law, Inc.*⁴⁵⁵ Is Craigslist similarly the publisher of the advertisements for prostitution that have been found on its website? The basic situation seems identical to both *Barnes* and *Chicago Lawyers'*. Craigslist is an online service provider that is publishing harmful information created by

⁴⁵² Blumenthal v. Drudge, 992 F. Supp. 44, 52 ((D.D.C. 1998)

⁴⁵³ ______ *Id.*

⁴⁵⁴ Braun v. Soldier of Fortune Magazine, Inc., 968 F.2d 1110, 1114 (11th Cir. 1992).

⁴⁵⁵ Barnes v. Yahoo!, Inc., 570 F.3d 1096 (9th Cir. 2008); Chicago Lawyers' Comm. For Civil Rights Under Law, Inc. v. Craigslist, Inc., 519 F.3d 666 (7th Cir. 2008).

third-party users. The court in *Barnes* noted that "publication involves reviewing, editing, and deciding whether to publish or to withdraw from publication third-party content."⁴⁵⁶ With the recently implemented screening process, Craigslist fulfills each of these requirements and as mentioned previously, Craigslist's feeble attempts to address the problem of advertised prostitution paradoxically have made Craigslist more vulnerable to criminal liability.⁴⁵⁷

In *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.* the court determined that information content providers' may be subject to contributory infringement if the format of their website is constructed to aid in achieving illegal objectives.⁴⁵⁸ In this particular case, the illegal purpose was stealing music and other copyrighted material.⁴⁵⁹ The court in *Chicago Lawyers'* further perceived that "nothing in the service craigslist offers induces anyone to post any particular listing."⁴⁶⁰ While Craigslist is not designed specifically to establish an easily accessible forum for advertising prostitution, its construction does accomplish this result. Thus, it would not be unjust to subject Craigslist to some form of contributory negligence. When designing an online service provider or information content provider it seems obligatory that the architects contemplate plausibly foreseeable exploitations of the website. With the concept of contributory negligence, is there a potential to for Craigslist's actions to be considered gross negligence and thus criminal? It seems likely that a reasonable person could see

⁴⁵⁶ *Barnes*, 570 F.3d at 1102.

⁴⁵⁷ John E.D. Larkin, *Criminal and Civil Liability For User Generated Content: Craigslist, A Case Study*, 15 J. TECH. L. & POL'Y 85, at 90 (June, 2010).

 ⁴⁵⁸ Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 545 U.S. 913 (U.S. 2005).
 ⁴⁵⁹ Id.

⁴⁶⁰ Chicago Lawyers' Comm. For Civil Rights Under Law, Inc. v. Craigslist, Inc., 519 F.3d 666, 671 (7th Cir. 2008).

the potential dangers in having a website that hosts categories, and even more specified subcategories, of sexual services and tastes available for other to third-parties to post advertisements. The level of negligence increases even more when considering that not only could a reasonable person anticipate issues with prostitution on such a forum, but that Craigslist is aware that some parties are actually using its website in this illegal fashion.

The court in *Chicago Lawyers*' emphasized that Craigslist did not induce advertisements for prostitution.⁴⁶¹ That statement is dubious when considering the category titles of "Erotic Services," "Adult Services," and even "casual encounters."⁴⁶² The term "Erotic Services" seems almost like a euphemism for prostitution. "Adult Services" is tamer, but still insinuates a pornographic element. "Casual encounters" is fairly unassuming and provide no actual stimulus; however the slight name changes will probably not have any material impact upon already occurring activities.

Craigslist may also have some criminal liability for aiding and abetting. Some contend that aiding and abetting prostitution would be a tough charge to assert in federal court. "Under Section 2 of the U.S. Crimes Code, defendants are liable 'as a principal' if that defendant either (1) 'aids, abets, counsels, commands, induces or procures its commission' or (2) 'willfully causes an act to be done which if directly performed by him or another would be an offense against the United States.'"⁴⁶³ Craigslist's actions, regarding the advertised prostitution on its website, do not amount to anything within (1), nor does Craigslist willfully cause others to advertise prostitution on its site. Resourceful

⁴⁶¹ *Id*.

⁴⁶² Craigslist Home Page, http://www.craigslist.org (last visited Mar. 5, 2011).

⁴⁶³ John E.D. Larkin, Criminal and Civil Liability For User Generated Content: Craigslist, A Case Study,
15 J. TECH. L. & POL'Y 85, at 97 (June, 2010).

prosecutors may endeavor to charge Craigslist with aiding and abetting wire fraud, which is committed when one:

- devises "any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises,"
- "transmits or causes to be transmitted by means or wire radio, or television communication in interstate or foreign commerce,"
- 3. "any writings, signs, signals, pictures, or sounds,"
- 4. "for the purpose of executing such scheme or artifice."⁴⁶⁴

Third-party authors of advertisements soliciting prostitution on Craigslist often utilize code words like "roses" or "diamonds" as substitutes for currency.⁴⁶⁵ When interstate wires are used to fraudulently acquire money it is a commission of wire fraud.⁴⁶⁶ The perpetration of this offense is what a criminal charge of aiding and abetting against Craigslist would be based upon.

There is also the possibility for Craigslist to be criminally liable for the distribution of obscenity. Although, it was previously argued that Craigslist is characterized as a publisher due to its authorship qualities, the website certainly performs the role of a distributor. Craigslist provides quick and convenient access to an ample amount of content.⁴⁶⁷ When it comes to providing access to this content Craigslist operates as both the phone company and the newspaper. They have an authorship role in the publishing of the advertisements along with a distributor role in providing expedient

⁴⁶⁴ John E.D. Larkin, *Criminal and Civil Liability For User Generated Content: Craigslist, A Case Study*, 15 J. TECH. L. & POL'Y 85, at 97 (June, 2010).

⁴⁶⁵*Id.*

⁴⁶⁶ *Id.* at 97-98.

⁴⁶⁷ Craigslist Home Page, http://www.craigslist.org (last visited Mar. 5, 2011).

accessibility to the content. Some consider "the strongest avenue of criminal attack against Craigslist in the federal courts is probably for distribution of obscenity in violation of 18 U.S.C. § 1465."468 Section 1465 is directed at interactive computer services under Section 230(e)(2) of the Communications Decency Act and would thus encompass Craigslist.⁴⁶⁹ Section 1465 forbids the sale or dissemination of an assortment of objects that are considered obscene or lewd, and among this extensive list are writings, pictures, and images.⁴⁷⁰ Determining which materials to classify as obscene has always been an arduous task since the assessment generally lends itself to personal biases and opinions. However, the third prong of the Miller test for obscenity, taken from Miller v. *California*, asks "whether the work, taken as a whole, lacks serious literary, artistic, political, or scientific value."⁴⁷¹ As depicted previously, the nude and pornographic photos that accompany many of the advertisements found within the "casual encounters" category on Craigslist would be considered devoid of any literary, artistic, political, or scientific value.⁴⁷² The pictures or images are integrated into the advertisements by thirdparty authors for the sole intention of enticing participation in sexual acts.⁴⁷³ The advertisements for prostitution use the images in an attempt to lure consumers into procuring sexual activities for pecuniary reimbursement. The pictures or images, as forms of speech, would not be protected, and instead would be considered obscene. As a

⁴⁶⁸ Larkin, *supra* note 5, at 95.

⁴⁶⁹ *Id*.

⁴⁷⁰ *Id.*

⁴⁷¹ *Id.* at 95-96.

 ⁴⁷² Craigslist Personals, Craigslist.com, http://www.craigslist.org/cgi-bin/personals.cgi?category=cas (last visited Mar. 5, 2011).
 ⁴⁷³ Id

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result of being labeled obscene, they would fail the Miller test, and thus Craigslist would be exposed to possible criminal liability for the distribution of obscenity.

VI. Authorship of Content

Craigslist's best defense to any challenge of liability would be the protection provided through the Communications Decency Act.⁴⁷⁴ Craigslist can potentially shield itself behind the Act's refusal to treat the providers of interactive computer service as the publishers of content authored by third-parties.⁴⁷⁵ This strategy has worked for previously for Craigslist and other interactive computer service providers. In Dart v. Craigslist, Inc., an adamant sheriff asserted that "Craigslist is the largest source of prostitution in the country."476 The sheriff's claim was inaccurately "built on the assumption that the underlying content, advertisements for prostitution and escort services, is constitutionally protected."⁴⁷⁷ This assumption is incorrect due to the fact that the content would not be constitutionally protected since it would be considered obscenity. Regardless, The Communications Decency Act armors interactive computer service providers from civil liability and State laws that are inconsistent with the act.⁴⁷⁸ "The CDA applies to a website operator, regardless of whether the third-party content posted on its site is entitled to First Amendment protection. Indeed, in several recent cases, the CDA has been held to provide immunity, even though the material published

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⁴⁷⁴ Communications Decency Act, 47 U.S.C.A. § 230 (1998).

⁴⁷⁵ Id.

⁴⁷⁶ David Johnson, *Dart v. Craiglist: Competing views of Craigslist's liability for creating its "adult" service section*, Digital Media Lawyer Blog (Sept. 1, 2009),

http://www.digitalmedialawyerblog.com/2009/09/dart_v_craigslist_competing_vi.html. 477 *Id.*

⁴⁷⁸ Communications Decency Act, 47 U.S.C.A. § 230 (1998).

was fraudulent and used to violate state criminal laws – all constitutionally unprotected activities."⁴⁷⁹

Is this proper? Does the Communications Decency Act provide an unfair cushion for interactive service providers? The argument for protecting speech on the internet that is within the realm of First Amendment protection is a compelling stance, but what is the benefit in providing immunity for material used explicitly for constitutionally unprotected activities? The Act essentially endeavors to eliminate all civil liability and preempts all criminal liability based on State or local laws that are inconsistent with the Act. This is a broad immunity for websites that operate with knowledge of the illegal activities regularly occurring on their forum. Should Craigslist and other websites only be liable for criminal liability based on Federal criminal statutes, or does this give the sites too much leeway, especially considering the challenges with imputing any criminal liability to these sites? It seems like the drafters of the Communications Decency Act calculated that the societal value for easily accessible interactive computer services outweighs the societal harm of similarly accessible advertisements of the prostitution of adults and minors. However, this equation is incorrect because it includes too many variables that could easily be removed by Craigslist. The interactive computer service provided by Craigslist is not a problem and still acts as a very valuable amenity for many people. The issue is Craigslist's intentional decision to include a category and subcategories that can be effortlessly manipulated for nefarious activities. Craigslist refuses to remove the categories because of their popularity and the amount of visitors that they bring to the

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⁴⁷⁹ David Johnson, *Dart v. Craigslist: Competing Views of Craigslist's Liability for Creating its "Adult" Service Section*, Digital Media Lawyer Blog (Sept. 1, 2009), http://www.digitalmedialawyerblog.com/2009/09/dart_v_craigslist_competing_vi.html.

site. The real equation should be the social benefit of these categories weighed against the potential harm. The answer seems evident, particularly when the legitimate advertisements in the "casual encounters" category frequently contain obscene content.

The Communications Decency Act offers explicit protection for websites that merely post third party content, but what about issues of authorship? *Batzel v. Smith* averred that the Communications Decency Act does not shelter interactive computer service providers from liability for content that a website develops and publishes on its own.⁴⁸⁰ Arguments have failed to circumvent the Communications Decency Act's protection by asserting that interactive computer service providers have a hand in the creation of the content. The core concern is "how far a website can go in creating categories that lend themselves to illegal third-party content before being held liable for inducing the posting of illegal content.⁴⁸¹." If the categories do not necessarily induce the posting of illegal content by third-parties, is it foreseeable that they would be regularly be used in such a manner?

Can editing and categorical organization amount to authorship of content for Craigslist and other interactive computer services? In *Batzel* minor wording changes did not amount to authorship.⁴⁸² The court also determined that the alterations to the content prior to the decision to publish it did not amount to "development."⁴⁸³ The court explained that "the preclusion of 'publisher' liability necessarily precludes liability for exercising the usual prerogative of publishers to choose among proffered material and to

⁴⁸⁰ 333 F.3d 1018 (9th Cir. 2003).

⁴⁸¹ David Johnson, Dart v. Craigslist: Competing Views of Craigslist's Liability for Creating its "Adult" Service Section, Digital Media Lawyer Blog (Sept. 1, 2009),

http://www.digitalmedialawyerblog.com/2009/09/dart_v_craigslist_competing_vi.html. ⁴⁸² *Id.*

⁴⁸³ Id.

edit the material published while retaining its basic form and message.⁴⁸⁴" This begs the question of what does rise to the level of "development?" What types of changes or alterations does Craigslist administer to advertisements in the "casual encounters" category? Does the newly implanted screening process only attempt to weed out potential advertisements for prostitution, or does it also try to amend some of the more obscene content to try to make it less offensive to visitors to the website? The Communications Decency Act provides protection only in instances when websites are treated as the publisher or speaker of third-party material.⁴⁸⁵ Craigslist may then be considered immune, but is this classification proper? Liability could be assessed due to the apparent nature of the ads that are soliciting illegal relationships consisting of prostitution. Websites that allow advertisements of this nature could be subject to a duty to review them before posting them for public view. This would force some effort on the part of the websites to avoid eventually being party to these illicit transactions. Considering the overtly sexual nature of these advertisements combined with Craigslist's knowledge of the occurrences of the illegal activities, it is not unduly burdensome to hold the website as negligent for not reviewing the ads.

Another element that may make the activities of Craigslist amount to some level of authorship is the categorical organization of the advertisements. Craigslist may not be invulnerable from attacks from this angle, "the Communications Decency Act also would not protect such activities as aiding, abetting, inducing or encouraging, or conspiracy

⁴⁸⁴ Batzel, 333 F.3d 1018, 1031 (9th Cir. 2003).

⁴⁸⁵ Chicago Lawyers' Comm. For Civil Rights Under Law, Inc. v. Craigslist, Inc., 519 F.3d 666, 670-71 (7th Cir. 2008).

with, a third party to place illegal content on a cite."486 The Ninth Circuit has also established that website operators do not retain their insusceptibility when their actions are found to induce or encourage a third party to engage in illegal conduct.⁴⁸⁷ The court in Fair Housing Council of San Fernando Valley v. Roommates.com, LLC determined that websites can be held complicit when they provide categories for advertisements that are biased.⁴⁸⁸ Here the "Adult Services" category definitely advances a particular connotation. It would be difficult to suggest that such a category on a website where people expect to pay for goods and services would not be biased toward an interpretation that includes prostitution. Do the categories of particular sexes seeking other members of the same or opposite sex induce users to select specific categories of prostitution? Individuals can access the website and easily narrow their search by gender or sexual orientation. While this type of organization is common among websites that include personal advertisements, it can also be seen as a possible endorsement of the illegal activity since it is known to be occurring through the advertisements found within these categories. When establishing a platform that in essence makes these illegal transactions more accessible, Craigslist's inclusion of these categories may amount to aiding or conspiracy to commit prostitution. If one were to create a website that offered a platform of categories where users could purchase murders or another illegal activity, it seems that this individual would be held liable even if they argued a benign reasoning. Even if the website provided some other legitimate function, the website's potential for illegal activities might be enough for potential criminal liability. While murder is a heinous

⁴⁸⁶ Johnson, *supra* note 15.

 ⁴⁸⁷ Fair Hous. Council of San Fernando Valley v. Roommates.com, LLC, *521 F.3d 1157, 1175 (9th Cir. 2008)*.
 ⁴⁸⁸ Id

offense, underage prostitution and sex trafficking are also highly condemned in society, so whatever value the "Adult Services" may provide for individuals, its potential for abuse may be too high.

In Gentry v. eBay the court found the organization of a website into categories and subcategories for the convenience of visitors did not make the operator criminally liable for instances of fraudulent posts.⁴⁸⁹ The court emphasized that the fraudulent aspects of the offenses were wholly attributable to the individual posters. This case may suggest that Craigslist should also not be held responsible for the content of the advertisements found on its forum. However, the inclusion of a category titled "Sports: Autographs" clearly insinuates that someone is paying money for autographed memorabilia.⁴⁹⁰ When the object in question is not what is advertised, there is no question that the poster should be held liable and not the website. The website can allow the advertisement, but cannot control the legality of the transaction. In the instances of prostitution on Craigslist, the advertisements are often explicit. While Craigslist should not be liable for fraudulent transactions, it should be liable for advertisements that obviously offer services related to prostitution. There is never a legitimate purpose to advertise sexual relations with a minor and these categories have the potential to surreptitiously represent or support these types of activities. Again, the category itself also implies that sexual services are being offered for financial reimbursement. Another court found that a website clearly encouraged the posting of defamatory material when it was titled "www.ripoffreport.com" and had a category titled "Con Artists" but that it was

⁴⁸⁹ Gentry v. eBay, Inc., 99 Cal. App. 4th 816, 835 (2002).
⁴⁹⁰ Id. at 821.

not sufficient to make the operators liable for the content.⁴⁹¹ The website here did not include categories where illegal services were knowingly purchased. Instead it merely offered a soapbox from which individuals could accurately or falsely file complaints about businesses.

Some courts distinguish "where websites have provided both neutral and nonneutral materials for users to include in on-line postings, which users were free to select or reject, courts have not found the website liable for inducing illegal conduct."492 Craigslist can argue that it does not require posts under the "Adult Services" category nor does it demand that the posts be for prostitution. However, Craigslist is still providing the forum. A website that advertises legitimate consumers goods should not be protected if it also marketed murder for hire. Users of such a website could reject the advertisements with illegal content and shop for consumer goods, but if murders were actually being purchased the website should not be able to forward the entirety of the culpability to the third party content providers. There is a distinct problem with having a category that implicitly or explicitly offers illegal services. When those services are purchased via that platform the operators cannot claim ignorance, especially when they are aware of the occurrences. As a result, some the guilt ought to rest with those individuals who offer such a forum yet refuse to adequately monitor it to eliminate the illegal solicitations. Craigslist could choose not to include the "Adult Services" and its subcategories, but for whatever reason the website does and thus there is an endorsement

⁴⁹¹ Global Royalties, Ltd. v. XCentric Ventures, LLC, 544 F. Supp. 2d 929, 930 (D. Ariz. 2008).
⁴⁹² David Johnson, Dart v. Craigslist: Competing Views of Craigslist's Liability for Creating its "Adult"

Service Section, Digital Media Lawyer Blog (Sept. 1, 2009), http://www.digitalmedialawyerblog.com/2009/09/dart v craigslist competing vi.html.

of the advertisements available there and possibly even some of the illegal content that has resulted.

VII. Conclusion

Craigslist and similar websites have found protection in the Communications Decency Act and some precedent, and the combination of those authorities have generated challenging obstacles that need to be surmounted, or at least alleviated in some form, in order to impose criminal liability on Craigslist for providing a forum for prostitution. The format of Craigslist makes the website the easiest party to regulate, and although enforcing criminal liability against Craigslist may be harsh, it may be necessary to evade a convenient platform for providing prostitution and other illegal activities. The societal values provided by Craigslist do not outweigh its potential for facilitating prostitution and other crimes intertwined with the nefarious sex trade. Entities that create forums and platforms should be held responsible when proper safeguards are not instituted to prevent the illegal use of their services.

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Justice in Genetics: Intellectual Property and Human Rights

from a Cosmopolitan Liberal Perspective

By: Louise Bernier

Citation: Louise Bernier, *Justice in Genetics: Intellectual Property and Human Rights from a Cosmopolitan Liberal Perspective* (Edward Elgar, 2010).

Reviewed by: Daniel M. Austin⁴⁹³

Relevant Legal and Academic Areas: Intellectual Property; Technology.

Summary: Louise Bernier provides a fresh perspective on how best to tackle the problem of global access to healthcare in *Justice in Genetics: Intellectual Property and Human Rights from a Cosmopolitan Liberal Perspective.* The author develops a theory that relies heavily upon a cosmopolitan liberal perspective where finite healthcare resources are more equitably distributed throughout the world. Bernier analyzes how this theory could be applied to the current healthcare environment including the obstacles to implementation. She also touches on the intersection of intellectual property, international human rights, and genetics and how these systems interact with Bernier's theory of distributive justice.⁴⁹⁴

About the Author: Louise Bernier is Professor and Head of the Law and Life Sciences Program at the University of Sherbrooke, Quebec, Canada.⁴⁹⁵

⁴⁹³ Daniel M. Austin, Book Note, SYRACUSE SCIENCE & TECHNOLOGY LAW REPORTER (2011) (reviewing LOUISE BERNIER, JUSTICE IN GENETICS (2010)).

 ⁴⁹⁴ LOUISE BERNIER, JUSTICE IN GENETICS: INTELLECTUAL PROPERTY AND HUMAN
 RIGHTS FROM A COSMOPOLITAN LIBERAL PERSPECTIVE (Edward Elgar ed., 2010).
 ⁴⁹⁵ Id.

Introduction

In this book, the author analyzes the interplay between intellectual property rights and human rights and how these forces act upon the distribution of medicine and humanitarian aid.⁴⁹⁶ Instead of seeing intellectual property and human rights as forces at odds with one and other, the author believes that they are interconnected. The author argues that both sets of rights draw their power from the same source, the fundamental ideals of justice.⁴⁹⁷

This analysis begins with an assessment of the present challenges to the distribution of healthcare in the developing world. Then the analysis shifts to focus on the political, legal, and economic forces that surround the problems of medicine distribution.⁴⁹⁸ The author examines this issue from a global perspective, analyzing the statements and actions of several international organizations including the G8, the World Health Organization, and the World Trade Organization.

Ms. Bernier then starts to develop her own theories as to how intellectual property and human rights are both served by justice and how these two forces can be harnessed to help provide a an equitable distribution of healthcare that will lead to better health outcomes in the developing world.⁴⁹⁹ The author believes in a cosmopolitan theory of justice where respect for both intellectual property rights and human rights can lead to better relations between the developed world and the developing world. Moreover, the

⁴⁹⁶ BERNIER, *supra* note 2, at xii.

⁴⁹⁷ Id.

⁴⁹⁸ *Id.* at 2.

⁴⁹⁹ *Id*. at xii.

author believes that this theory of justice can help countries in the developing world gain better access to medicine and more advance healthcare services.⁵⁰⁰

Finally, the author lays out several possible roadmaps or actions that could be taken to further her cosmopolitan theory justice through the continued respect for both human rights and intellectual property.

Part I: A Theoretical Framework for Healthcare Distribution:

The positive benefits that result from advancements in science such as genetics should be shared with people around the globe. This is the basic theory of distributive justice.⁵⁰¹ The theoretical basis for the equitable distribution of healthcare resources is based on the fundamental belief of fairness and equality.⁵⁰² This theoretical basis is necessary because it provides the foundation for a common vision by declaring that all individuals should have a right to basic needs such as food, water, shelter, clothing and adequate medical care.⁵⁰³ It is from this basic idea of equality and fairness and the belief that each individual matters, regardless of whether they come from a rich developed country or a poor undeveloped country. Access to healthcare includes the use of modern medical technologies including the most recent developments in science and in particular, genetic research. This bedrock principle is what forms the basis for distributive justice in healthcare distribution.⁵⁰⁴

⁵⁰⁰ *Id.* at 3.

⁵⁰¹ Bernier, *supra* note 2, at 19.

⁵⁰² *Id*.

⁵⁰³ Id.

⁵⁰⁴ Id.

Section 1: Global Application of Distributive Justice: A Cosmopolitan Approach

When applying a cosmopolitan approach to the distribution of healthcare discoveries and advancements, one of the main tenets is that each individual on the globe counts as a single unit. Each individual, regardless of what nation they come from, or their socio-economic status is important and should have an equal share of the benefits from genetic research and medical technology advances.⁵⁰⁵ Along with the idea of who gets to benefit from these advancements in healthcare, the notion of who gets to profit from their application is another important question.⁵⁰⁶

It is likely that advances in genetics and other scientific technologies will initially only benefit those members in wealth societies.⁵⁰⁷ The problem with this type of distribution is it will help to increase the healthcare inequality gap between those individuals who can pay for cutting-edge breakthroughs and those who cannot.⁵⁰⁸ The former will prosper while the latter will struggle because they have been shutout from these advancements in medicine and the healthcare inequality gap will continue to widen.⁵⁰⁹

Section 1.1: Distributive Justice

In order to apply a cosmopolitan theory of distributive justice to international healthcare, it is essential that the theory allows for the international distribution of genetic research. The author believes that the advances in scientific technology and especially

⁵⁰⁵ Bernier, *supra* note 2, at 20.

⁵⁰⁶ *Id.* at 21.

⁵⁰⁷*Id.*

⁵⁰⁸ *Id.*

⁵⁰⁹ Id.

genetics should not be limited by market forces, but should be applied equally on a global scale to those who are most in need of this technology.⁵¹⁰ Several theories exist with the goal of redistribution of property including medical and healthcare technology.⁵¹¹ Some of the theories discussed by the author are liberalism, distributive justice, and social cooperation.⁵¹²

The essence of distributive justice was articulated nearly 50 years ago by John Rawls in *A Theory of Justice*.⁵¹³ In his book, Rawls describes distributive justice as a phenomenon where individuals have "rights that cannot be sacrificed simply to create more benefits for others."⁵¹⁴ What flows from this theory is that social primary goods such as "liberty, opportunity, income, and wealth are to be distributed equally unless an unequal distribution will advantage the least well-off".⁵¹⁵ Distributive justice is different from many other types of social justice because it takes into account the most vulnerable in a given population based on the ideals of fairness.⁵¹⁶ Furthermore, although distributive justice is normally applied to one society, an international form of distributive justice is necessary when dealing with international healthcare issues such as genetic and genomic research because it application, and potential benefits are global.⁵¹⁷

Section 1.2 Cosmopolitanism: A Way of Envisioning Global Justice

⁵¹⁰ BERNIER, *supra* note 2, at 22 ⁵¹¹ *Id*. at 22.

⁵¹² *Id.* at 22-23

⁵¹³ *Id.* at 23.

⁵¹⁴ BERNIER, *supra* note 2, at 23.

 $[\]frac{515}{10}$ Id. at 23.

⁵¹⁶ *Id.*

⁵¹⁷ *Id.* at 24.

The ideas of cosmopolitanism can be captured in two categories: Institutional and Moral cosmopolitanism.⁵¹⁸ First, institutional cosmopolitanism is an idea that deals with political systems.⁵¹⁹ Specifically, institutional cosmopolitanism regards the world as a single nation with a single super government and discards the notion of individual nations.⁵²⁰ Furthermore, moral cosmopolitanism deals with the "theoretical basis for the justification of institutions, practices, and interpersonal relationship".⁵²¹ Moral cosmopolitanism views individuals as humans, and does not categorize people based on ethnicity, culture, country of origin or other indicators.⁵²²

The theory of cosmopolitanism fits well with genetic research because people throughout the world share many of the same genes.⁵²³ With such commonality, genetic research and gene treatment regiments have world-wide application.⁵²⁴ A distributive framework of global justice initiatives requires not a local mindset but an international.⁵²⁵ *Section 2: An Argument for Global Distribution in Health*

The basis for a global distribution in health means that each individual will have the same access to healthcare services and resources as any other.⁵²⁶ First, this section deals with a theoretical basis, an ideal situation where the theory of distributive justice

⁵¹⁸ Id.
⁵¹⁹ BERNIER, supra note 2, at 24.
⁵²⁰ Id.
⁵²¹ Id.
⁵²² Id. at 25.
⁵²³ See Id.
⁵²⁴ BERNIER, supra note 2, at 24.
⁵²⁵ Id. at 28-29.
⁵²⁶ Id. at 47.

would work in an optimum environment. Furthermore, the author describes the benefits and consequences of having an ideal global distribution in health.⁵²⁷

The second half of this section deals with a more pragmatic approach to the distribution of healthcare resources as the world stands today.⁵²⁸ This approach is more practical and tries to apply a cosmopolitan theory of distributive justice to a world that is less inviting.⁵²⁹ Although health and healthcare inequality exists in the world, the author argues that healthcare is important to all people and if a cosmopolitan approach to healthcare distribution was applied to the current environment, compensation would need to be paid to those individuals who are not provided with an equivalent distribution of healthcare resources.⁵³⁰ Moreover, the author argues that along with compensation, the international healthcare system should adapt and change to bring those individuals who are disadvantaged into alignment with the healthcare resources of the more fortunate.⁵³¹

Section 2.1: Conception of Health Justice

In deciding what the ideal concept of health justice constitutes, it is important to determine first how health is defined.⁵³² The term health or healthy has a number of definitions and ranges from meaning freedom from disease or infirmity to a more inclusive definition which includes not only the absence of disease but also the freedom from "disabilities, loss of abilities due to trauma and environmental harms, as well as

- ⁵²⁷ Id.
- ⁵²⁸ Id.

⁵²⁹ BERNIER, *supra* note 2, at 47.

⁵³⁰ BERNIER, *supra* note 2, at 47.

⁵³¹ Id.

⁵³² *Id.* at 48.

other functional deficits.⁵³³ The author supports a more broad definition of health and believes an ideal definition of health means that an individual can function normally.⁵³⁴

Applying this broad definition of what health or healthy means, the author believes that upcoming advances in healthcare generally, and genetics research in particular, should be shared equally and applied to individuals regardless of income, citizenship, or any other factor.⁵³⁵ The requirement for utilization of these modern treatments should be based on need; if someone is unhealthy, or falls below the standard of normal functioning then that individual should have access to the most modern healthcare technology.⁵³⁶ The goal of this ideal conception is that each person is treated as an individual and should be allowed to obtain healthcare services that will ensure a healthy life regardless of where they come from and there background.⁵³⁷

Section 2.2: Normative Grounds to Operate Distribution and Premises upon which to Claim Health Equity and Fairness

In this section the author stresses a concept of global equality of opportunity that provides a basis for distributive justice.⁵³⁸ This concept is applied to the distribution of healthcare services and resources in the current global environment. The author lays out a framework on how to reach global equality of opportunity including the use of rights and duties based theories along with applying the Rawl's difference principle.⁵³⁹

⁵³³ Id.

⁵³⁴ BERNIER, *supra* note 2, at 48.

⁵³⁵ *Id.* at 49.

⁵³⁶ BERNIER, *supra* note 2, at 51.

⁵³⁷ *Id.* at 51.

⁵³⁸ *Id.* at 63.

⁵³⁹ BERNIER, *supra* note 2, at 63.

One piece required in a global concept of justice requires that all individuals have the right to equality of opportunity.⁵⁴⁰ In this particular instance, the right described is the right to healthcare and specifically, the right of all individuals to have access to genetic technology.⁵⁴¹ The concern with defining a right to healthcare is that defining the right requires specificity. For example, to ensure equality of opportunity, the right to healthcare must be allowed at any time, not just in emergency cases.⁵⁴² In order for equality to exist, people must have the same right at the same time, or to have the same rights all the time.⁵⁴³

Along with defining the rights of an individual, an institution must exist to ensure that an individual's rights are protected. Specifically, this global institution must ensure that "rights must be adequately protected by required duties and obligations to refrain from harm, defend the interest of the right-holders, and facilitate the enforcement of their rights against particular agents."⁵⁴⁴ Included in this analysis is who should act? Should it be states? Or international organizations like the United Nations? The author stresses that the organization that takes up this task should be well coordinated in order to ensure adequate protection of these important rights.⁵⁴⁵ An alternative to having a centralized body who would coordinate and ensure rights, is to have the more wealthy states redistribute their healthcare and genetic resources to those states that do not have the same level of resources.⁵⁴⁶ Although the author realizes the current inequality that exists

⁵⁴⁰ *Id*.

⁵⁴² *Id*.

⁵⁴¹ *Id.* at 65.

⁵⁴³ *Id.*

⁵⁴⁴ BERNIER, *supra* note 2, at 68.

⁵⁴⁵ Id. at 73.

⁵⁴⁶ *Id.* at 74.

in the world, it is possible to change the focus of governments and allow equality and justice to play a larger role.⁵⁴⁷

One example the author noted was an effort to have rich nations provide the United Nations with 0.75% of their GDP for development projects in parts of the world that were less fortunate.⁵⁴⁸ Although this particular project was unsuccessful, the global structure is still relatively new and the author believes there are numerous opportunities that can be utilized to change the inequality that currently exists in the distribution of healthcare and genetic resources.⁵⁴⁹

Part II: Normative Tools for Distribution in Health:

The first section of this analysis focused on theoretical issues surrounding distributive justice of healthcare and genetic resources.⁵⁵⁰ The second section focuses on two areas of law that are critical to the development of genetic science: intellectual property law and human rights law.⁵⁵¹ These two areas of law play a critical role in dealing with issues of access and fairness.⁵⁵²

Section 3: International Intellectual Property Law: A First Tool?

In this section, the author addresses whether international intellectual property law as it is currently stands is either helpful or a hindrance to the distributive justice of

⁵⁴⁷ *Id.* at 81.

⁵⁴⁸ *Id.* at 82.

⁵⁴⁹ BERNIER, *supra* note 2, at 83.

⁵⁵⁰ BERNIER, *supra* note 2, at 85.

⁵⁵¹ *Id.*

⁵⁵² Id.

healthcare and genetic resources.⁵⁵³ Included in this analysis is a brief description of intellectual property rights, the patent system, and its relevance to genetic science.⁵⁵⁴

Section 3.1: The Patent System

In describing the current state of the patent system, the author highlights the use of patents in the area of genetic research.⁵⁵⁵ In order for an invention to be eligible for a patent, the invention must be new, involve an inventive or new step in a process, and it must be useful – meaning that it has some commercial application.⁵⁵⁶

Applied to genetic material, the question of whether genes or genetic material is patentable has been plaguing lawmakers for over twenty years.⁵⁵⁷ Current international law allows for "isolated genetic material" to be patentable.⁵⁵⁸ The ethical debate between whether genetic material should be patentable plays on a tension between the individual inventor's rights and the rights of the community to use the invention to help as many people as possible.⁵⁵⁹

Section 3.2 Some Theoretical Justifications for the Institutions of Patents

The author in this section discusses several theories have been put forth to justify the need for patents. Included in these theories, the author highlights the arguments made by Locke's Labour theory and the Utilitarian Theory of Property.⁵⁶⁰

Section 3.3 Global Distribution, Justice, and the Patent System: An Assessment

⁵⁵³ *Id.* at 87.

⁵⁵⁴ BERNIER, *supra* note 2, at 87.

⁵⁵⁵ *Id.* at 90.

⁵⁵⁶ Id.
⁵⁵⁷ BERNIER, supra note 2, at 91.
⁵⁵⁸ Id. at 91-92.
⁵⁵⁹ Id. 92.
⁵⁶⁰ Id. at 100, 103.

In this section, the author describes, under a global distributive justice theory framework, what the ideal tension should or could be between patent law, research and development of genetic materials, and knowledge.⁵⁶¹ The author argues that although the patent system was designed to allow the patent holder to recoup financial and personal investment, a secondary goal of the patent system is to ensure society greater knowledge for the common good.⁵⁶² Although these two goals were the driving force behind the patent system, it appears that the former and not the latter has come to fruition. The author argues that the benefit to society has not been fulfilled while the individual benefits the patent holder possesses have taken over the patent system.⁵⁶³

The author concludes her analysis of intellectual property law by claiming that IP is driven not by the common good for society but by market forces and the use of finite supply to drive up the cost of patented products, including products that are used in healthcare and genetics research.⁵⁶⁴

Section 4: International Human Rights Law: A Second Tool?

The focus of this chapter relates to the use of international human rights legal system and whether the current system helps or hinders the move towards a global distributive justice system in healthcare.⁵⁶⁵

Section 4.1: The field of International Human Rights Law

The current system of international human rights took hold after the Second World War.⁵⁶⁶ Although human rights issues have been debated for centuries, after World

⁵⁶¹ *Id.* at 116.

⁵⁶² BERNIER, *supra* note 2, at 116.

⁵⁶³ BERNIER, *supra* note 2, at 116

⁵⁶⁴ *Id.* at 143

⁵⁶⁵ *Id.* at 146.

War II, there was a resurgence in human rights issues.⁵⁶⁷ There have been several organizations created to deal with international human rights and an international bill of rights was created in the 1960's.⁵⁶⁸ The recognition of human rights was simply based on an individual as a human being.⁵⁶⁹ The author then goes on two discuss the two types of human rights; first, "civil and political rights" and "economic, social, and cultural rights."⁵⁷⁰

Section 4.2: Distribution, Access, Justice and the International Human Rights Systems: An Assessment:

In this section the author compares an ideal system of cosmopolitan theory of distributive justice relating to human rights and the reality of how the international community actually deals with international human right issues.⁵⁷¹ In making this comparison, the author believes that the most important metric is whether there is universal access to healthcare and genetic technology.⁵⁷²

To help show the different models that are applied to the issue of international human rights and access to healthcare, several types of universalism are compared.⁵⁷³ Included in the comparison is universalism as it relates to relativism, individualism and westernalization.⁵⁷⁴

⁵⁶⁶ *Id.* at 147.
⁵⁶⁷ *Id.*⁵⁶⁸ BERNIER, *supra* note 2, at 147-78.
⁵⁶⁹ *Id.* at 148
⁵⁷⁰ BERNIER, *supra* note 2, at 148.
⁵⁷¹ *Id.* at 157.
⁵⁷² *Id.*⁵⁷³ *Id.*⁵⁷⁴ *Id.*

Section 4.3: The conceptualization of Human Rights within the Reality of the Market

In this final section the author discusses the interplay between the concept of international human rights and the reality of what is actually taking place in the marketplace.⁵⁷⁵ The author asserts that there is an international consensus about basic human rights, but this ideology is not practically applied to political and economic forces affecting the world marketplace.⁵⁷⁶ The author recognizes this distinction and argues that many of the reasons the current system is not changing is because there are economic and political powers that are profiting from the current system and enjoying incredible benefits.⁵⁷⁷ Socio-economic rights including the right of equal access to opportunity for healthcare and genetic services and technologies are being protected by powerful interests and these individuals do not want to see a change in the distributive framework that would bring about more equality and fairness.⁵⁷⁸

⁵⁷⁵ *Id.* at 182.

⁵⁷⁶*Id*.

⁵⁷⁷ *Id.* at 192.

⁵⁷⁸ *Id.* at 191-92.