

NOTES

A Model Copyright Exemption to Serve the Visually Impaired: An Alternative to the Treaty Proposals Before WIPO

ABSTRACT

Copyright law presents visually impaired persons with serious barriers to access of the written word. A recent international effort seeks to remove these barriers to access, in limited instances, by allowing the creation of accessible formats of copyrighted works. While bodies like the World Blind Union—through several South American states—have presented draft treaties to the World Intellectual Property Organization (WIPO), to date the interested parties have not found a mutually agreeable solution. This Note surveys international intellectual property law as it relates to the problem, draws a comparison to the humanitarian concerns entangled with international patent law, and tracks the progress of the efforts toward resolution. The Note then discusses the shortcomings of the currently proposed solutions. Finally, this Note proposes a market-based solution to providing accessible works, which conforms to the requirements of the Berne Convention and TRIPS Accord’s “three-step test” and avoids the onerous process of finding an acceptable treaty as well as the static resolution such a treaty would provide.

TABLE OF CONTENTS

I.	INTRODUCTION	1371
II.	BACKGROUND	1376
A.	<i>Foundations of International Copyright</i>	1376

B.	<i>Interface with International Human Rights and Lessons from International Patent Law</i>	1380
C.	<i>The Economics of Copyright in a Digital World</i>	1386
D.	<i>A Summary of Current Exceptions for the Visually Impaired</i>	1390
E.	<i>The Proposed Solutions</i>	1393
	i. The First Proposed Treaty	1393
	ii. Proposals at the Twentieth Session of the Standing Committee.....	1395
	iii. The TIGAR Solution	1396
III.	WHY THE PROPOSED TREATIES ARE INADEQUATE AND UNNECESSARY MEASURES	1397
A.	<i>The Redundancy of the Treaties</i>	1397
B.	<i>The Shortcomings of the Proposed Treaties</i>	1399
C.	<i>Technology Specific Shortfalls of the Treaties</i> ..	1400
	i. The Lack of Adequate Ability to Circumvent Technological Protections	1401
	ii. Patent-Related Barriers to Access	1404
	iii. The Lack of a Standardized File Format for Accessible Digital Works Will Burden the Visually Impaired	1405
IV.	A MODEL LAW: THE ALTERNATIVE WIPO SHOULD PURSUE.....	1407
A.	<i>Important General Provisions</i>	1407
B.	<i>A Framework for an Effective Model Law</i>	1408
C.	<i>The Framework in International Law</i>	1410
V.	CONCLUSION	1411

In a word, literature is my Utopia. Here I am not disenfranchised. No barrier of the senses shuts me out from the sweet, gracious discourses of my book friends. They talk to me without embarrassment or awkwardness.

—Helen Keller¹

1. HELEN KELLER, *THE STORY OF MY LIFE* 85 (Bantam Books 2005) (1902).

I. INTRODUCTION

In 2002, approximately 161 million people in the world lived with a visual impairment.² Thirty-seven million of those people suffered from blindness with the remainder suffering from low vision.³ Visual impairment also affects marginalized populations at a greater rate: women, the elderly (over the age of fifty), and those living in developing nations experience visual impairment at significantly greater rates than men, younger individuals, and those living in the developed world.⁴ The total economic cost of visual impairment, measured as lost productivity, in the year 2000 amounted to an estimated \$19 billion attributable to blindness and \$42 billion attributable to all visual impairment.⁵ In the United States alone, visual impairment accounts for an annual loss of more than 209,000 quality-adjusted life years.⁶

2. Serge Resnikoff et al., *Global Data on Visual Impairment in the Year 2002*, 82 BULL. WORLD HEALTH ORG. 844, 846, 847 tbl.3 (2004).

3. *Id.* at 846. Definitions of visual impairment vary, but the World Health Organization (WHO) uses the following standards: (1) persons with visual acuity of less than 3/60 or a corrected visual field loss to less than ten degrees in the better eye, and (2) persons who are not blind but have visual acuity of less than 6/18 or a corrected visual field loss to less than twenty degrees in the better eye. *Id.* at 845 (citing WORLD HEALTH ORG. [WHO], INTERNATIONAL STATISTICAL CLASSIFICATION OF DISEASES AND RELATED HEALTH PROBLEMS, H54 (2d ed., 10th rev. 2007), available at <http://www.who.int/classifications/icd/en/>). While distinctions between normal vision, low vision, and blindness have legal implications in a variety of jurisdictions, those differences remain beyond the scope of this Note. As a matter of convenience to the author and reader, this Note refers to all persons with any degree of visual impairment collectively as the visually impaired. Additionally, this Note will not focus in any great depth on line drawing between groups based on legal or medical classifications. All references to the effects of copyright on the visually impaired will focus on general legal effects on abstract classes rather than effects on individuals, unless specifically noted otherwise.

4. *Id.* at 846 tbl. 2, 847 tbl. 3. Blindness increased more in the developed world (8.5 percent) than in the developing world (3 percent), excluding India and China, over the period 1990 to 2002. *Id.* at 848. However, in 2002, 3.8 million blind people lived in the developed world, while 35 million blind people lived in the developing world, including 6.7 and 8.9 million people in China and India respectively. *Id.* In 2008, the life expectancy at birth of an individual living in a high-income nation exceeded that of an individual living in a low-income nation by twenty-three years, explaining to some extent why the developed world has seen a greater increase in blindness. DEP'T OF HEALTH STATISTICS AND INFORMATICS, WORLD HEALTH ORG. [WHO], WORLD HEALTH STATISTICS 2010, tbl. 1, at 56 (Tony Waddell ed. 2010), available at <http://www.who.int/whosis/whostat/2010/en/index.html>.

5. Kevin D. Frick & Allen Foster, *The Magnitude and Cost of Global Blindness: An Increasing Problem That Can Be Alleviated*, 135 AM. J. OPHTHALMOLOGY 471, 474 (2003).

6. Kevin D. Frick et al., *Economic Impact of Visual Impairment and Blindness in the United States*, 125 ARCHIVES OPHTHALMOLOGY 544, 547 (2007). "Quality-adjusted life years" is

The visually impaired must negotiate substantial barriers in accessing the written word.⁷ Despite the availability of a variety of accessible media—ranging from Braille and large print editions to simple and complex technological solutions (e.g., magnifiers, computer software–hardware combinations)—the cost of these technologies creates a large burden borne by the visually impaired.⁸ Even texts within the public domain, when rendered in an accessible format, become expensive: an English-Braille version of the Roman Catholic Bible can cost more than \$700;⁹ Shakespeare’s *Hamlet* costs approximately four times as much in Braille;¹⁰ and in Indonesia, printing a Braille version of the Qur’an costs 1.2 million rupiah¹¹

[a] method used to measure the benefit of medical intervention. Each additional year of life attributed to the medical intervention is given a value reflecting the quality of life in that year. A value of 1 is given to a year lived in perfect health and a lower value, down to a minimum of 0, is given to any years with illness. . . . The benefit of medical intervention is measured by the [Quality-Adjusted Life Years] QALYs it generates which are defined as the sum of the additional years of life with each year weighted by its value.

Quality-Adjusted Life Years (QALYs), in OXFORD DICTIONARY OF ECONOMICS 370 (John Black et al. eds., 3d ed. 2009).

7. See Gretchen L. Wade, *Serving the Visually Impaired User*, 3 PORTAL: LIBR. & ACAD. 307, 309–11 (2003) (noting the increased costs and decreased availability of accessible formats of the written word).

8. For example, the Open Book software system allows a computer equipped with a scanner and sound card to read a book aloud. However, the software alone costs approximately \$1000. *Id.* at 310; see also *Open Book Scanning and Reading Software*, FREEDOM SCIENTIFIC, <http://www.freedomscientific.com/products/fs/openbook-product-page.asp> (last visited Nov. 7, 2010). Intel has developed a stand-alone device that accomplishes the same task and costs \$1500. Walter S. Mossberg, *Intel Makes Leap in Device to Aid Impaired Readers*, WALL ST. J., Nov. 19, 2009, at D1. One can use a Braille printer for access, but the Braille Blazer, for example, costs approximately \$1700. Wade, *supra* note 7, at 310.

9. E.g., *Roman Catholic Bible in Grade 2 Braille*, FUTURE AIDS: THE BRAILLE SUPERSTORE, <http://www.braillebookstore.com/view.php?T=The+Roman+Catholic+Bible+in+Grade+2+Braille> (last visited Nov. 7, 2010) (selling a Braille version of the Bible for \$709.95). Grade 2 Braille consists of the basic Braille alphabet (grade 1) “plus some two hundred contractions and abbreviations.” ROBERT B. IRWIN, *The War of the Dots*, in AS I SAW IT 1, 35 (1955), available at <http://www.afb.org/warofthedots/book.asp> (unpaginated). This system occupies 12–14 percent less space than previous Braille systems. *Id.* at 48.

10. Compare “*Hamlet Folger*,” AMAZON.COM, <http://www.amazon.com> (search for “*Hamlet Folger*”) (last visited Nov. 7, 2010) (pricing a new copy of *Hamlet* at approximately \$6), with *Hamlet (Prince of Denmark)*, FUTURE AIDS: THE BRAILLE SUPERSTORE, <http://www.braillebookstore.com/view.php?T=Hamlet> (last visited Nov. 7, 2010) (pricing a Grade 2 Braille version of *Hamlet* at approximately \$29, more than 4.3 times the price of Amazon’s paperback version).

11. Heru Asprihanto, *Indonesia’s Only Braille Koran Gives Faith to Blind*, REUTERS, Oct. 8, 2007, <http://www.reuters.com/article/lifestyleMolt/idUSSP18552320071008>.

(approximately \$134¹² or €95¹³) while the per capita GDP is estimated at approximately 35 million rupiah¹⁴ (less than thirty times the cost of the Qur'an). The World Intellectual Property Organization (WIPO) estimates that the visually impaired can access no more than 5 percent of published books currently available because of format barriers.¹⁵

At the same time, technology continues to improve access to the written word for those visually impaired people who can afford it. Both Microsoft's and Apple's latest operating systems support increased access for the visually impaired.¹⁶ Public libraries have made digital audio book downloads available to the blind as a free lending service.¹⁷ E-book readers like Amazon's Kindle line and Sony's Reader line allow readers to adjust the size of the font.¹⁸ The Kindle line also has the ability to convert text to speech.¹⁹ However, visually impaired users report difficulty in activating the function.²⁰ This drawback has stopped at least two American universities from

12. *Universal Currency Converter*, XE: THE WORLD'S FAVORITE CURRENCY SITE, www.xe.com/ucc (last visited Nov. 7, 2010) (converting Indonesian Ruphias to U.S. dollars using the exchange rate of 1 USD = 8,920 IDR).

13. *Id.* (converting Indonesian Ruphias to Euros using the exchange rate of 1 EUR = 12,573 IDR).

14. CENT. INTELLIGENCE AGENCY, THE CIA WORLD FACTBOOK 2008, at 298 (2007), available at <https://www.cia.gov/library/publications/the-world-factbook/geos/id.html> (estimating the per capita GDP at \$3,900); see generally *Universal Currency Converter*, *supra* note 12 (establishing the exchange rate at 1 USD = 8920 IDR).

15. World Intellectual Prop. Org. [WIPO], Standing Comm. on Copyright and Related Rights, *Study on Copyright Limitations and Exceptions for the Visually Impaired*, 15th Sess., Sep. 11–13, 2006, at 14, SCCR/15/7 (Feb. 20, 2007) [hereinafter *WIPO Exceptions*].

16. *Accessibility in Windows 7*, MICROSOFT ACCESSIBILITY, <http://www.microsoft.com/enable/products/windows7/> (last visited Nov. 7, 2010) (describing tools included in Windows 7 to magnify on-screen images, increase the size of text, turn text into audio, and recognize the user's voice for dictation); *Mac OS X—Universal Access*, APPLE, <http://www.apple.com/macosx/accessibility/> (last visited Nov. 7, 2010) (describing tools included in Mac OS X "Snow Leopard" to magnify on-screen images, turn text into audio, describe websites via audio, and connect to Braille displays "right out of the box").

17. See, e.g., *NLS/BPH: What's New? 2009*, LIBRARY OF CONGRESS, <http://www.loc.gov/nls/whatsnews2009.html> (last visited Nov. 7, 2010) (describing the launch of the Braille and Audio Reading Download (BARD) service of the National Library Service, which provides the visually impaired with access to digital audio book downloads for free); *Talking Book and Braille Services Patron Handbook*, OREGON STATE LIBRARY, <http://www.oregon.gov/OLS/TBABS/general.shtml> (last visited Nov. 7, 2010) (describing the Oregon State Library's participation in the BARD program).

18. Brad Stone, *E-Book Fans Keep Format in Spotlight*, N.Y. TIMES, Oct. 21, 2009, at B1.

19. Rachel Metz, *Schools Shun Kindle, Saying Blind Can't Use It*, ASSOCIATED PRESS, Nov. 11, 2009, available at http://www.msnbc.msn.com/id/33861522/ns/technology_and_science-tech_and_gadgets/.

20. *Id.*

rolling the device out to their students on a large scale.²¹ A third school, Arizona State University, found itself in court because of participation in a Kindle pilot program.²²

In large part, technology drives the increases in access to the written word for the visually impaired because, in the digital world, the price of information trends towards zero.²³ Unlike tangible media used to deliver information, which has a marginal cost linked to the scarcity of its production components, the information itself has a reproduction cost of effectively zero.²⁴ Parties recognized this idea and the odd cost–price dichotomy of information in the earliest days of the information economy, well before the rise of the Internet.²⁵ In 1984, Steven Levy reported on the “hacker’s ethic,” which included among its maxims that “[a]ll information should be free.”²⁶ Later that year, Stewart Brand reinterpreted this maxim as “information wants to be expensive, because it’s so valuable” while “information wants to be free, because the cost” of distribution constantly approaches zero.²⁷

While technology may solve access problems for some, 90 percent of visually impaired people “live in countries of low or moderate incomes.”²⁸ The developing world does not have the same access to technology as the developed world, and that access improved slightly, at best, between 1997 and 2007.²⁹ Approximately 70 percent of all

21. *Id.* (noting that the University of Wisconsin–Madison and Syracuse University halted further use of Kindles “unless Amazon makes [them] more accessible to visually impaired students”).

22. Nat’l Fed’n of the Blind v. Ariz. Bd. of Regents, No. CV–09–1359–PHX–GMS, 2009 WL 3352332, at *1–2 (D. Ariz. Oct. 16, 2009) (granting defendant’s motion to dismiss for lack of standing).

23. CHRIS ANDERSON, FREE: THE FUTURE OF A RADICAL PRICE 92 (2009) (“The Web has become the land of the free, not because of ideology but because of economics. Price has fallen to the marginal cost, and the marginal cost of everything online is close enough to zero that it pays to round down.”).

24. *See id.* at 241 (explaining how the price of technology varies with its components and how the cost of the components are getting closer to zero each year).

25. *Id.* at 101 (citing William Henry Gates III, General Partner, Micro-Soft, An Open Letter to Hobbyists (Feb. 3, 1976), available at <http://www.blinkenlights.com/classiccmp/gateswhine.html> (“[M]ost of you steal your software. Hardware must be paid for, but software is something to share.”)).

26. *Id.* at 94 (quoting STEVEN LEVY, HACKERS: HEROES OF THE COMPUTER REVOLUTION 27–33 (1984)).

27. *Id.* at 96.

28. WIPO, Standing Comm. on Copyright and Related Rights, *Proposal by Brazil, Ecuador and Paraguay, Relating to Limitations and Exceptions: Treaty Proposed by the World Blind Union (WBU)*, Annex 1 pmbl., at 2, SCCR/18/5 (May 25, 2009) [hereinafter *WBU Proposed Treaty*].

29. *See* WORLD INFO. ACCESS PROJECT, WIA REPORT 2006, at 2 (Philip N. Howard ed., 2006), http://www.wiareport.org/wp-content/uploads/wia_report_2006.pdf (“[T]he world’s supply of computers, internet hosts, and secure servers is even more concentrated among core countries [than it was a decade before], and the distribution of these technologies among the world’s populations has only marginally improved.”).

people living in the United States reported having used the Internet by 2008.³⁰ In India, 7 percent reported the same use; in Mali, 0.7 percent.³¹ Internet access in the developing world is more expensive in income-relative and absolute terms.³² Residents of the developing world's urban cities spend an average of 14 percent of their daily income on one hour of Internet access.³³ That ratio is halved in the developed world.³⁴ Moreover, in 2004, 18.4 percent of the world's population lived on less than \$1 a day and 47.7 percent lived on less than \$2 a day.³⁵ The visually impaired also encounter greater difficulty finding and maintaining employment.³⁶ According to the World Bank, disabled people in general constitute 15–20 percent of the poor living in developing countries.³⁷

The visually impaired in the developing world have even fewer accessible-format works available.³⁸ For example, only approximately 0.5 percent of books published in India are converted to an accessible format.³⁹ Charities in Chile, Columbia, Mexico, Nicaragua, and Uruguay have produced a total of 8,517 accessible Spanish-language works.⁴⁰ By contrast, Spain has 102,000 accessible works, nearly twelve times as many.⁴¹

To a large extent, the solution to overall access to written works reflects policy decisions by individual states within the global

30. See Philip N. Howard & Nimah Mazaheri, *Telecommunication Reform, Internet Use and Mobile Phone Adoption in the Developing World*, 37 *WORLD DEV.* 1159, 1159 (2009) (noting that “[seven] out of every [ten] people in the United States reported ever using the internet by 2008”).

31. *Id.*

32. Eli Noam, *Why Broadband Internet Should Not Be the Priority for Developing Countries*, in *INTERNET POLICY AND ECONOMICS* 73, 74 (William H. Lehr & Lorenzo Maria Pupillo eds., 2009).

33. WORLD INFO. ACCESS PROJECT, *WIA REPORT 2007* (2007), http://www.wiareport.org/wp-content/uploads/wia_report_2007_with_map.pdf (measuring the rates at commercial access points, such as cyber cafes).

34. *Id.*

35. DEV. DATA GRP., WORLD BANK, 2007 WORLD DEVELOPMENT INDICATORS tbl. 2.6a, at 68 (2007).

36. Ann Elwan, *Poverty and Disability: A Survey of the Literature* para. 4.10, at 13–14 (Human Dev. Network, World Bank, Social Protection Discussion Paper Series, Paper No. 9932, 1999) (citing Peter Townsend, *Employment and Disability*, in *DISABILITY IN BRITAIN* 52, 59–60 (Alan Walker & Peter Townsend eds., 1981)).

37. *Id.* para. 4.14, at 15.

38. See WIPO, Standing Comm. on Copyright and Related Rights, *Background Paper by Brazil, Ecuador and Paraguay on a WIPO Treaty for Improved Access for Blind, Visually Impaired and Other Reading Disabled Persons*, Annex ¶ 1.2, at 1, SCCR/19/13 Corr. (Dec. 11, 2009) [hereinafter *Treaty Background*] (stating that “even in the wealthiest markets, less than 5 percent of published books are [available]” in accessible formats, thus implying that the developing world's visually impaired fare even worse (emphasis added)).

39. Letter from Daisy Forum of India to Francis Gurry, Dir. Gen., WIPO (Nov. 11, 2009), http://www.visionip.org/export/sites/visionip/news/en/pdf/vip_in_dg_09.pdf.

40. *Treaty Background*, *supra* note 38, Annex ¶ 1.3 ex. 2., at 2.

41. *Id.*

community, charitable organizations, and individual rights holders. While numerous open questions exist with regard to those decisions and the international law affecting them, those problems lay beyond the scope of the present analysis. This Note summarizes the aspects of international copyright that present specific hurdles to access for the visually impaired and the economic and philosophical principals undergirding those legal restrictions. This Note next analyzes current legal systems' provisions for overcoming these obstacles and the international proposals to expand such solutions. Finally, the Note addresses the specific implications these solutions have on access for the visually impaired. Ultimately the Note advances a market-based solution that effectively balances the rights holders' need for protection of their intellectual property with the visually impaired's need for access. The solution advocates a system that allows visually impaired people to access the written word at approximately the same rate as similarly situated, sighted individuals. As a final limitation, this Note addresses copyright only within the realm of the written word. The visually impaired have access limitations to a number of copyrighted materials, but the question of how to accommodate access in those other media will remain open.

II. BACKGROUND

A. *Foundations of International Copyright*

Individual nations justify the protection of copyright on a number of grounds, including natural law, encouragement of creativity, social utility, and just rewards.⁴² The major differences among domestic copyright laws stem from differences in source and the underpinning rationale in common law countries and civil law countries.⁴³ For example, in the United States, copyright law traces its roots to a constitutional source in the Copyright Clause,⁴⁴ which in

42. CARLOS M. CORREA, TRADE RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS: A COMMENTARY ON THE TRIPS AGREEMENT 115 (2007) (citing GILLIAN DAVIS, COPYRIGHT AND THE PUBLIC INTEREST 15–16 (2d ed. 2002)).

43. *Id.*

44. U.S. CONST. art. I, § 8, cl. 8 (“The Congress shall have power . . . [t]o promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive rights to their respective writings and discoveries . . .”). This constitutionally granted congressional power takes its current form primarily in the Copyright Act of 1976. *See generally* Copyright Act of 1976, 17 U.S.C. §§ 101–805, 1101 (2006). Other provisions codified in Title 17 of the United States Code are not part of the Copyright Act. Commentators have also referred to the clause as the Patent Clause, the Intellectual Property Clause, and the Progress Clause, but because of the subject matter, this Note shall refer to the Copyright Clause.

turn draws from England's Statute of Anne.⁴⁵ On the other hand, in France, the copyright law's (*droit d'auteur*, literally "authors' rights") authority stems from statute.⁴⁶ The very language of the Copyright Clause indicates that the Framers empowered Congress to create economic incentives for the production of creative works.⁴⁷ By contrast, the French copyright system—and the other civil copyright systems it gave rise to—incorporates the idea of an author's moral rights into the rationale behind copyright law.⁴⁸ WIPO member states explicitly recognize economic incentives as a driving concern of copyright law in one of the treaties proposed to solve certain access issues for the visually impaired.⁴⁹

In general, international copyright law grants to authors, *inter alia*, the complete right to reproduction of their works.⁵⁰ More importantly, the foundation of international copyright law extends at least some protection to all authors, not just citizens of the nation in which any reproduction occurs.⁵¹ This idea of reciprocal protection dates to at least the nineteenth century when the United States recognized that Americans received protections in the United Kingdom of Great Britain and Ireland and the Kingdom of France. However, the United States did not return such protections to

45. Jane C. Ginsburg, *A Tale of Two Copyrights: Literary Property in Revolutionary France and America*, 64 TUL. L. REV. 991, 992 (1990) (citing Statute of Anne, 1709, 8 Ann., c. 19 (Eng.)).

46. *Id.* at 997, 1005–14 (describing the pre-revolutionary system of French copyright, *ancien régime*, which amounted to a royal grant of monopoly to print, and extensively describing the debate to enact revolutionary-era legislation); BLACK'S LAW DICTIONARY 153, 570 (9th ed. 2009).

47. U.S. CONST. art I, § 8, cl. 8.

48. CODE DE LA PROPRIÉTÉ INTELLECTUELLE art. L111–1 (Fr.), available at http://195.83.177.9/upl/pdf/code_35.pdf (unofficial translation) ("This right shall include attributes of an intellectual and moral nature as well as attributes of an economic nature . . ."); see Ginsburg, *supra* note 45, at 992 ("[P]ost-revolutionary French laws and theorists portray the existence of an intimate and almost sacred bond between authors and their works as the source of a strong literary and artistic property right." (footnote omitted)). *But see* 17 U.S.C. § 106A (granting limited moral rights to some authors in the United States in compliance with the Berne Convention).

49. *WBU Proposed Treaty*, *supra* note 28, pmb., at 3.

50. Berne Convention for the Protection of Literary and Artistic Works art. 9(1), Sept. 9, 1886, as last revised at Paris, July 24, 1971, S. TREATY DOC. NO. 99–27, 828 U.N.T.S. 221 [hereinafter *Berne*].

51. *Id.* art. 3(1)–(2).

British, French, or Irish authors.⁵² The United States amended its copyright law fifty-three years later to grant these reciprocal rights.⁵³

The Berne Convention for the Protection of Literary and Artistic Works (Berne Convention) establishes a number of rights for authors.⁵⁴ The Berne Convention specifically establishes rights to reproduction,⁵⁵ translation,⁵⁶ and certain derivative works.⁵⁷ Exceptions to these rights aimed at increasing access for the visually impaired must meet the “three-step test” established in the Berne Convention⁵⁸ and ascended to by the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS),⁵⁹ the WIPO Copyright Treaty, and the WIPO Performances and Phonograms Treaty (together, WIPO Internet Treaties).⁶⁰ To meet this test, an exception must be limited to specific classes of users and works, avoid conflict with the normal exploitation of an author’s rights, and potentially allow for remuneration to the author (e.g., establishing a compulsory license).⁶¹ Under this system, a number of nations and

52. See HENRY CLAY, REPORT IN FAVOR OF INTERNATIONAL COPYRIGHT, S. DOC. NO. 24–179, at 179 (2d Sess. 1837), reprinted in THE QUESTION OF COPYRIGHT 33, para. 4, at 34–35 (Geo. Haven Putnam ed., 2d ed. 1896); see also An Act to Amend the Several Acts Respecting Copyright, S. 223, 24th Cong. (1837), reprinted in THE QUESTION OF COPYRIGHT, *supra*, at 38–39 (proposing a bill which would extend copyright protection to Irish, British, and French citizens).

53. International Copyright (Chace) Act of 1891, ch. 565, §§ 12–13, 26 Stat. 1106, 1110 (establishing copyright protection for works by foreign authors beginning on July 1, 1891); THE QUESTION OF COPYRIGHT, *supra* note 52, at 62–63 (providing the votes of both chambers of Congress in passing the Chace Act).

54. See generally Berne, *supra* note 50, arts. 6 bis, 8–9, 11–12, 14 (providing authors with various rights such as economic and moral rights, as well as rights to reproduction).

55. *Id.* art. 9.

56. *Id.* art. 8.

57. See *id.* arts. 9(3), 11 bis–12 (securing the author’s right of broadcasting, sound or visual reproductions, and any other adaptations or arrangements of the original work).

58. *Id.* art. 9(2) (“It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.”).

59. Agreement on Trade-Related Aspects on Intellectual Property Rights art. 13, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments—Results of the Uruguay Round, 1869 U.N.T.S. 299 [hereinafter TRIPS] (“Members shall confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the right holder.”).

60. GEIDY LUNG, WIPO, COPYRIGHT EXCEPTIONS FOR THE VISUALLY IMPAIRED para. 12, at 3 (2004); WIPO Copyright Treaty art. 1(4), Dec. 20, 1996, 36 I.L.M. 76, 2186 U.N.T.S. 121 [hereinafter WCT] (“Contracting Parties Shall Comply with Articles 1 to 21 and the Appendix of the Berne Convention”); WIPO Performances and Phonograms Treaty art. 16(2), Dec. 20, 1996, S. TREATY DOC. NO. 105–17, 2186 U.N.T.S. 203 [hereinafter WPPT] (using substantially the same language as the Berne Convention but substituting “performance or phonogram” for “work”).

61. LUNG, *supra* note 60, para. 12, at 3.

the European Union have established exceptions that allow for greater access for the visually impaired.⁶²

Despite its addition to the Berne Convention in 1967, the three-step test was not interpreted by an international tribunal until 2001.⁶³ That year, a WTO panel decision interpreted the test as it had been adopted in Article 13 of TRIPS.⁶⁴ First, the panel held that the first prong (“certain special cases”) of the test requires national legislation limitations and exceptions to be clearly defined and narrow in both scope and reach.⁶⁵ “Most purpose-specific exceptions would pass the first step of the test. An exception or limitation for the blind would almost certainly be compatible with the first step of the test.”⁶⁶ The panel interpreted the second prong of the test (“do not conflict with a normal exploitation of the work”) to mean that exceptions could not affect forms that were currently economically exploited by rights holders, as well as “those forms of exploitation which, with a certain degree of likelihood and plausibility, could acquire considerable economic or practical importance.”⁶⁷ Finally, the

62. *Id.* para. 13, at 3–4; see discussion *infra* Part II.D (summarizing the exceptions currently available for the visually impaired).

63. Comment submitted by Daniel Gervais, Professor, Vanderbilt Univ. Law Sch., responding to Copyright Office Notice of Inquiry and Request for Comments on the Topic of Facilitating Access to Copyrighted Works for the Blind and Other Persons with Disabilities, paras. 19, 26 (Oct. 13, 2009) [hereinafter Gervais Comment], <http://www.copyright.gov/docs/sccr/comments/2009/comments-2/daniel-gervais-vanderbilt-university-law-school.pdf>.

64. Panel Report, *United States—Section 110(5) of the US Copyright Act*, ¶ 6.97, WT/DS160/R (June 15, 2000) [hereinafter Panel Report]; see generally CORREA, *supra* note 42, at 146–55 (providing a detailed exposition of the panel’s decision); Gervais Comment, *supra* note 63, paras. 23–39 (summarizing and analyzing the interpretation of the three-step test by the WTO panel).

65. Panel Report, *supra* note 64, ¶¶ 6.112, 6.109 (“[A]n exception or limitation must be limited in its field of application or exceptional in its scope. In other words, an exception or limitation should be narrow in quantitative as well as a qualitative sense. This suggests a narrow scope as well as an exceptional or distinctive objective.”).

66. Gervais Comment, *supra* note 63, para. 29.

67. Panel Report, *supra* note 64, ¶ 6.180. Professor Gervais notes that this second prong’s application resembles the *Folsom* test, which is codified as the fourth fair use factor in American copyright law. Gervais Comment, *supra* note 63, para. 44; see generally 17 U.S.C. § 107 (2006) (“[T]he fair use of a copyrighted work . . . is not an infringement of copyright. In determining whether the use made . . . is a fair use the factors to be considered shall include . . . (4) the effect of the use upon the potential market for or value of the copyrighted work.”); *Folsom v. March*, 9 F. Cas. 342, 348 (C.C.D. Mass. 1841) (“In short, we must often, in deciding questions of this sort, look to the nature and objects of the selections made, the quantity and value of the materials used, and the degree in which the use may prejudice the sale, or diminish the profits, or supersede the objects, of the original work.”). However, failure in the context of the three-step test for a statutory exception is fatal, while the factor is simply an element of a balancing test in an American fair use analysis. Gervais Comment, *supra* note 63, para. 45. Compare TRIPS, *supra* note 59, art. 13, and Berne, *supra* note 50, art. 9(2), with 17 U.S.C. § 107 (whereas TRIPS and Berne strictly apply the three factors, the test in the United States allows the court to balance the different elements).

panel interpreted the final prong (“do not unreasonably prejudice the legitimate interests of the right holder”) to prohibit exceptions when they “cause[] or ha[ve] the potential to cause an unreasonable loss of income to the copyright holder.”⁶⁸

The TRIPS agreement expands signatory nations’ obligations under international copyright law.⁶⁹ Article 51 requires WTO member states to implement criminal provisions in their domestic copyright laws, at least in cases of commercial-scale piracy.⁷⁰ TRIPS also incorporates many of the provisions of the Berne Convention, thus making members of the WTO who did not sign the Berne Convention subject to most of its provisions.⁷¹ Most importantly, the TRIPS agreement, by incorporating the Berne Convention by reference (less Article 6 bis) and establishing a structure for limitations and exceptions very similar to Berne’s, actually expands the three-step test of Berne to cover rights other than reproduction (i.e., translation, public performance, broadcasting, public recitation, and adaptation, as well as the original right of rental established in TRIPS).⁷²

B. *Interface with International Human Rights and Lessons from International Patent Law*

As identified by WIPO, international copyright protections potentially conflict with other international laws.⁷³ Commentators identified a similar conflict in the field of international patent law, especially with regard to access to prescription medications used to treat diseases like HIV/AIDS.⁷⁴ The TRIPS agreement applies to

68. Panel Report, *supra* note 64, ¶ 6.229. The panel notes that some level of prejudice must be justified to give full effect to the Article’s meaning. *Id.* Furthermore, the panel concerns itself solely with the economic value of copyrights, but recognizes that the legitimate interests are not limited to economic interests. *Id.* ¶ 6.227.

69. See generally TRIPS, *supra* note 59, arts. 9–14 (stating rules governing the availability, scope, and use of copyright and related rights).

70. *Id.* art. 51.

71. *Id.* art. 9 (incorporating Articles 1–21 of the Berne Convention by reference, except for specifically excluding the moral rights provisions of Berne’s Article 6 bis).

72. CORREA, *supra* note 42, at 134–36; see also TRIPS, *supra* note 59, arts. 11, 13; Berne, *supra* note 50, arts. 8, 11–12.

73. Cf. Convention on the Rights of Persons with Disabilities, G.A. Res. 61/106, Annex I, arts. 9, 21, 30, U.N. Doc. A/RES/61/106 (Dec. 13, 2006); Standard Rules on the Equalization of Opportunities for Persons with Disabilities, G.A. Res. 48/96, Annex R. 5, at 14, U.N. Doc. A/RES/48/96 (Dec. 20, 1993); *VIPs and International Law*, WIPO, http://www.visionip.org/vip_resources/en/international_law.html (last visited Nov. 7, 2010) (citing Universal Declaration of Human Rights, G.A. Res. 217 (III) A, arts. 19, 27, U.N. Doc. A/RES/217(III) (Dec. 10, 1948) [hereinafter UDHR]) (noting individuals’ rights to freedom of expression and to “protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author”).

74. Ruth L. Okediji, *The Limits of Development Strategies at the Intersection of Intellectual Property and Human Rights*, in INTELLECTUAL PROPERTY, TRADE AND

patent protections in addition to copyright.⁷⁵ TRIPS mandates that patent holders receive protection against unauthorized production, use, sale, or importation of their products.⁷⁶ TRIPS Article 30 explicitly provides for national exceptions to the exclusive rights of patent holders, “provided that such exceptions *do not unreasonably conflict with a normal exploitation* of the patent and *do not unreasonably prejudice the legitimate interests* of the patent owner, taking account of the legitimate interests of third parties.”⁷⁷ When contrasted with the provision concerning exceptions and limitations of copyright, the patent provision substitutes the qualifier “limited” for the three-step test’s “certain special cases” qualification (i.e., the first prong)⁷⁸ while retaining the basis for the remainder of the test (the emphasized portions above).⁷⁹ The TRIPS allowance for patent exceptions might in fact extend further than the corresponding copyright provision, as evidenced by the final clause.⁸⁰ Despite the

DEVELOPMENT 355, 364–65 (Daniel J. Gervais ed., 2007); see HOLGER HESTERMEYER, HUMAN RIGHTS AND THE WTO 11–13 (2007) (describing the adoption of the South African Medicines and Related Substances Control Amendment Act, 1997, and the international backlash in the form of economic sanctions allowed under TRIPS, which conflicted with a constitutional mandate for the South African government to “protect its citizens’ right to health”); see generally S. AFR. CONST., 1996 ch. 2, § 27 (“1. Everyone has the right to have access to health care services . . . 2. The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights.”).

75. TRIPS, *supra* note 59, arts. 27–34.

76. *Id.* art. 28(1)(a). For purposes of this Note, the discussion will concern utility patents held on products. The discussion of other patents does not lend itself easily to a comparison to copyrights for the visually impaired. Additionally, the Paris Convention for the Protection of Industrial Property encompasses patents on an international scale. HESTERMEYER, *supra* note 74, at 34–35. But that agreement focuses primarily on harmonizing the treatment of individual patent applicants, without regard to nationality, and does not harmonize the various national patent laws. *Id.* at 35.

77. TRIPS, *supra* note 59, art. 30 (emphasis added). TRIPS also allows for individual use exceptions, such as those allowed during national emergencies, that need not conform with the restrictions of Article 30, but any such exception must “respect” eleven provisions, including an attempt to remunerate the patent holder. *Id.* art. 31.

78. *Id.* art. 30. However, this qualification does not provide the same guidance towards both qualitative and quantitative limits on patent exceptions. Compare CORREA, *supra* note 42, at 303 (stating that the patent language does not specify if these limitations should be in scope, duration, etc.), with *supra* notes 67–68 and accompanying text (establishing both quantitative and qualitative limitations).

79. Compare TRIPS, *supra* note 59, art. 30, with *id.* art. 13.

80. DANIEL GERVAIS, THE TRIPS AGREEMENT 241 (2d ed. 2003). But see *id.* at 216, 241 n.91.

While the use of similar language in a number of Sections of Part II of the Agreement [relating to copyright] increases consistency, the fact that it was lifted from an existing convention may be used to import the interpretation of that exception in the field of copyright. . . . In referring to material concerning

reservations of some observers,⁸¹ a WTO panel used the Berne Convention framework to analyze exceptions to patents under Article 30 of TRIPS.⁸² Currently at least six types of exceptions are recognized as valid under the framework of Article 30.⁸³

TRIPS Article 31 provides for the cases generally termed “compulsory licenses of a patented product.”⁸⁴ One can compare this provision to Article 13’s “limitations” language, regarding copyright, which scholars have interpreted as implying compulsory licensing.⁸⁵ Article 31 allows member states to compel the licensing of otherwise protected intellectual property.⁸⁶ However, this compulsion can occur only in concert with one of five situations: “refusal to deal, national emergency or extreme urgency, anti-competitive practices, non-commercial use, and dependent patents.”⁸⁷ While Article 31 calls for remuneration to the patent holder, small payments—with little relationship to the cost of developing the patent or the potential market profits—serve as the norm.⁸⁸

Heightened patent protection increases the price of prescription drugs, thereby reducing access to those medications. This protection disproportionately affects developing countries whose governments

the Berne Convention, however, it is necessary to take into account the different nature of copyright and other intellectual property rights

Id.

81. See, e.g., *id.* at 241 (“[G]iven the different nature of industrial property, the reference to copyright-related principals here should be limited to terminology and carried out with utmost caution.”).

82. Panel Report, *Canada—Patent Protection of Pharmaceutical Products*, ¶ 7.14, WT/DS114/R (Mar. 17, 2000); see also Susy Frankel, *WTO Application of “the Customary Rules of Interpretation of Public International Law” to Intellectual Property*, 46 VA. J. INT’L L. 365, 403–04 (2006) (discussing the relationship between the Berne Convention and the TRIPS Agreement, including Article 30).

83. CORREA, *supra* note 42, at 303 (recognizing exceptions for importation of products available in other member states; private, non-commercial actions; research, experimentation, and teaching purposes; regulatory approval for marketing of a product’s generic version before the patent’s expiration; preparation of medicines according to individual prescriptions; and use by a third party who independently invented, but does not hold, the patent rights).

84. GERVAIS, *supra* note 80, at 165; Jennifer Bjornberg, *Brazil’s Recent Threat on Abbott’s Patent: Resolution or Retaliation?*, 27 NW. J. INT’L L. & BUS. 199, 202 (2006).

85. SAM RICKETSON & JANE C. GINSBURG, INTERNATIONAL COPYRIGHT AND NEIGHBORING RIGHTS ¶ 6.110 (2006). *Contra* GERVAIS, *supra* note 80, at 89–90 (“[O]ne would be tempted to say that [Article 13] allows countries to create new compulsory licenses. . . . [T]his line of argument must fail. Introducing *new* compulsory licenses would in almost all cases violate the Berne Convention.”).

86. Bjornberg, *supra* note 84, at 202.

87. *Id.* at 203 (footnotes omitted) (citing TRIPS, *supra* note 59, art. 31(b), (l), (k)).

88. *Id.* at 202–03 (“[T]he sum is generally nominal and is modest in comparison both to the amount invested by the patent-holder and the potential returns available under the usual regulatory scheme.”).

cannot easily afford to subsidize pharmaceutical products.⁸⁹ This limitation to access may nonetheless comport with international human rights values.⁹⁰ Similarly, a limitation on access for the visually impaired indirectly imposed by copyright law, whether desirable or not, may comport with those same values.⁹¹ One justification for the limitation on access to medications is the moral or material rights of the patent holder.⁹² For example, Ronald Cass argues that the foundations of intellectual property, as an element of comprehensive property rights, lie within the framework of human rights.⁹³ He further contends that the human rights implicated in the protection of intellectual property place intellectual property within the protection of the Universal Declaration of Human Rights.⁹⁴ However, one can distinguish intellectual property rights, which stem from a quid pro quo arrangement established to pursue a net benefit to society,⁹⁵ from other rights, which society has recognized as fundamental to civilized existence.⁹⁶

89. HESTERMEYER, *supra* note 74, at 149. *But see* Richard P. Rozek & Ruth Berkowitz, *The Effects of Patent Protection on the Prices of Pharmaceutical Products: Is Intellectual Property Protection Raising the Drug Bill in Developing Countries?*, 1 J. WORLD INTEL. PROP. 179, 180 (1998) (stating that with the adoption of TRIPS, “there should be no concern about IPP [intellectual property protections] increasing the price for existing products”) (cited in HESTERMEYER, *supra* note 74, at 149 (dismissing the methodology of Rozek and Berkowitz)).

90. HESTERMEYER, *supra* note 74, at 152.

91. *Cf. id.* (approving access-limiting market dynamics under international law).

92. *Id.* at 153.

93. Ronald A. Cass, *Intellectual Property and Human Rights*, in ARE INTELLECTUAL PROPERTY RIGHTS HUMAN RIGHTS? 31, 33 (Federalist Soc’y ed., 2007); *see also* Francesco Francioni, *Genetic Resources, Biotechnology, and Human Rights: The International Legal Framework*, in BIOTECHNOLOGIES AND INTERNATIONAL HUMAN RIGHTS 3, 4 (Francesco Francioni ed., 2007) (“[L]ooking at biotechnology through the lens of human rights will immediately entail the acknowledgement of the basic freedom of scientific research and the right to enjoy the benefits of scientific progress and its applications.” (internal quotation marks omitted)). *Compare* UDHR, *supra* at note 73, art. 27 (establishing a right to protection of one’s “scientific, literary, or artistic production”), *with id.* art. 27 (establishing a right to “enjoy the arts and share in scientific advancement and its benefits”). *But see id.* art. 25, para. 1 (establishing a right to access health care).

94. *See, e.g.,* Cass, *supra* note 93, at 35.

[U]nable to persuade a government to invest in adequate medical care, some people who are concerned with health issues wish to conscript pharmaceutical companies to serve poor communities without the remuneration that they otherwise would receive. . . . [I]t is clear that these are a direct assault on the human rights protected by the United Nations Declaration [on Human Rights]

Id.

95. HESTERMEYER, *supra* note 74, at 154; *see also* CORREA, *supra* note 42, at 99 (noting that “the recognition and enforcement of intellectual property rights are subject to higher social values”). Such values are enshrined in the U.S. Constitution. U.S. CONST. art. I, § 8, cl. 8 (“*To promote the Progress of Science and useful Arts*, by securing

This net-social-benefit theory of intellectual property rights serves as the other primary justification for preferring intellectual property rights to other rights.⁹⁷ This justification effectively weighs the rights of future generations against the current one by defining the exclusive rights granted as the incentive to develop new intellectual property (e.g., pharmaceuticals).⁹⁸ That is, if patent holders' economic incentives (i.e., the return on investment for one's current patent portfolio) diminish, then the number of new medications developed will also shrink as a function of that lessened protection.⁹⁹ Scholars have hotly debated the legitimacy of this justification, as studies of the overall social welfare return of the patent system have achieved no consensus.¹⁰⁰ Furthermore, the profitability of a patentable drug, or even an entire pharmaceuticals company, might remain with either a shorter patent protection period, the allowance of exceptions based on economics, or both.¹⁰¹ Nonetheless, black- or grey-market drugs—crossing borders after production and sale at a lower price in another country, within or outside of patent protection—remains a lingering, and very real, concern for rights holders. These sales may reduce patent holders' profits when customers divert to these alternative sources and thus reduce the incentive to create patented products.¹⁰²

Many of the concerns over patent-law exceptions apply in the field of copyright. However, copyright presents a distinct legal right with separate protection issues. The concerns over patent exceptions

for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” (emphasis added)).

96. UDHR, *supra* note 73, pmb1. (recognizing human dignity and rights as “the foundation of freedom, justice, and peace in the world”).

97. HESTERMEYER, *supra* note 74, at 158.

98. *Id.*

99. *Id.*; Cass, *supra* note 93, at 35.

100. HESTERMEYER, *supra* note 74, at 159.

101. *Id.* at 159–63.

[T]he TRIPS Agreement's 20-year patent term does not rely on economic studies, but rather historic coincidence and goes back to the Belgium patent legislation passed in 1854. . . . As developing countries' markets lack the financial capital to acquire expensive drugs, the fact that monopoly rents can be collected is of little relevance—developed country markets remain more attractive.

Id.

102. *Id.* at 165; Duff Wilson, *Battle Over Drug Imports*, N.Y. TIMES, Dec. 12, 2009, at A12.

[Sen.] Dorgan says that Americans can save \$100 billion over the next [ten] years by buying drugs from Canada, Europe or Japan. Prices in those places, thanks to government controls, are 35 percent to 55 percent lower than for the same drugs by the same makers sold in the United States.

Wilson, *supra*, at A12.

should not deter an international solution for access to copyrighted works by the visually impaired. Payment for access to copyrighted works compensates the author for expression captured in a particular format. In contrast, payment for patented inventions compensates the inventor for the right of access to the embodiment of the protected idea.¹⁰³ Thus one can clearly delineate alternative formats of copyrighted works from the underlying, protected work.¹⁰⁴ One cannot say the same of patented products, like drugs, where use of a black market, exception or limitation, or parallel import obviates the need for the product supplied by the patent holder.¹⁰⁵ At least some alternative formats will present no real competition to mainstream formats and one can easily classify them as highly imperfect substitutes (e.g., Braille).¹⁰⁶ Therefore one cannot apply a net-social-benefit theory of copyright to subordinate other human rights concerns a priori. In fact, copyright exceptions for the visually impaired present a vehicle for even greater benefit to disadvantaged populations than patent-law exceptions¹⁰⁷ while preserving the economic and moral interests of authors.¹⁰⁸ Copyright-protected trade benefits the developed world disproportionately more than patent-protected trade.¹⁰⁹ The United States experienced a net trade surplus of \$23 billion in 1999 related to intellectual property trade.¹¹⁰

103. WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 294–96 (2003) (explaining that patent protection forbids the making, sale, or use of protected ideas, while copyright protections forbid copying of expression rather than ideas).

104. While the value of patent-protected goods comes from the embodiment of the idea, the fundamental value of a copyrighted work issues from the expression regardless of its embodiment. Patent law specifically forbids many substitute goods, requiring any competitor to work around an in-force patent if he or she desires to create a substitute good. *Id.* at 295. By contrast, authors gain no protection from the majority of substitute goods based on their copyrights; however, the law always bans perfect substitutes (unauthorized copies) of a protected work. *Id.* at 295–96. For example, assuming Firm A holds a patent on the fork, Firm B cannot produce sporks without licensing Firm A's patent, but could produce chopsticks. By contrast, Ray Bradbury could not be stopped from publishing *Fahrenheit 451* in 1953 because George Orwell had already addressed a dystopian future fraught with government censorship four years earlier, but Bradbury certainly could not sell unauthorized e-books of *Nineteen Eighty-Four*.

105. See *infra* Part III.C and accompanying text (discussing market dynamics unique to nonvisual reading aids).

106. See *infra* text accompanying note 151.

107. See *infra* notes 109–13 and accompanying text (comparing the copyright-protected trade benefits versus the patent-protected trade).

108. See *infra* Part IV (proposing a solution to serve the needs of visually impaired individuals while protecting rights holders).

109. See Alan Story, *Don't Ignore Copyright, the 'Sleeping Giant' on the TRIPS and International Education Agenda*, in *GLOBAL INTELLECTUAL PROPERTY RIGHTS* 125, 129–30 (Peter Drahos & Ruth Mayna eds., 2002) (comparing the benefits from copyrights and patent to American trade).

110. *Id.* at 131 (citing 55 INT'L MONETARY FUND, *BALANCE OF PAYMENTS STATISTICS YEARBOOK* 2004 (2004)).

Copyrighted materials account for the largest proportion of this trade surplus.¹¹¹ The American motion picture industry experienced a trade surplus with *every* other nation in 2001¹¹² and copyright-related exports accounted for more than five times the exports of the American pharmaceutical industry.¹¹³

C. *The Economics of Copyright in a Digital World*

Economic incentives serve as a fundamental rationale for the establishment of copyright law across the globe. While some nations intermix this rationale with moral rights, others—like the United States—allow the economic incentives alone to sustain their copyright laws. If one assumes that the economic rationale drives both the need and desire for copyright protections, then that rationale must seek to balance the incentives of creation with the ability to access.¹¹⁴ “For copyright law to promote economic efficiency, its principal legal doctrines must, at least approximately, maximize the benefits from creating additional works minus both the losses from limiting access and the costs of administering the copyright protection.”¹¹⁵

Professor Landes and Judge Posner identify two costs in the production of a copyrighted work: creative costs and the copying cost.¹¹⁶ The former does not vary based on the number of copies produced, at least in the sense that producing a second copy does not require the author to expend any additional creative effort.¹¹⁷ The latter incorporates the cost of replication and distribution in the relevant medium.¹¹⁸ “The creator will make copies up to the point

111. See *id.* at 129–31 (citing STEPHEN E. SIWEK, COPYRIGHT INDUSTRIES IN THE U.S. ECONOMY—THE 2000 REPORT 3 & chart 1 (2000), http://www.iipa.com/pdf/2000_SIWEK_EXEC.pdf) (stating that while the American intellectual property trade surplus was not divided between patent and copyright-related income, research indicates the supremacy of copyright income).

112. *Id.* at 129 (citing Press Release, Motion Picture Ass’n Am., Valenti Warns of Potentially Devastating Economic Impact of Copyright Theft (Apr. 3, 2001), available at http://www.mi2n.com/press.php3?ej=md&press_nb=20747).

113. *Id.* at 130 (citing S. REP. NO. 104–315, at 8 (1996)).

114. William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325, 326 (1989).

115. *Id.*

116. *Id.* at 326–27.

117. *Id.* But one can certainly imagine variable creation costs when anticipating the final size of the audience. For example, a writer who quickly writes a short story with the goal of improving his own craft would most likely invest less in its production than his or her novel intended for publication. Somewhat paradoxically though, the investment in additional creative work can serve to limit the number of copies produced (e.g., James Joyce’s *Finnegans Wake*, which took seventeen years to produce and receives critical notoriety for literary difficulty). See generally John Bishop, *Introduction* to JAMES JOYCE, *FINNEGANS WAKE* vii, vii (Penguin Books 2d ed. 1999) (1939) (applauding Joyce’s extraordinary efforts in completing the sophisticated piece).

118. Landes & Posner, *supra* note 114, at 327.

where the marginal cost of one more copy equals its expected marginal revenue.”¹¹⁹ For a work available in a digital format, that marginal cost is effectively zero and, as such, economic theory predicts that rights holders will distribute additional copies for almost nothing.¹²⁰ This cost will not truly reach zero because one must account for promotion, overhead, etc., but at some point, the marginal cost of making an additional digital copy of a work becomes so negligible that rational pricing theory rounds the price down to zero.¹²¹

This economic theory does not imply that digital books should cost nothing.¹²² Much of the marginal costs considered by Professor Landes and Judge Posner do not exist in the digital world; “the cost of printing, binding, and distributing [physical] copies” effectively does not exist with an Internet-based distribution model.¹²³ However, individual books serve as “good but not perfect substitutes” for one another.¹²⁴ And the creation of a monopoly reproduction right in the author, or his or her assigns, prevents the marginal price of a book from reaching zero,¹²⁵ although its digital marginal costs will become zero. Thus, marginal price equals marginal profit, and the author will price his work to maximize monopolistic profit.¹²⁶ These returns will serve to compensate the author for the creative costs of the writing.¹²⁷

Even within an Internet distribution model, authors must expend creative costs before they know the true demand for the final product.¹²⁸ So, “the work will be created only if the difference between expected revenues and the cost of making copies equals or exceeds the cost of expression.”¹²⁹ Moreover, the marginal profits must incorporate the risk of failure.¹³⁰ Logically, authors will only

119. *Id.*

120. See ANDERSON, *supra* note 23, at 92–93 (discussing the economics of the Internet and the long-term supply and demand implications); cf. Landes & Posner, *supra* note 114, at 327–28 (discussing the economic factors that impact the production of books or other copyrightable works).

121. ANDERSON, *supra* note 23, at 92.

122. Cf. Landes & Posner, *supra* note 114, at 327–28 (noting that “for a new work to be created, the expected return . . . must exceed the expected cost”).

123. *Id.*; ANDERSON, *supra* note 23, at 92.

124. Landes & Posner, *supra* note 114, at 327.

125. See *id.* at 328 (discussing the ability of book publishers to partake in price discrimination, assuming copyright protection exists).

126. *Id.* at 327, 336.

127. *Id.* at 327.

128. *Id.*

129. *Id.* at 327.

130. *Id.* at 328.

expend the creative costs if the expected monopolistic revenues, including the risk of failure, exceed the costs of production.¹³¹

Because copiers other than the author bear no creative costs and can wait until real-world sales performance mitigates the risk of failure, they can distribute the same work at their marginal cost, undercut the author's pricing, and stop the author from recouping his creative costs.¹³² Therefore, absent the legal protection of copyright, uncertainty creates a disincentive for authors to create.¹³³ Furthermore, when that marginal cost becomes zero because of the technology used to copy and distribute the work, the risk of failure to a non-author also becomes effectively zero.¹³⁴ The non-author distributing digitally has every economic incentive to distribute the work as soon as possible, thus eliminating the author's limited window of exclusive distribution in a world without copyright protection.¹³⁵ Thus, without copyright protections in a digital market, authors would lose the opportunity to recoup creative costs and have little economic incentive to produce creative works.¹³⁶

Professor Landes and Judge Posner identify several practical obstacles that limit the ability to copy an original work.¹³⁷ Two decades ago, they concluded that these obstacles "do not make a persuasive case for eliminating copyright protection."¹³⁸ These physical obstacles become even weaker in a digital distribution market.¹³⁹ For example, the inferiority of copies is substantially eliminated and technology greatly reduces the time required to make a copy.¹⁴⁰

In balancing all of these considerations, Professor Landes and Judge Posner come to the conclusion that the total welfare of society, with regard to creative works, depends on the number of works produced and the consumer and producer surpluses resulting from

131. *Cf. id.* at 327–28 (discussing the break-even point needed to stir author production).

132. *Id.*

133. *Id.* at 329 (“[U]ncertainty generates an additional disincentive to create works in the absence of copyright protection.”).

134. *See id.* at 329 (discussing the relationship between risk and marginal cost). The cost is “effectively” zero and not truly zero because of the costs of creating or acquiring the initial file.

135. *Id.* at 328.

136. *See id.* at 327–28 (noting that production incentives are predicated on, *inter alia*, cost recovery).

137. *Id.* at 329–31 (listing as the practical obstacles, potential inferior quality of copies, addition of creative costs in copying, the time which copying takes, contractual alternatives to copyright, high cost of access to an original copy, and nonmonetary benefits to publishing).

138. *Id.* at 329.

139. *Id.*

140. Martin Peitz & Patrick Waelbroeck, *Piracy in Digital Products: A Critical Review of the Theoretical Literature*, 18 INFO. ECON. & POL'Y 449–50 (2006); *see also* Landes & Posner, *supra* note 114, at 329–30 (discussing production costs).

those works.¹⁴¹ The welfare provided by any one work will likely decrease as copyright protection increases, but the number of works may rise.¹⁴² Ultimately, the optimal quantity of protection depends on the value of the work to society (i.e., protection should increase with value).¹⁴³ However, differentiation of protection levels or terms would create serious problems in administration and enforcement,¹⁴⁴ and courts and legislatures have proven unwilling to make judgments as to the worth of individual works.¹⁴⁵

Derivative work rights affect the economics of copyright with regard to the visually impaired.¹⁴⁶ A translation into another language or medium constitutes a derivative work.¹⁴⁷ Copyright law generally grants a monopoly of all such derivative works to the original author.¹⁴⁸ In a digital marketplace, derivative works serve as a cost-effective method of access for the visually impaired and a potential source of massive infringement.¹⁴⁹ These conflicting aspects of digital derivative works create special difficulties in the realm of copyright reform aimed at increasing access to the visually impaired.¹⁵⁰ Generally, derivative works constitute imperfect

141. Landes & Posner, *supra* note 114, at 341.

142. *Id.* at 340–41.

143. *Id.* at 343.

144. *See id.* at 363 (describing the motivation for setting the copyright term for individual authors, as life plus a term of years, as a convenient means of determining the date on which all of an author's works enter the public domain).

145. *See, e.g.,* Bleistein v. Donaldson Lithographing Co., 188 U.S. 239, 251 (1903) (“It would be a dangerous undertaking for persons trained only to the law to constitute themselves final judges of the worth of pictorial illustrations, outside of the narrowest and most obvious limits.”); 17 U.S.C. § 302 (2006) (establishing consistent copyright terms across classes of authorship, e.g., works of individuals, works-for-hire, pseudonymous works).

146. *E.g.,* WBU Proposed Treaty, *supra* note 28, Annex 1 art. 4(a)(2), at 5 (recognizing that problems, including navigation of the work, require changes in the work beyond pure formatting).

147. Landes & Posner, *supra* note 114, at 353; *accord* 17 U.S.C. § 101 (2006) (“A ‘derivative work’ is a work based upon one or more preexisting works, such as a translation”); Berne, *supra* note 50, art. 2(3) (“Translations . . . of a literary . . . work shall be protected as original works without prejudice to the copyright in the original work.”).

148. Landes & Posner, *supra* note 114, at 354; *e.g.,* 17 U.S.C. § 106(2) (“[T]he owner of copyright under this title has the exclusive rights . . . to prepare derivative works based upon the copyrighted work”); Berne, *supra* note 50, art. 9(3), 11 bis–12 (granting exclusive rights to prepare derivative works).

149. *Compare* N.Y. Times v. Tasini, 533 U.S. 483, 487–88 (2001) (holding that digital reproduction of freelance journalists’ news articles in online databases is not authorized by 17 U.S.C. § 201(c), and is thus a violation of § 106(a)), *with* Greenburg v. Nat’l Geographic Soc’y, 533 F.3d 1244, 1249, 1252–53 (11th Cir. 2008) (en banc) (holding that a digital reproduction of a magazine, in its entirety, which preserved the appearance of the original print issues, was allowed by 17 U.S.C. § 201(c) and thus not a violation of § 106(a)).

150. *See, e.g.,* ELEC. FRONTIER FOUND. ET AL., DIGITAL RIGHTS MANAGEMENT (2005), available at <http://www.eff.org/wp/digital-rights-management-failure->

substitutes for the original work, or no substitute at all.¹⁵¹ Furthermore, “it would be speculative to conclude that, without control over derivative works, authors . . . would not be able to cover the fixed costs of the original work.”¹⁵² However, some derivative works prepared to promote access for the visually impaired do serve as very close substitutes for the sighted (e.g., large print or “talking” books), which could affect sales of the underlying work.¹⁵³ As a result, many nations that have adopted exceptions to the derivative-work rights of the author to benefit the visually impaired have also strictly limited those rights.¹⁵⁴

This section has not fully described the economics of copyright,¹⁵⁵ but it provides a sufficient foundation for the examination of copyright reforms to increase access to the visually impaired.¹⁵⁶

D. A Summary of Current Exceptions for the Visually Impaired¹⁵⁷

At the outset of this section, it is important to note the nature of an exception to copyright provisions. Generally, exceptions are definitions of behaviors that do not infringe copyright.¹⁵⁸ Domestic copyright laws do not consider these exceptions grants of rights to any aspect of the copyrighted works.¹⁵⁹ Rights owners still retain the ability to prevent the behavior via contract with those who are reproducing works, or could do so, under the exceptions. But, in general, any such contract serves as an unrealistic method of preventing parties from utilizing an exception because of the methods

developed-world-danger-developing-world (noting that while copyright laws often grant disabled people rights that supersede those of the author, or his assign, the “private rights holders [can] unilaterally prevent the exercise of those rights” through the use of digital rights management technology).

151. Landes & Posner, *supra* note 114, at 354.

152. *Id.*

153. See *Treaty Background*, *supra* note 38, Annex ¶¶ 1.1, 2.1, at 1, 4 (recognizing the need to limit the scope of the treaty to the visually impaired).

154. *E.g.*, 17 U.S.C. § 121 (2006) (excepting reproductions for the “blind or other persons with disabilities” from infringement, and requiring limits, *inter alia*, on the format, accompanying notices, and persons who may use such reproductions); *cf.* 17 U.S.C. § 106 (2006) (enumerating the rights of the author to which § 121 establishes exceptions); see discussion *infra* Part II.D (discussing exceptions that have developed for the visually impaired).

155. See *generally* Landes & Posner, *supra* note 114, at 325 (examining “the field of copyright as a whole, [and] discussing the evolution and major doctrine in the law from an economic standpoint”).

156. See discussion *infra* Part IV (proposing a solution that should be pursued by the WIPO to address the needs of the visually impaired).

157. For a more complete exposition of current exceptions, see *WIPO Exceptions*, *supra* note 15.

158. *Id.* ¶ 2.11, at 44.

159. *Id.*

and scope of the distribution of the underlying work.¹⁶⁰ Conversely, in the context of digital files, copyright owners have a realistic method of allowing distribution to the visually impaired while controlling what exceptions might be employed.¹⁶¹ Traditional “first-sale doctrine” does not apply in cases of digital sales under strict contract terms or with technological restrictions.¹⁶²

A number of nations have developed exceptions to the copyrights of authors with the specific intent of increasing access for the blind.¹⁶³ The scope of these exceptions varies.¹⁶⁴ In most cases, nations craft their exceptions in an attempt to “ensure that only such people [who cannot access the written word] can be the end beneficiaries of the exception.”¹⁶⁵ In this attempt to protect the rights of the author, many nations have adopted provisions that limit the type of accessible formats allowed.¹⁶⁶ For example, some nations restrict the exceptions to reproductions in Braille or other blind-specific formats.¹⁶⁷ However, many people suffering from visual impairment cannot read Braille or similar formats, especially those who have lost their sight in old age.¹⁶⁸

Other nations restrict the exceptions to works that have not already been produced in an accessible format.¹⁶⁹ Still other countries have made a similar provision but only with regard to derivative works produced in Braille.¹⁷⁰ Again, these provisions seem to honor the derivative work rights of the author, but at the same time, they serve to restrict the format choice of the visually impaired and might force a less desirable format upon a disabled person, potentially at a higher price.¹⁷¹

160. *Id.*

161. *Id.*

162. See ELEC. FRONTIER FOUND. ET AL., *supra* note 150 (“However, DRM [digital rights management] often prevents the re-sale—or even the outright donation—of goods. iTunes songs and Adobe eBooks are just two of the many DRM goods that cannot be sold on, lent, or given away due to technological restrictions.”). Music sold through Apple’s iTunes store is no longer protected by DRM software; however, the company’s FairPlay DRM product will be attached to some major publishers’ e-books sold through the new iBooks store. Alex Pham, *Apple to Wrap Digital Books in FairPlay Copy Protection*, L.A. TIMES (Feb. 15, 2010, 1:50 PM), <http://latimesblogs.latimes.com/technology/2010/02/apple-ibooks-drm-fairplay.html>. Apple never removed DRM from other iTunes content, including audiobooks. *Id.*

163. LUNG, *supra* note 60, para. 13, at 3–4.

164. *Id.* para. 14, at 4.

165. *WIPO Exceptions*, *supra* note 15, ¶ 2.2, at 29.

166. *Id.*

167. *Id.*

168. *Id.* ¶ 2.7, at 36.

169. *Id.* ¶ 2.3, at 31.

170. *Id.*

171. See *supra* notes 167–68 and accompanying text (discussing reader preferences across different media).

The majority of the nations with exceptions restrict the producers of accessible formats to the nonprofit realm.¹⁷² This restriction seems sensible at first. If the ability to make a profit by creating an accessible work exists, then the author or a licensee would undertake such a venture under rational economic theory within the normal purview of copyright law.¹⁷³ However, problems do arise even if one can make a profit.¹⁷⁴ Prolonged licensing negotiations and product prioritization can delay the availability of an accessible format.¹⁷⁵ At the same time, removal of the ability to profit from the exception does not promote economies of scale.¹⁷⁶

While these provisions all make exceptions to the reproduction rights of copyright owners, almost half specify no other rights.¹⁷⁷ Without precise language, it remains unclear if the letter of the law allows for the distribution of the works once rendered in an accessible format.¹⁷⁸ As an example, the United States makes the distribution right clear,¹⁷⁹ as do a number of European nations.¹⁸⁰ Few exceptions allow for adaptation, which might become necessary to describe included artwork or provide navigational aids to find specific sections of the work.¹⁸¹

Most nations do not require remuneration, at least not in all cases, when one uses the exception to provide an accessible format.¹⁸² Austria, the Netherlands, and Slovenia structure their exceptions as compulsory licenses, which require remuneration in all cases.¹⁸³

172. *WIPO Exceptions*, *supra* note 15, ¶ 2.4, at 32.

173. *See* Landes & Posner, *supra* note 114, at 355 (describing the ability to subdivide the various interests in works).

174. *E.g.*, *Treaty Background*, *supra* note 38, Annex ¶ 1.5, at 3–4.

175. *See id.* (claiming that licensing alone will always be an inadequate solution).

176. *See generally* discussion *infra* Part IV (discussing the importance of balancing the needs of both rights holders and the visually impaired).

177. *WIPO Exceptions*, *supra* note 15, ¶ 2.5, at 33.

178. *Id.*

179. 17 U.S.C. § 121(a) (2006) (“[I]t is not an infringement of copyright . . . to reproduce or to distribute copies . . . in specialized formats exclusively for use by blind or other persons with disabilities.” (emphasis added)).

180. *WIPO Exceptions*, *supra* note 15, ¶ 2.5, at 33 (stating that Austria, the Czech Republic, Estonia, Germany, Hungary, Latvia, Slovenia, and Ukraine make explicit exceptions to the distribution right).

181. *Id.* ¶ 2.5, at 34.

182. *Id.* ¶ 2.8, at 39–40.

183. *Id.* ¶ 2.8, at 40.

E. The Proposed Solutions

i. The First Proposed Treaty

At the eighteenth session of the WIPO Standing Committee on Copyright and Related Rights, three South American nations, on behalf of the World Blind Union, proposed a treaty aimed at improving access for the visually impaired to copyrighted works.¹⁸⁴ In many ways, the proposed treaty mirrors the provisions already implemented in many nations. Those provisions establish exceptions to create accessible formats of copyrighted works without the authorization of the author, and allow for copying under certain conditions by both for-profit and nonprofit entities.¹⁸⁵

The proposed treaty addresses three important stumbling blocks to access for the visually impaired: exceptions for reproduction in an accessible format (i.e., the creation of limited types of derivative works),¹⁸⁶ rights to circumvent technological protection measures,¹⁸⁷ and freedom of import and export of accessible works.¹⁸⁸ The proposed treaty's reproduction exception limits its scope to personal reproduction by the visually impaired individual, by a nonprofit entity, or by a for-profit entity under a normal exception and on either a nonprofit basis or with "adequate remuneration to copyright owners."¹⁸⁹ The treaty would allow any signatory to decline to implement the final alternative.¹⁹⁰

As long as the party meets one of the qualifications for exclusion, the treaty requires no authorization from the copyright owner.¹⁹¹ The proposed treaty also specifically incorporates the right of distribution and additional copying of the resulting derivative work.¹⁹² While these exceptions do require acknowledgement of the author's name and the work's title, the treaty does not make reproduction or distribution subservient to the exercise of moral rights by the author.¹⁹³

184. *WBU Proposed Treaty*, *supra* note 28.

185. *Compare id.* Annex art. 4, at 5 (discussing the proposed limitations and exceptions to exclusive rights under copyright), *with* discussion *supra* Part II.D (discussing the exceptions to the copyrights of authors that have been developed in a number of nations).

186. *WBU Proposed Treaty*, *supra* note 28, Annex art. 4, at 5.

187. *Id.* Annex art. 6, at 6.

188. *Id.* Annex art. 8, at 6.

189. *Id.* Annex art. 4, at 5.

190. *Id.* Annex art. 19, at 10.

191. *Id.* Annex art. 4, at 5.

192. *Id.*

193. *Id.* Annex art. 5, at 6.

In cases of commercial reproduction, the proposed treaty establishes a central registry of works, which WIPO will maintain.¹⁹⁴ One must notify rights holders of commercial reproductions allowed under the provisions of Article 4, and the proposed treaty provides a system for remuneration in these cases.¹⁹⁵ Any remuneration for commercial reproductions in developing countries “take[s] into consideration the need to ensure that works are accessible and available at prices that are affordable, taking into account disparities of income for persons who are visually impaired.”¹⁹⁶ Individual nations also have the option of waiving remuneration for certain formats.¹⁹⁷

In determining if the commercial reproduction exception applies, the proposed treaty makes a critical distinction between developed and developing nations.¹⁹⁸ As a default rule, in all countries, for-profit entities may make and distribute commercial reproductions under the notice and remuneration provisions when a work “is not reasonably available.”¹⁹⁹ In developed countries, this means that the work must not be available at a similar or lower price than available to the sighted.²⁰⁰ However, in the developing world, availability depends on a work’s affordability, “taking into account disparities of incomes for persons who are visually impaired.”²⁰¹ This affordability element presents a unique aspect to the issue of access for the visually impaired.²⁰² The Berne Convention does not include any indication that an exception should be made if a work is not affordable to the poor.²⁰³ Rather, it allows exceptions when pricing does not meet national norms—prices that potentially only the richest citizens of the nation could pay.²⁰⁴ The proposed treaty’s implication that a marginalized class, here the visually impaired, should have access to works they can afford presents a unique provision in international copyright law.²⁰⁵

194. *Id.* Annex art. 10, at 7.

195. *Id.* Annex arts. 9, 11, at 7.

196. *Id.* Annex art. 11, at 7.

197. *Id.*

198. *Id.* Annex art. 4(d), at 6.

199. *Id.* Annex art. 4(c)(3), at 5. Any contracting state may decline to implement this provision. *Id.* Annex art. 19, at 10.

200. *Id.* Annex art. 4(d)(1), at 6.

201. *Id.* Annex art. 4(d)(2), at 6.

202. *Compare id.*, with *infra* notes 203–04 and accompanying text.

203. Berne, *supra* note 50, app. art. III(2)(a). While the Berne Convention makes specific exceptions for the developing world, and one of those exceptions involves licenses to reproduce works not published at comparable prices to similar products, that exception mirrors the rule for the developed world in the proposed treaty. *Id.*

204. *See id.* (stating when the “price [is not] reasonably related to that normally charged in the country for comparable works” the country may obtain licensing rights).

205. *Compare WBU Proposed Treaty*, *supra* note 28, Annex art. 4(d)(2), at 6, with Berne, *supra* note 50, app. art. III(2)(a).

Finally, the proposed treaty would erode the potential for contractual control of copyrighted works in a digital marketplace.²⁰⁶ Article 7 specifically states that “[a]ny contractual provisions contrary to the exception provided in Article 4 shall be null and void.”²⁰⁷ This structure runs contrary to the majority of exceptions already in place and enshrines the exception as a quasi-right rather than a noninfringement.²⁰⁸

ii. Proposals at the Twentieth Session of the Standing Committee

At the twentieth session of the WIPO Standing Committee on Copyright and Related Rights, member states proposed three additional solutions by presenting draft instruments.²⁰⁹ The only instrument designated as a treaty, a proposal of the African Group, expands the scope of the debate dramatically by including unauthorized and unrecompensed reproduction for research purposes, educational and research institutions, libraries, and archives.²¹⁰ The proposal also expands the class of disabled beneficiaries to include persons with “a physical, mental, sensory, or cognitive incapacity” in addition to the visually impaired.²¹¹ Otherwise, the provisions related to exceptions for the visually impaired represent only minor revisions to the initial treaty proposal.²¹²

The United States presented a consensus instrument that deals with the ability to import and export accessible formats made under existing national exceptions for the visually impaired.²¹³ The

206. See *WBU Proposed Treaty*, *supra* note 28, Annex art. 7, at 6 (“Any contractual provisions contrary to the exceptions provided in Article 4 shall be null and void.”).

207. *Id.*

208. See *supra* notes 158–62 and accompanying text (discussing exceptions as right-granting provisions).

209. See generally WIPO, Standing Comm. on Copyright and Related Rights, *Draft Joint Recommendation Concerning the Improved Access to Works Protected by Copyright for Persons with a Print Disability*, SCCR/20/2 (June 17, 2010) [hereinafter *EU Recommendation*] (proposing a joint recommendation presented by the European Union); WIPO, Standing Comm. on Copyright and Related Rights, *Draft WIPO Treaty on Exceptions and Limitations for the Disabled, Educational and Research Institutions, Libraries and Archive Centers*, SCCR/20/11 (June 15, 2010) [hereinafter *African Proposed Treaty*] (offering a second proposed treaty presented by the African Group); WIPO, Standing Comm. on Copyright and Related Rights, *Draft Consensus Instrument*, SCCR/20/10 (June 10, 2010) [hereinafter *U.S. Consensus*] (proposing a consensus instrument presented by the United States).

210. *African Proposed Treaty*, *supra* note 209, arts. 6–8, at 6–7.

211. *Id.* art. 21(a), at 10.

212. Compare *id.* art. 5, at 5–6 (broadening the scope to disabled persons, adding an attribution requirement in paragraph (a), and removing the equality element from paragraph (c)(2)), with *WBU Proposed Treaty*, *supra* note 28, Annex art. 4, at 5–6 (lacking the amendments stated).

213. *U.S. Consensus*, *supra* note 209, arts. 2–3, at 3–4.

provisions allow general trade in Braille texts between member states, but require the establishment of a “trusted intermediary” for trade in all other accessible formats.²¹⁴ The instrument establishes trusted intermediaries as governmental agencies or nonprofit organizations with a principal purpose of assisting the visually impaired.²¹⁵ Trusted intermediaries must also establish their trustworthiness via policies and procedures acceptable to the visually impaired and rights holders.²¹⁶ Finally, members may restrict either import or export to cases of published works not available in the importing country in the particular accessible format concerned at a reasonable price and in a reasonable time.²¹⁷

Finally, the European Union’s proposed joint recommendation calls on member states to adopt domestic exceptions for noncommercial reproduction and distribution to benefit the visually impaired, and to recognize the legitimacy of trade in accessible works through the state itself or trusted intermediaries.²¹⁸ The recommendation also calls for notice to rights holders and the encouragement of programs seeking affordable technological solutions.²¹⁹

iii. The TIGAR Solution

On October 23, 2010, WIPO announced the launch of the Trusted Intermediary Global Accessible Resources (TIGAR) project.²²⁰ TIGAR allows publishers to make titles available to trusted intermediaries, which in turn will convert the works to accessible formats.²²¹ IPO will help facilitate the efforts by providing technical support.²²² WIPO’s Director General, Francis Gurry, recognized that the project will only succeed with the voluntary participation of all parties.²²³ Moreover, Director General Gurry called the project a “complement

214. *Id.* In the various negotiations related to this topic, parties have used “trusted intermediary” as a term of art with somewhat varying meaning based on context. In reading this Note, one should interpret the term as specific to the accompanying discussion.

215. *Id.* art. 1, at 3.

216. *Id.*

217. *Id.* arts. 2–3, at 3–4.

218. *EU Recommendation*, *supra* note 209, arts. 2, 4–5, at 5–6.

219. *Id.* arts. 6, 8, at 6–7.

220. Press Release, WIPO, Standing Comm. on Copyright and Related Rights, Stakeholders’ Platform Launches Project to Facilitate Access by VIPs to Published Works, U.N. Press Release PR/2010/668 (Oct. 23, 2010) [hereinafter WIPO Press Release], available at http://www.wipo.int/pressroom/en/articles/2010/article_0043.html.

221. *Id.*

222. *Id.*

223. *See id.* (“[T]he success of this project . . . will require the commitment and investment of all concerned.”).

to,” and not a substitute for, legal change regarding exceptions and limitations of domestic copyright laws.²²⁴

III. WHY THE PROPOSED TREATIES ARE INADEQUATE AND UNNECESSARY MEASURES

A. *The Redundancy of the Treaties*

Commentators have raised serious questions about the necessity of a treaty.²²⁵ While treaty proponents argue that a multilateral agreement serves as the only method to ensure legal cross-border exchange of accessible formats and harmonization among nations,²²⁶ Professors Ginsburg and Besek argue against the validity of both concerns.²²⁷ The pair points out that the Berne–TRIPS framework specifically permits nations to allow for cross-border exchange.²²⁸ Berne only requires nations to make *infringing* copies liable to seizure.²²⁹ Neither treaty obliges member states to seize copies characterized as lawful by the importing nation, even if unlawful where exported.²³⁰ WTO membership, through TRIPS, does not change this obligation.²³¹ The pair also point out that the adoption of

224. *Id.*

225. *See, e.g.*, Comment submitted by Jane C. Ginsburg & June M. Besek, Columbia Univ. Sch. of Law Kernochan Ctr. for Law, Media and the Arts, responding to Copyright Office Notice of Inquiry and Request for Comments on the Topic of Facilitating Access to Copyrighted Works for the Blind and Other Persons with Disabilities 2–4 (Nov. 13, 2009) [hereinafter Ginsburg & Besek Comment], <http://www.copyright.gov/docs/sccr/comments/2009/comments-2/ginsburg-besek-columbia-law-school.pdf>.

226. *Treaty Background*, *supra* note 38, Annex ¶¶1.4, 2.4, at 3, 5.

227. Ginsburg & Besek Comment, *supra* note 225, at 2.

228. *Id.* at 3.

229. *Id.*; Berne, *supra* note 50, art. 16.

230. Berne, *supra* note 50, art. 16(1) (“Infringing copies of a work shall be liable to seizure *in any country* of the Union *where the work enjoys legal protection.*” (emphasis added)); Ginsburg & Besek Comment, *supra* note 225, at 3 (citing RICKETSON & GINSBURG, *supra* note 85, ¶ 11.46). *But see supra* notes 213–17 (discussing the United States’ proposal of a consensus instrument to clarify and harmonize domestic laws related to import and export of works, which may go beyond the Berne requirements).

231. *See* Ginsburg & Besek Comment, *supra* note 225, at 3 (citing RICKETSON & GINSBURG, *supra* note 85, ¶¶ 11.77–80) (stating that with respect to TRIPS while “[u]nlawful manufacture in the country of production” might mean that a copy is “pirated,” the copy must also be unlawful in the importing country for importation to be blocked); *see generally* TRIPS, *supra* note 59, arts. 44, 50–51 (providing enforcement provisions for remedies to intellectual property infringements). This does not mean that imported copies will not infringe the author’s rights. *Compare* Quality King Distrib. v. Lanza Research Int’l, Inc., 523 U.S. 135, 147–48 (1998) (stating that the first-sale doctrine protects owners of copies from importation and distribution liability under 17 U.S.C. §§ 106(3) and 602(a) when the copy was “lawfully made” under the Copyright Act, i.e., in the United States), *with id.* at 154 (Ginsburg, J., concurring) (stating that the Court had only decided the application of the doctrine for works

a treaty might lead to less harmonization or undesirable harmonization.²³² In jurisdictions where a treaty self-executes, international norms might be forced on the country.²³³ On the other hand, some nations, including the United States, may choose not to ratify a treaty after signing.²³⁴ Conversely, in light of the fact that “copyright exceptions and limitations are the primary means . . . [of] implement[ing] . . . national cultural policies[,] . . . member States may no longer be free to devise their own[,] more flexible exceptions if an international treaty occupies the field.”²³⁵

Generally speaking, treaty making comes with great costs—both political²³⁶ and monetary.²³⁷ With this consideration in mind, as well as the arguments of redundancy discussed above, a model law written and administered by WIPO is a viable alternative endorsed by scholars and WIPO member states.²³⁸ While this Note’s solution will focus on the development of a model law, the solutions presented below can also inform the proposed treaties’ specific shortcomings.

making a “round trip” back to the United States, leaving the question open with regard to copies produced, even lawfully, abroad), *and Omega S.A. v. Costco Wholesale Corp.*, 541 F.3d 982, 983 (9th Cir. 2008) (denying the first-sale doctrine as a defense when copies were made abroad and not first sold in the United States with the copyright holder’s authorization), *cert. granted*, 130 S. Ct. 2089 (2010).

232. Ginsburg & Besek Comment, *supra* note 225, at 3–4.

233. *Id.*

234. *See, e.g.*, U.S. CONST. art. II, § 2, cl. 2 (“He [the President] shall have the power, by and with the Advice and Consent of the Senate, to make Treaties, provided two-thirds of the Senators present concur”); *see generally* GLEN S. KRUTZ & JEFFREY S. PEAKE, TREATY POLITICS AND THE RISE OF EXECUTIVE AGREEMENTS 28–29 (2009) (“It is a widely held misperception that the Senate ratifies treaties. Rather, the Senate consents to the treaty, as amended, and ratification awaits presidential action.”); JEFFERY S. LANTIS, THE LIFE AND DEATH OF INTERNATIONAL TREATIES 1–5 (2009) (“Ratification processes for international treaties appear to have become increasingly politicized in advanced industrial democracies.”).

235. Ginsburg & Besek Comment, *supra* note 225, at 3.

236. *See, e.g.*, KRUTZ & PEAKE, *supra* note 234, at 40–41 (describing President Franklin Roosevelt’s failed attempt to secure Senate approval for Lend–Lease exchanges with the United Kingdom prior to American entry into World War II and his ultimate reliance on an executive order).

237. *See, e.g.*, U.S. DEP’T OF STATE, THE BUDGET IN BRIEF: FISCAL YEAR 2010, at 107–08 (2010), <http://www.state.gov/documents/organization/122511.pdf> (indicating annual contributions by the United States to the WTO and WIPO of over \$20 million and \$1 million respectively).

238. Ginsburg & Besek Comment, *supra* note 225, at 4. States have endorsed this view as well. *E.g.*, U.S. Delegation Statement on Copyright Exceptions and Limitations for Persons with Print Disabilities: Before the World Intellectual Property Organization Committee on Copyright and Related Rights [SCCR] (Dec. 15, 2009), <http://www.copyright.gov/docs/sccr/statement/us-intervention12-15-09.pdf>. The fact that member states presented two non-treaty proposals at the Standing Committee’s twentieth session demonstrates that the body has and will continue to consider alternative means of a solution. *See supra* note 209 (discussing additional solutions proposed by member states).

B. *The Shortcomings of the Proposed Treaties*²³⁹

Professor Gervais, among others, has identified a number of concerns with the first proposed treaty.²⁴⁰ The problems are classified in the following groups: drafting, respect for market forces and related compulsory licensing compensation, presumptions about WTO treatment of the treaty, adoption, and transitory copying issues.²⁴¹ Leaving aside drafting, the solution focuses on the other four classes of problems, which present opportunities for worthwhile improvements in any solution upon which the international community agrees.

First, rights holders wish to find a market-based solution to problems of access.²⁴² While that solution may not be imminent, any solution must effectively balance the future interests of those rights holders against those of the visually impaired.²⁴³ As Professor Gervais notes, the first proposed treaty may result in a lack of protection for rights holders who undertake efforts to make their works available in accessible formats.²⁴⁴ This structure discourages rights holders from producing accessible works and slows progress towards an eventual market-based solution.²⁴⁵

Second, the proposed treaty explicitly states that signatory countries agree to the consistency of the proposed treaty with seven existing international agreements.²⁴⁶ This set of agreements includes TRIPS, and thus the three-step test analysis as developed by the WTO panel report.²⁴⁷ A *per se* compatibility finding by the WTO would largely negate any restrictions on exceptions to Berne, TRIPS,

239. This section deals only with the general shortcomings of the initially proposed treaty. *See generally* *WBU Proposed Treaty*, *supra* note 28. Because of the similarity of the provisions in the two proposed treaties, as well as the other instruments, the discussion shall remain general. *See supra* notes 209–19 and accompanying text. For further discussion of technology-related shortcomings, see *infra* Part IV.C.

240. Gervais Comment, *supra* note 63, paras. 54–58.

241. *Id.*

242. Comment submitted by Allan Adler, Assoc. Am. Publishers, responding to Copyright Office Notice of Inquiry and Request for Comments on the Topic of Facilitating Access to Copyrighted Works for the Blind and Other Persons with Disabilities 9 (2009) [hereinafter AAP Comment], <http://www.copyright.gov/docs/sccr/comments/2009/adler.pdf>.

243. *Treaty Background*, *supra* note 38, Annex ¶ 1.3, at 2; *see infra* text accompanying notes 290–91 (noting that WIPO “has organized a group of stakeholders in the attempt to find an extra-treaty solution to provide access”).

244. Gervais Comment, *supra* note 63, paras. 55–56.

245. *See* AAP Comment, *supra* note 242, at 9–10 (“Perversely, however, the continuing role of the Chaffee Amendment provides a potent disincentive for publishers to make the necessary investments to bring universally designed products to the market.”).

246. *WBU Proposed Treaty*, *supra* note 28, Annex art. 3(a), at 4–5.

247. *Id.* Annex art. 3(a)(5), at 4.

etc., with regard to accessible works for the visually impaired²⁴⁸ and potentially upset the careful balance between copyright protection and the ability to make exceptions as outlined in existing treaties.²⁴⁹

Third, while joining the WTO has provided a valuable incentive to submit to the provisions of the Berne Convention—via TRIPS—one can find no such incentive in the proposed treaty.²⁵⁰ If WTO members adopt the treaty slowly, inconsistent laws may emerge and could “delay the adoption of measures for access by the [b]lind in countries that fail to ratify the treaty.”²⁵¹ This observation gives further credence to the alternative of a model law discussed above.²⁵²

Finally, transitory copying issues present a real danger of infringement by those creating accessible copies, even if national law will characterize the final product as authorized.²⁵³ Any solution to the problem must ensure that accessible work creators do not run the risk of infringing in this “grey area”²⁵⁴ just as the first proposed treaty’s drafters recognized the need to avoid the “grey area” associated with the sharing of works across borders.²⁵⁵

C. Technology Specific Shortfalls of the Treaties

The use of a technology-based solution to access for the visually impaired comes with several challenges. First, technological protection measures can present specific obstacles to access, even of works within the public domain. Secondly, patent protections might slow development of an efficient solution. Finally, file compatibility issues might force multiple devices on users of market-provided accessible formats, thus creating a great cost burden for the visually impaired.

248. Gervais Comment, *supra* note 63, para. 57.

249. See *supra* text accompanying note 218–19 (discussing the European Union’s attempt to find a solution within the current treaty framework).

250. Compare Daniel J. Gervais, *TRIPS and Development*, in *INTELLECTUAL PROPERTY, TRADE AND DEVELOPMENT* 3, 5–6 (Daniel J. Gervais ed., 2007) (describing the coercive forces that potentially lead to widespread assent to TRIPS), with Ginsburg & Besek Comment, *supra* note 225, at 3. (“If the task of devising exceptions devolves on the international agreement-making bodies, the result could both constrain member States and prove substantially undesirable.”).

251. Gervais Comment, *supra* note 63, para. 58.

252. See *supra* note 238 and accompanying text (discussing a model law as a viable alternative to a treaty).

253. Gervais Comment, *supra* note 63, paras. 62–66.

254. Compare *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511, 519 (9th Cir. 1993) (holding that loading software into a computer’s RAM, while temporary in nature, creates a copy of the work), with *Sony Computer Entm’t, Inc. v. Connectix Corp.*, 203 F.3d 596, 599 (9th Cir. 2000) (holding that fair use protects intermediate copying when necessary to create noninfringing software), and *Sony Computer*, 203 F.3d at 605 n.9 (distinguishing the case from *MAI*).

255. *Treaty Background*, *supra* note 38, Annex ¶ 1.4, at 3.

i. The Lack of Adequate Ability to Circumvent Technological Protections

The first proposed treaty addresses non-copyright, intellectual property issues in only two instances: Articles 6 and 14.²⁵⁶ Article 14 applies only to non-copyright elements of databases, and it is of little import for this discussion.²⁵⁷ Article 6 directly addresses the circumvention of technological protection measures to render the work accessible.²⁵⁸ Technological protection can present a real barrier to access for the visually impaired.²⁵⁹ In fact, the use of digital rights management (DRM) technology has restricted access to public domain works when applied to e-book formats, and thus a new, completely extra-copyright barrier can impair access by the visually impaired.²⁶⁰ The treaty provision falls short in facilitating access to the visually impaired by failing to address these barriers.

The Digital Millennium Copyright Act (DMCA) in the United States provides an illustrative example. The DMCA expressly prohibits both circumventing technological protections²⁶¹ (typically DRM software protections) and trafficking in the means of

256. *WBU Proposed Treaty*, *supra* note 28, Annex arts. 3, 14, at 6, 8.

257. *Id.* Annex art. 14, at 8 (“The provisions of this treaty shall apply *mutatis mutandis* to non-copyrighted elements of databases.”).

258. *Id.* Annex art. 6, at 6 (“Contracting parties shall ensure that beneficiaries of the exception provided by Article 4 have the means to enjoy the exception where technological protection measures have been applied to a work, including when necessary the right to circumvent the technological protection measure so as to render the work accessible.”).

259. *See supra* note 150 (noting that private rights holders can sometimes use digital rights management technology to prevent disabled people from exercising the rights that are afforded to them).

260. *See, e.g.*, ELEC. FRONTIER FOUND. ET AL., *supra* note 150 (noting that Adobe has placed DRM protections around *Alice in Wonderland*, a public domain work); James Boyle, *Mixed Feelings About Kindle Edition*, PUB. DOMAIN (Feb. 26, 2009), <http://www.thepublicdomain.org/2009/02/26/mixed-feelings-about-kindle-edition/> (describing the author’s experience with making available a Kindle edition, and the mandatory DRM protection of his Creative Commons licensed book); Chris Walters, *B&N Wraps Public Domain Books in DRM*, CONSUMERIST (July 29, 2009), <http://consumerist.com/2009/07/bn-wraps-public-domain-books-in-drm-to-protect-authors-copyrights-what.html> (describing that five public domain works formatted for the Barnes & Noble eReader were restricted by DRM); *see generally About: Licenses*, CREATIVE COMMONS, <http://creativecommons.org/about/licenses/> (last visited Nov. 7, 2010) (describing the various license defaults that Creative Commons offers that relinquish some or all of the author’s copyrights). Another consumer control concern related to DRM was demonstrated when Amazon remotely deleted Kindle e-books after discovering that copies of, ironically, *Nineteen Eighty-Four* and *Animal Farm*, copyright protected works, had been distributed by unauthorized sellers. Brad Stone, *Amazon Erases Two Classics from Kindle. (One Is ‘1984.’)*, N.Y. TIMES, July 18, 2009, at B1.

261. Digital Millennium Copyright Act, 17 U.S.C. § 1201(a)(1)(A) (2006) (“No person shall circumvent a technological measure that effectively controls access to a work protected under this title.”).

circumventing the protections.²⁶² The DMCA allows the Librarian of Congress, based on the recommendation of the Register of Copyrights, to exempt certain users from the provisions that prohibit the act of circumvention.²⁶³ No similar mechanism exists in the proposed treaty to create an exemption to the trafficking prohibition.²⁶⁴

The Librarian made a limited exemption for e-books pursuant to his duty to issue exemptions.²⁶⁵ This exemption applies only when *all* available editions of the work prevent the capabilities of text-to-speech or other presentation in a “specialized format” as defined in the Copyright Act of 1976’s general exemption for the blind and disabled.²⁶⁶ Because the exemption only permits the act of circumventing the technological protection, commentators have argued that visually impaired individuals would need to create their own circumvention device.²⁶⁷ “Individuals who could legally take advantage of the exemption cannot practically do so unless someone makes available a circumvention device, which would be a prohibited act, subject to criminal sanctions.”²⁶⁸ In fact, federal prosecutors

262. *Id.* § 1201(b)(1)(A)–(C).

No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that . . . is primarily designed or produced for the purpose of circumventing protection afforded by a technological measure that effectively protects a right of a copyright owner under this title . . . has only limited commercially significant purpose or use other than to circumvent [such measures] . . . or is marketed . . . for use in circumventing [such measures]

Id.

263. *Id.* § 1201(a)(1)(C)–(D).

264. *See id.* § 1201(b) (outlawing persons from transporting copyrighted material outside of its permitted uses).

265. 37 C.F.R. § 201.40(b)(4), (c) (2009); Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 74 Fed. Reg. 55,138, 55,139 (Oct. 27, 2009) (to be codified at 37 C.F.R. § 201.40(b)) (extending the exemptions made in 2006 indefinitely during a prolonged rulemaking process). This exemption was first made in 2003, renewed in 2006, and extended indefinitely in 2009. *Cf.* 37 C.F.R. § 201.40(b)(4) (providing the e-books exception for the first time); 37 C.F.R. § 201.40 (2003) (lacking any exemption for e-books). *See also* 17 U.S.C. § 1201(a)(1)(C)–(D) (requiring triennial review of exceptions and a similar effective timeframe); *see generally* 17 U.S.C. § 121(d)(4) (“[S]pecialized formats’ means braille, audio, or digital text which is exclusively for use by blind or other persons with disabilities . . .”).

266. 37 C.F.R. § 201.40(b)(6), (c).

267. Comment submitted by Eddan Katz & Danny O’Brien, Elec. Frontier Found., responding to Copyright Office Notice of Inquiry and Request for Comments on the Topic of Facilitating Access to Copyrighted Works for the Blind and Other Persons with Disabilities 3 (2009) [hereinafter EFF Comment], <http://www.copyright.gov/docs/sccr/comments/2009/katz.pdf>.

268. *Id.*; *see also* 17 U.S.C. § 1204(a) (providing maximum criminal penalties of \$500,000 fine and five years of imprisonment for a first offense, and a \$1 million fine and ten years of imprisonment for subsequent offenses).

brought criminal proceedings against a Russian company that developed software to circumvent protections in Adobe's eBook format; Russian law provides no such sanctions.²⁶⁹ An aggrieved party may also seek civil remedies including actual or statutory (ranging from \$200 to \$2500 per act) damages, providing a further disincentive for any third party to develop a circumvention device for use by the visually impaired.²⁷⁰

As illustrated by the example of the DMCA above, Article 6 of the proposed treaty would allow for circumvention of technology by the "beneficiaries of the exception established in Article 4," but there is no clear provision for third-party development of devices that would allow for this circumvention.²⁷¹ While the treaty expands the class of persons allowed to circumvent technology,²⁷² it still places an onerous burden on those parties, requiring that circumvention device makers become format converters, or vice versa.²⁷³

While the DMCA example suffices to illustrate the problems created by anti-circumvention legislation, the United States' law is not unique in these provisions. The United Kingdom provides for civil and criminal penalties for circumvention and device trafficking in a manner similar to the DMCA.²⁷⁴ More generally, the WIPO Internet Treaties both contain language requiring signatories to "provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by [rights holders] in connection with the exercise of their rights."²⁷⁵ The Anti-Counterfeiting Trade Agreement (ACTA), under secretive negotiation at the same time as WIPO's efforts concerning the visually impaired, may become an additional hurdle to circumvention.²⁷⁶ Specifically, Article 2.18, paragraph 4 of the ACTA

269. Justin D. Fitzdam, Note, *Private Enforcement of the Digital Millennium Copyright Act: Effective Without Government Intervention*, 90 CORNELL L. REV. 1085, 1091–92 (2005).

270. 17 U.S.C. § 1203.

271. *WBU Proposed Treaty*, *supra* note 28, Annex art. 6, at 6.

272. *Id.* Annex arts. 4, 6, at 5–6.

273. See EFF Comment, *supra* note 267, at 3.

274. Copyrights, Designs and Patents Act, 1988, c. 48, § 296ZA–ZB, as amended by The Copyright and Related Rights Regulations, 2003, S.I. 2003/2498, art. 24, ¶ 1 (U.K.); see generally Jacqueline D. Lipton, *Solving the Digital Piracy Puzzle: Disaggregating Fair Use from the DMCA's Anti-Device Provisions*, 19 HARV. J.L. & TECH. 111, 141–45 (2005) (providing an overview of anti-circumvention provisions in U.K. law).

275. WCT, *supra* note 60, art. 11; WPPT, *supra* note 60, art. 18.

276. See Eddan Katz & Gwen Hinze, *The Impact of the Anti-Counterfeiting Trade Agreement on the Knowledge Economy: The Accountability of the Office of the U.S. Trade Representative for the Creation of IP Enforcement Norms Through Executive Trade Agreements*, 35 YALE J. INT'L L. ONLINE 24, 30, 34 (2009), <http://www.yjil.org/docs/pub/o-35-katz-hinze-ACTA-on-knowledge-economy.pdf> ("By exporting one half of the complex U.S. legal regime, FTAs [free trade agreements] have

draft would provide for potential civil remedies and criminal penalties for the act of circumvention of DRM or the “manufacture, importation, or circulation” of technology used to circumvent DRM.²⁷⁷

ii. Patent-Related Barriers to Access

The creation of accessible formats may bring a number of patent-related barriers into play. For example, the creation of an audiobook with the mp3 format would potentially implicate a pool of patents managed by Technicolor.²⁷⁸ The DAISY consortium, a Swiss-based not-for-profit that develops international standards for talking books, acknowledges that the use of its software, which in turn makes use of the LAME mp3 Encoder, might require a patent license in some countries.²⁷⁹ In fact, the DAISY technology itself is subject to two patents in the United States.²⁸⁰ Patents may also protect other text-based, accessible formats.²⁸¹ Moreover, rights to integrated circuit designs have been enshrined in international law.²⁸² While this class of intellectual property does not confer the same rights as patent

required other countries to adopt lopsided laws with strengthened exclusive rights without accompanying exceptions and limitations.”).

277. *European Commission Public Predecisional/Deliberative Draft of Anti-Counterfeiting Trade Agreement*, art. 2.18, para. 4, at 22–24 (Apr. 21, 2010), http://trade.ec.europa.eu/doclib/docs/2010/april/tradoc_146029.pdf.

278. *See Licensed Companies*, MP3LICENSING.COM, <http://www.mp3licensing.com/licensees/index.asp> (last visited Nov. 7, 2010) (listing the American Printing House for the Blind as a licensed company); *Patents*, MP3LICENSING.COM, <http://www.mp3licensing.com/patents/index.html> (last visited Nov. 7, 2010) (listing twenty patented products with corresponding patents granted in a number of jurisdictions); *see also, e.g.*, U.S. Patent No. 5,579,430 (filed Jan. 26, 1995) (describing a patent held in the mp3 patent pool).

279. *E.g., Save as DAISY—Microsoft Word Add-In*, DAISY CONSORTIUM, <http://www.daisy.org/project/save-as-daisy-microsoft-word-add-in> (last visited Nov. 7, 2010).

280. U.S. Patent No. 5,822,284 (filed Sep. 6, 1996); U.S. Patent No. 5,687,144 (filed Nov. 1, 1996).

281. *E.g., Legal Notices for Developers*, ADOBE, http://partners.adobe.com/public/developer/support/topic_legal_notices.html (last visited Nov. 7, 2010) (listing eight patents associated with the personal digital file (pdf) format and the requirements to obtain a free license).

282. Treaty on Intellectual Property in Respect to Integrated Circuits art. 3, *opened for signature* May 26, 1989, 28 I.L.M. 1477 [hereinafter Washington Treaty]. The Washington Treaty is not in force as only three states have ratified it or acceded to it: Egypt, St. Lucia, and Bosnia and Herzegovina. *Treaties and Contracting Parties: Washington Treaty*, WIPO, <http://www.wipo.int/treaties/en/ip/washington> (last visited Nov. 7, 2010); *see also* Washington Treaty, *supra*, art. 16 (requiring five states to ratify or accede before the treaty will enter into force). Similar protections are the subject of U.S. law. *See* 17 U.S.C. §§ 901–14 (2006). The *sui generis* right is relatively rare in the United States. While the Copyright Office recorded over 500,000 copyright claims in fiscal year 2007, it recorded less than 300 integrated circuit claims. U.S. COPYRIGHT OFFICE, ANNUAL REPORT OF THE REGISTER OF COPYRIGHTS 3 (2007), <http://www.copyright.gov/reports/annual/2007/ar2007.pdf>.

law—notably, independent creation is not infringement²⁸³—it has the potential to create similar barriers to the production of accessible formats.²⁸⁴ While these examples might not present current barriers to access, they demonstrate that a copyright-only solution will not serve as a panacea for the visually impaired.

iii. The Lack of a Standardized File Format for Accessible Digital Works Will Burden the Visually Impaired

While allowing for circumvention of protection measures is one solution to problems created by DRM, establishing a legal framework in which the visually impaired possess and use a device that could access all digital files, no matter the DRM system used for protection, presents an alternative solution. In fact, under a legal structure like the DMCA (as currently implemented), this might serve as the only alternative available because the regulatory exemption does not apply if even one e-book edition allows text-to-speech and rendering in a specialized format.²⁸⁵ One can easily imagine a scenario where two proprietary e-book devices each have exclusive titles that meet the DMCA standard so that the exception becomes void.²⁸⁶ Assuming that such a situation could occur, a visually impaired reader might have to spend nearly \$1,000 on hardware alone to access a full e-book library on portable devices.²⁸⁷

A recent example from the motion picture and television industries provides insight into compatibility issues. When Netflix launched the capability to stream movies to a home computer, Macintosh users²⁸⁸ could not stream because Apple refused to license

283. Washington Treaty, *supra* note 282, art. 6(2)(c).

284. CARLOS M. CORREA, INTELLECTUAL PROPERTY RIGHTS, THE WTO AND DEVELOPING COUNTRIES 157 (2000) (“[A]ccess to semiconductor technology is and will continue to be extremely difficult” in the developing world.).

285. See *supra* note 265 and accompanying text (discussing the limited exception that is made for e-books pursuant to the Librarian’s duty to issue exceptions).

286. E.g., Geoffrey A. Fowler et al., *Amazon Updates Its Kindle E-book Reader—Stephen King Agrees to an Exclusive Deal As Device Gains Clout*, WALL ST. J. EUR., Feb. 10, 2009, at 28 (describing the exclusive availability of the novella *Ur* on the Amazon Kindle); Steven Swinford, *Top Authors Cash in on eBook Sales*, TIMES (London), Jan. 24, 2010, at 9 (noting that author Ian McEwan signed an exclusive deal with Amazon for his back catalog).

287. This calculation is based on the lowest priced device in the Kindle (\$139), iPad (\$499), nook (\$149), and Reader-Pocket Edition (\$179.99) lines as of Nov. 7, 2010. AMAZON <http://www.amazon.com> (last visited Nov. 7, 2010); *iPad*, APPLE, <http://www.apple.com/ipad/> (last visited Nov. 7, 2010); *nook*, BARNES & NOBLE, <http://www.barnesandnoble.com/nook/index.asp?PID=34323&cids2Pid=30195> (last visited Nov. 7, 2010); *All Reader Digital Books*, SONY, <http://www.sonystyle.com/webapp/wcs/stores/servlet/CategoryDisplay?catalogId=10551&storeId=10151&langId=1&categoryId=8198552921644523779&N=4294954529> (last visited Nov. 7, 2010).

288. Hiram Meléndez-Juarbe, *DRM Interoperability*, 15 B.U. J. SCI. & TECH. L. 181, 181–82 (2009); *Instant Watching on Mac, Firefox, and More*, NETFLIX (Aug. 9,

its DRM technology to Netflix.²⁸⁹ The eventual solution came from the use of Microsoft DRM software on Macintosh computers.²⁹⁰ While the content providers' fears tend towards "profit leakage," i.e., that unprotected files will subvert their digital—and potentially print—markets,²⁹¹ device makers have real incentives to keep users loyal to their devices vis-à-vis their proprietary file formats.²⁹²

In general, the same anti-circumvention issues presented above apply to the problem of divergent file formats. If only parties protected by Article 4 of the treaty may create and distribute a device to achieve universal access to accessible digital files, then the burden associated with the creation of such a device would most likely prevent development.²⁹³ Even absent the legal barriers, the cost of developing any solution may remain prohibitive.²⁹⁴ The real solution to device-compatibility issues lies in refining the exceptions to statutory protections like the DMCA so that publishers must provide works to the visually impaired in one standard, accessible e-book format. Thus, all works could be enjoyed on the same device. WIPO organized a group of stakeholders in the attempt to find an extra-treaty solution to provide access, and this group specifically identified the integration of existing accessible formatting standards into the publishing processes as an element of the solution.²⁹⁵ The same

2007, 11:31 MST), <http://blog.netflix.com/2007/08/instant-watching-on-mac-firefox-and.html> [hereinafter *Netflix*].

289. Meléndez-Juarbe, *supra* note 288, at 273; *Netflix*, *supra* note 288.

290. Meléndez-Juarbe, *supra* note 288, at 273 n.2.

291. See, AAP Comment, *supra* note 242, at 8 (describing the AAP's concern that specialized formats authorized under the Chafee Amendment, 17 U.S.C. § 121, are converging with widely available, monetized products in the publishing space like e-books and audiobooks). One can argue that this fear is largely irrational because non-accessible, pirated books have already been made available on the Internet. That is, pirates have already opened the Pandora's box of print media. Oliver Shah, *Pirate Boarding Parties Leap on Publishers; Illegal Downloads Have Hit Music and Film; Books Are the Next Target*, *TIMES*, Jun. 7, 2009, at 9 ("[S]ites such as Pirate Bay, btjunkie and RapidShare, still offer users the ability to download complete PDFs of bestselling novels . . .").

292. Apple makes little profit on the iTunes store content, but operates the service to support sales of its iPod, iPad, and iPhone product lines. Peter Kafka, *Apple: Billions of Songs, Billions of Apps, Not Much Profit*, *ALL THINGS DIGITAL* (Feb. 25, 2010), http://mediamemo.allthingsd.com/20100225/apple-billions-of-songs-billions-of-apps-not-much-profit/?mod=ATD_skybox. Before Apple removed DRM protections from its music, only Apple's own iPod players could play the files. Claudine Beaumont, *Can Tesco Topple iTunes?*, *TELEGRAPH* (London), Apr. 17, 2008, at 28. When Apple announced it would remove DRM from its iTunes music files, it controlled more than 70 percent of the market share for mp3 players. Jim Dalrymple et al., *Apple Reports Record Profit for First Quarter*, *MACWORLD* (Jan. 21, 2009), <http://www.macworld.com/article/138362/2009/01/earnings.html>.

293. See *supra* note 268–73 and accompanying text.

294. LUNG, *supra* note 60, para. 21, at 5.

295. WIPO, Standing Comm. on Copyright and Related Rights, *Stakeholders' Platform: Second Interim Report*, ¶ 17, at 2, SCCR/19/10 (Nov. 10, 2009).

dialogue led to the realization that this solution will take time and require publishers to redesign their product creation processes.²⁹⁶ While WIPO recently announced the launch of the TIGAR project, participation remains voluntary and WIPO does not expect the project to result in any accessible works until at least mid-2011.²⁹⁷

IV. A MODEL LAW: THE ALTERNATIVE WIPO SHOULD PURSUE

WIPO may best utilize its resources in the effort to achieve access to the written word by developing a model law that individual nations may implement and adapt to best serve the needs of domestic visually impaired populations. The solution should strike a careful balance that protects rights holders and simultaneously provides means of cost-effective, equal access to the visually impaired. With these goals in mind, WIPO should craft a model law that will guide member nations and at the same time remain flexible as issues pertinent to accessible formats change rapidly with the advance of technology.

A. Important General Provisions

Whether WIPO chooses to pursue a model law or a multilateral agreement, an appropriate solution should contain the following elements:

- practical definitions of qualifying recipients of the accessible works and the allowable formats, and restrictions to any exceptions within those definitions;
- a priority for the rights holder to control the distribution of accessible formats if the rights holder chooses to do so;
- the ability for rights holders to receive notice of any reproduction and distribution of accessible copies of their work and payment in appropriate situations;
- the retention of attribution rights, and to the extent possible, integrity rights by the author;
- the right of the rights holder to determine, to the extent allowed under current law, the languages and geographies in which the work shall be available;

296. WIPO, Standing Comm. on Copyright and Related Rights, *Stakeholders' Platform: Interim Report*, ¶ 18, at 6–7, SCCR/18/4 (May 11, 2009).

297. See WIPO Press Release, *supra* note 220; see generally *supra* text accompanying notes 219–23.

- clear exemption from any liability for transitory copying as part of the effort to create an authorized accessible work;
- clear exemptions from liability stemming from related intellectual property rights and provisions (e.g., patents, rights to integrated circuits, anti-circumvention provisions);
- a right of self-help for visually impaired individuals, when the appropriate accessible format is not available;
- clear provisions for the import and export of all noninfringing copies of works, including those made under applicable national exceptions; and
- a method for dealing with orphaned works.

B. A Framework for an Effective Model Law

The following legal framework utilizes the free market's ability to allocate risk appropriately for the creation of accessible formats while maintaining rights holders' fundamental right to exploit their works as they see fit and acquire the economic rewards.

First, recognizing that any solution should honor the ability of the underlying work's rights holder (the "author" as a matter of convenience here) to control his or her work and provide any and all accessible formats for the visually impaired, national lawmakers should establish a period of exclusive rights for the author with regard to these formats. These rights should be viewed as a "bundle of sticks" with the right to each accessible format²⁹⁸ viewed as an individual stick. A mechanism should exist for the author to preserve any or all of these individual format rights indefinitely (i.e., potentially to the expiration of the copyright in the underlying work) if the author declares his or her intention to create specific accessible formats of the work.

At the expiration of this period of exclusive rights, if the author did not preserve any specific format right, any person or organization, including the author, may lay claim to that format right. This claim shall be nonexclusive, with the exception that if the author seeks to regain any given format right at this stage, any *subsequent* claimants to that right shall be excluded.

298. Additionally the responsibility of determining which formats constitute accessible formats should fall on some unit of the government. As the landscape of formats changes, the list of official accessible formats can as well. In the meantime, any new format can be proven appropriate by using works in the public domain. Format rights shall not include translations into other underlying languages, but only conversion into an accessible format.

Each national government should create, maintain, and publicize a database on format-rights claimants in order to manage party rights information. Each nation should also put a mechanism in place to ensure that no claimants sit on format rights without making reasonable progress towards the creation of the specified accessible format. This mechanism could provide for cancellation of those rights and sanctions against habitual squatters.²⁹⁹

After the original format rights lapse, any person may freely create a copy in an accessible format so long as they do so using an authorized copy of the work. A visually impaired individual should always maintain the freedom to create a single copy in any accessible format from an authorized copy and for personal use.

Once anyone creates an accessible-format copy of the work, the complete copyright in that formatted derivative work should vest in the creator of that copy and the author as if they were co-authors, for that format only (if the author creates the formatted derivative work, then he or she shall have the sole right). An exception should exist if the creator of the accessible copy was not a claimant of the format right,³⁰⁰ in which case, the right should vest in *all* of those claimants and the author as if co-authors (again, with the merging provision if the author serves as the only claimant). No matter the ownership of the new format rights, the creator's one copy shall be considered authorized and the protection of the new format shall not exceed the term of the underlying work's protection. Moreover, any transitory copying or case normally constituting a breach of alternative intellectual property rights of the author, when properly limited to an attempt to create an accessible format prior to any party's success, shall not result in any liability.

The author shall have the option to either set the price for the new, accessible format, encumber the format with any technological protections he or she sees fit, or both. A mechanism for neutral, third-party review should ensure that the price remains reasonable and is not a defensive measure to keep the format off the market. The possibility must exist that the market price for the specific format is zero. Any party with rights to the accessible format may now sell the work, with attribution in tact, at or above the established price to those designated visually impaired by national law. All parties shall account for the profits from those sales, which they shall then distribute to the non-author, rights holding parties, until the

299. While this provision becomes most important when an author exercises exclusive claim to a format, inaccurate information as to nonexclusive claims will also tend to limit parties' creation of accessible format by magnifying the risk and opportunity costs associated with competition.

300. Without claiming the right, there is no notice to other parties. Thus an incentive to claim the right serves as an incentive against wasteful reproduction of efforts and for an accurate risk picture for format creators.

cost of producing the format has been recouped for all of those parties. After the non-author parties have recouped their expenses, any profits shall belong to the author, less a portion that the government may determine the other parties shall share as an incentive for the creation of accessible formatted works.

C. *The Framework in International Law*

The suggested framework effectuates the general provisions outlined above,³⁰¹ confronts the shortcomings identified by Professor Gervais,³⁰² and conforms to the requirements of the three-step test.³⁰³

With regard to the general provisions, the proposal addresses all of the concerns enumerated. First, it places control of qualifying formats and individuals within the national legislative and regulatory power. The structure of the market-based solution guarantees rights holders' priority to control their works, notice of the creation of accessible formats, and appropriate remuneration. The system also specifically provides for control of attribution, integrity, and language rights. Non-rights holders gain protection from any liability that might otherwise result from an attempt to create an accessible format. Moreover, the visually impaired retain the right of self-help found in many current exceptions. The fact that after a designated period of time, anyone may claim format rights solves problems concerning the creation of accessible formats of orphaned works; the regulatory bodies concerned could address any price-setting and remuneration problems remaining. Finally, because the solution operates within the current Berne-TRIPS structure, no import-export concerns arise.³⁰⁴

Professor Gervais recognized that current proposals ignore market forces, make presumptions about the WTO's action, create adoption problems, and fail to address transitory copying. This solution addresses all of these concerns. Above all, in respecting market forces in the solution, the framework also avoids any potential WTO scrutiny by specifically conforming the three-step test, as discussed below. Moreover, the framework specifically exempts transitory copies from liability. Finally, while the framework does not guarantee adoption, each nation would have the internal incentive to assist its visually impaired population at no cost to its rights holders.

As indicated above, the three-step test's first step does not provide a significant hurdle as the exception focuses on the special

301. See *supra* Part IV.A.

302. See *supra* Part III.B.

303. See *supra* notes 65–68 and accompanying text.

304. See *supra* notes 228–31 and accompanying text.

case of the blind.³⁰⁵ Secondly, the solution specifically grants the power to exploit the market and only creates an exemption when the rights holder decides that the market does not present a profitable opportunity. Hence, no conflict exists with the normal exploitations of the work satisfying the second prong. Finally, the system specifically compensates rights holders for the monopoly profits they would have earned by developing the accessible format themselves (i.e., profits minus the cost of creating an accessible format), thus satisfying the third prong.

V. CONCLUSION

As demonstrated in this Note, copyright and related intellectual property law present real barriers to the visually impaired's ability to access the written word. WIPO, involved stakeholders, and member states have all made serious efforts to provide a solution to these barriers. However, serious concerns remain with all of the current proposals. As scholars have made clear, the proposed treaties have flaws as currently drafted and the potential to prove entirely unnecessary. A model law, which fits within the framework presented, would provide a needed solution in a more efficient manner. WIPO should draft and promote such a model law as the best solution within the requirements of the three-step test. Moreover the benefits of providing a market-based solution that allows member states to retain autonomy and flexibility in implementation far exceed the proposals currently before the international community.

*Patrick Hely**

305. See *supra* notes 65–66 and accompanying text (discussing exceptions to the test).

* J.D. Candidate 2011, Vanderbilt University Law School; B.A. Vanderbilt University College of Arts and Science, 2006. The author wishes to thank classmate Katherine Van Deusen for first suggesting this topic for his research, his family for their support of his studies, the editors and staff of the *Vanderbilt Journal of Transnational Law*, the faculty of the Vanderbilt Intellectual Property Program, and all the others who offered advice along the way. For Dorothy Wade.