In this issue:

Special 301 and Access to Medicine in the Obama Administration
by Sean M. Flynn

Avenues to Reduce Total Patent Pendency in Order to Boost the United States Economy
by Alexandria Yasmin Bromell

Reverse Engineering: Exploitation for Benefit of All
by Daniel Lee

Reinforcing the Tower of Babel: The Impact of Copyright Law on Fansubbing
by LaToya D. Rembert-Lang

Featured Columns and Blog Posts
by the American University Intellectual Property Brief Staff
## ARTICLES

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special 301 and Access to Medicine in the Obama Administration</td>
<td>by Sean M. Flynn</td>
<td>5</td>
</tr>
<tr>
<td>Avenues to Reduce Total Patent Pendency in Order to Boost the United States Economy</td>
<td>by Alexandria Yasmin Bromell</td>
<td>14</td>
</tr>
<tr>
<td>Reinforcing the Tower of Babel: The Impact of Copyright Law on Fansubbing</td>
<td>by LaToya D. Rembert-Lang</td>
<td>21</td>
</tr>
<tr>
<td>Reverse Engineering: Exploitation for Benefit of All</td>
<td>by Daniel Lee</td>
<td>34</td>
</tr>
</tbody>
</table>

## FEATURED COLUMNS AND BLOG POSTS

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Senators Continue War On Internet with “Online Infringement” Bill</td>
<td>By Ashlee Hodge</td>
<td>39</td>
</tr>
<tr>
<td>The Government is Wrong: The Case for Human Gene Patents and the Genomics Revolution</td>
<td>By Jonathan Stroud</td>
<td>43</td>
</tr>
<tr>
<td>The Absence of Common Sense from the Copyright Act’s Treatment of Software and the First Sale Doctrine</td>
<td>By James Lafave</td>
<td>41</td>
</tr>
<tr>
<td>Mark Twain’s Autobiography: In the Public Domain Before the Public’s Hands?</td>
<td>By Mark Tratos</td>
<td>45</td>
</tr>
<tr>
<td>Chanel Avoids Genericide By Taking Its Trademark Seriously</td>
<td>By Ashley Kobi</td>
<td>42</td>
</tr>
</tbody>
</table>
2010-2011 STAFF

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I. Introduction

This article examines the history and current use of the Special 301 program to restrict access to generic medicines in developing countries, specifically the 2009 and 2010 reports released under the Obama Administration. The news for access to medicines advocates is not good overall. Both reports continue the previous Administration’s policies of using Special 301 to promote Trade-Related Aspects of Intellectual Property Rights (“TRIPS”) policies (“TRIPS-plus”) endangering access to medicines for millions of people worldwide. These policies violate not only the Obama Administration’s pledges to promote access to affordable medications in developing countries, but also U.S. commitments under the 2001 World Trade Organization (“WTO”) Doha Declaration on the TRIPS Agreement and Public Health, numerous World Health Organization resolutions, and express Congressional policy. Although the reports reflect small moves toward a more complete embrace of the Doha Declaration and a de-escalation of some issues threatening access to medicines, the most recent Special 301 Reports signal more continuity than change in U.S. policy on trade and access to medicines.

II. Legal and Statutory Background

The Special 301 program takes its name from, and builds upon the administrative structure of, Section 301 of the Trade Act of 1974 (“Act”). That Act was passed at a time of large and growing trade deficits, increasing flight of manufacturing activities abroad, skyrocketing foreign debt, and economic crisis caused by dependency on foreign oil imports, all of which fueled a mood in U.S. policy circles that was decidedly “protectionist.”

Section 301 was a key element of the response. Section 301 authorizes the President to impose economic sanctions on countries that “burden or restrict United States commerce.” Notably, the law does not require that the alleged conduct violate any trade agreement with the U.S. to be subject to sanction under the Act.

At the urging of the pharmaceutical and copyright industries, Section 301 was amended in 1984 and 1988 to expand the policy into intellectual property. The 1984 amendment established “adequate and effective protection of intellectual property rights” as grounds for 301 investigation and sanctions. In 1988, the statute was amended again to create the new intellectual property-focused “Special 301” program.

Under Special 301, the United States Trade Representative (“USTR”) is required to annually publish in the Federal Register a list of countries that “deny adequate and effective protection of intellectual property” or “deny fair and equitable market access for U.S. firms that rely on intellectual property,” and then designate among those countries the subset of worst actors to be designated “priority foreign countries.”

These requirements resulted in USTR’s creation of a “Watch List” and “Priority Watch List,” which serve considerable blame on the weak enforcement regimes in the General Agreement on Tariffs and Trade (“GATT”), and the accompanying inability of the U.S. to enforce free trade commitments abroad. Section 301 was a key element of the response.

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1. This is an abbreviated version of a forthcoming article to be published in the next issue of the Journal on Generic Medicine. Special thanks are due to Prudence Cho for her stellar editing assistance. Remaining errors are mine.


as warning mechanisms to countries perceived as out of compliance with USTR’s preferences on IP policy. Designation as a “Priority Foreign Country” triggers a 30-day countdown during which targeted countries must “[enter] into good faith negotiations” or “[make] significant progress in bilateral or multilateral negotiations” or face sanctions determinations under the Section 301 process.8

Special 301 findings are, by intent and definition, unilateral findings by the U.S. and subject only to U.S. standards. As in the original Section 301, foreign practices and policies do not have to contravene any trade agreement with the United States to be subject to listing on watch lists or for sanction determinations.9 Nor must the U.S. take into account a country’s level of economic development in determining what is fair or unfair—a sharp departure from GATT rules promoting special and differential treatment for developing countries.10

III. Special 301 and Access to Medicines

During the TRIPS Agreement negotiations, concerns about its impact on access to medicines were a primary issue for many countries. Pharmaceutical patents grant monopoly rights to patent holders, allowing them to charge much higher prices than would be possible in a competitive environment. That effect is justified by the assertion that a portion of those excess profits would be directed toward research and development of new medicines.

The increased prices that patents permit to promote social benefits from research and development also create social costs by limiting access to affordable medications. Economists call this social cost “deadweight loss,” and it refers the number of people who would have been able to purchase the medicine at a lower competitive price who are unable to purchase the medicine at the higher monopoly price.

The deadweight loss effect is most pronounced and harmful in developing countries with high income inequality. In such markets, the nature of demand—with a small number of very wealthy people and a large number of the very poor—predictably leads to profit maximizing pricing that will exclude the great majority from access while providing miniscule incentives for future innovation.11

Recognizing the unbalanced costs and benefits of intellectual property, particularly with respect to medicines, it is commonly accepted that intellectual property rules for medicines should differ among countries.12 The WTO agreement on TRIPS harmonizes global patent and other intellectual property standards to a minimum level. But the agreement permits a great deal of differentiation between countries through provisions allowing flexibility in defining rights and the exceptions and limitations of them.13 Primary among TRIPS flexibilities supporting access to medicines are the freedom to grant compulsory licenses for any purpose; freedom to define the scope of patentability through definitions of novelty and inventiveness standards; liberty to permit parallel importation of protected goods from any country; permission to limit patent terms to twenty-years without extension; absence of any requirement to adopt U.S.-style patent-registration “linkage” systems (where registration authorities are required to check patent status before approving the safety profile of a drug); a flexible requirement to protect undisclosed data that does not require U.S. or EU-style “data exclusivity” that grants originator firms a limited marketing monopoly even in absence of a patent; and complete freedom to regulate the prices and other sales terms of any patented good, including through price controls or completion duties.

IV. Special 301 in the Obama Administration

The cause of promoting access to affordable medicines,

8. 19 U.S.C. § 2242(b)(1)(C) (2010) (specifying that “In identifying priority foreign countries under subsection (a)(2) of this section, the Trade Representative shall only identify those foreign countries that are not entering into good faith negotiations, or making significant progress in bilateral or multilateral negotiations.” (emphasis added)).

9. See Glick, supra note 6, at150 (explaining the “great deal of discretion” USTR has to define infringements).


13. See Agreement on Trade-Related Aspects of Intellectual Property Rights, art. 8, Apr. 15, 1994, WTO (hereinafter TRIPS) (expressing the overriding principles that countries remain free to “adopt measures necessary to protect public health” and to take measures “to prevent the abuse of intellectual property rights”).
medicines in developing countries has occasionally become a high-profile political issue. When the Clinton Administration pressed South Africa and Brazil to halt the use of TRIPS flexibilities to promote affordable AIDS medications in their public treatment programs, U.S. AIDS activists protested at the campaign rallies of Vice President Gore, who was running for president. A policy change ensued, and since then Democratic presidential candidates (more than Republicans) have attempted to reach out to global health advocates in their campaigns.

The Bush Administration was largely hostile to access to medicine concerns and favorable to the interests of the brand name pharmaceutical industry. Special 301 was a central vehicle for the Administration’s efforts to impose ever-higher intellectual property standards around the world with little regard for their effect on the affordability of potentially life saving treatments. Special 301 was used to press countries to limit grounds for compulsory licenses, restrict freedom to define the scope of patentability, prohibit parallel importation, extend patents beyond twenty years, implement “linkage” between drug registration and assertions of patent protection, adopt U.S. or EU-style “data exclusivity” rules, and do away with evidence-based formularies and other price and competition restrictions on pharmaceutical monopoly power. The administration justified these pressures in spite of its international commitments with the assertion that “IP rights ultimately enhance public health . . . and that therefore this approach is consistent with the Doha Declaration.”

The Obama presidential campaign recognized the access to medicine issue as part of its campaign’s global health platform. Obama declared that his presidency would “break the stranglehold that a few big drug and insurance companies have on these life-saving drugs,” and pledged support for “the rights of sovereign nations to access quality-assured, low-cost generic medication to meet their pressing public health needs.”

The Obama Administration has now produced two Special 301 reports cataloguing its policies on intellectual property and access to medicines. With no free trade agreements yet negotiated in its term, these reports are key indications of the Administration’s accomplishments on its promises to change the previous hostility to access to medicine concerns. As detailed below, the Administration receives low marks on its commitments thus far.

A. Procedural Reform

The most notable change in Special 301 under the Obama Administration may be in the area of procedural reform. But even here, the change has been extremely modest.

USTR reviews the IP policies of a large number of countries every year. The 2010 report states that the laws and policies of seventy-seven countries were reviewed through “extensive research and analysis.” USTR has few dedicated staff to this effort, and lacks the necessary legal, economic, and other experts to independently research and analyze the world’s intellectual property policies and their economic effect on US trade interests. The agency therefore relies largely on an administrative comment process to provide the factual material required.

The Pharmaceutical Research and Manufacturers of America (“PhRMA”) annually submits hundreds of pages of detailed allegations about the intellectual property and pharmaceutical policies of countries around the globe. PhRMA regularly targets countries failing to enact U.S.-style intellectual property and data protection standards or having reimbursement formularies that consider cost or promote generic medicines. Of the forty-eight countries PhRMA requested to be included in watch lists in 2008, thirty-six, or 75%, of the requests were honored by USTR.

In the past, it was exceedingly rare for

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18. Office of the U.S. Trade Representative, Office of Intellectual Property and Innovation has a total of 8 staff, as verified over a phone inquiry on October 9, 2009.

19. Drahos & Brathwaite, supra note 3, at 94 (describing USTR’s “symbiotic” reliance on industry submissions).
pharmaceutical policy interests other than PhRMA to make their voices heard in the Special 301 process. Part of this has been by design. Reflecting a desire at the time to increase industry input into trade policy, the Special 301 statute requires USTR to “take into account information from such sources . . . submitted to the Trade Representative by interested persons.”

Although “interested persons” may include targeted countries or non-governmental organizations, in practice, USTR has sought and received input almost exclusively from industry.

If the goal of the comment period was to solicit a full record of differing views and information to adjudicate between them, then one would expect an adversarial process in which notice and opportunities to be heard would be structured for targeted countries and their allies to respond. Yet, until 2008, the process effectively made replies to the industry complaints impossible, as all comments were due on the same day.

Presently, countries (but not non-state party allies) are given two weeks of additional time to submit comments after industry submissions are received. That change appears to have led to a dramatic increase of country submissions in the process, from a norm of three or four per year to over twenty in 2009 and 2010. In 2010, for the first time, the USTR held an open public hearing (limited to participants physically present in the U.S.) as part of its report preparation process. The number of submissions ballooned to over 500, nearly 90% of which were from individuals or public interest organizations opposed to the current direction of U.S. trade policy.

Although the process improved in 2010, the hearing procedure implemented by USTR remains severely flawed from an administrative justice standpoint. In a normal regulatory review process, a draft regulation or report is released and comments are requested on its contents. After the comments, the agency is normally compelled to explain its decision between opposing comments, thus demonstrating that any choices between opposing views have some rational basis. The Special 301 process lacks these basic procedural norms. Comments are invited on a notice, not a draft. And the final report that was issued in 2010 failed to respond to any of the factual and legal disputes before it.

One of the hallmarks of a just and fair administrative process is an avenue for appealing questions of law, policy, and erroneous findings of fact to an independent authority. Indeed, this procedural protection is being demanded by USTR for pharmaceutical pricing programs abroad, but is not being given in the Special 301 process that is used to make such demands. The Special 301 adjudication process lacks any defined means for the appeal of legal, policy, and factual determinations in the draft report to an independent body.

B. Continuation of Restrictions on Access to Medicines

The change in Special 301 procedure in the Obama Administration has been similarly modest. A comparison of the 2009 and 2010 Special 301 reports shows some gradual change in the direction of promoting access to medicines and respecting the Doha Declaration. Both reports continue to press developing and other countries to adopt access to medicines limiting policies in excess of those required by TRIPS and in excess of the restrictions placed on the Bush Administration’s negotiation of the May 2007 New Trade Policy for America.

1. Incomplete Embrace of the Doha Declaration

The Bush Administration Special 301 reports rhetorically embraced the Doha Declaration, while avoiding its affirmation of the rights of countries to use TRIPS flexibilities “to the full” or the commitment that TRIPS “can and should” be interpreted and implemented to promote access to medicines for all public health problems. In the first Special 301 report after the Doha Declaration, the U.S. limited its embrace of the Doha declaration to situations to “address a major health crisis, like the HIV/AIDS crisis in sub-Saharan Africa.”

By 2008, the Bush Administration’s stance had moderated somewhat, recognizing the application of the Doha Declaration to “serious public health problems.”

The Obama Administration’s statements on the Doha Declaration are slightly broader. The 2009 report eliminates the qualification “serious” from the public health problems Doha was meant to address, explaining that the “United States respects a country’s right to protect public health, in particular, to promote access to medicines for all.”

For the first time, the report

21. See Submissions Concerning Special 301, www.regulation.gov (choose “Read Comments” then enter “USTR 2010-0003” in “Keyword or ID”).
23. Office Of the U.S. Trade Representative, Executive
explicitly mentions support for use of compulsory licenses.\textsuperscript{24} The same language is included in the 2010 report.\textsuperscript{25} These are much broader categories of public interest concerns than the U.S. has previously endorsed. But the Administration still appears intent on avoiding the Doha Declaration’s affirming of the rights to use TRIPS flexibilities “to the full” and the instruction that TRIPS “can and should” be interpreted and implemented to promote public health and access to medicines.

2. Data Exclusivity

The most common objection in the 2009 and 2010 reports related to pharmaceutical policy is a complaint about “lack of protection . . . against unfair commercial use of undisclosed test and other data.”\textsuperscript{26} In 2010, fifteen countries were cited for lack of adequate pharmaceutical data protection (Algeria, Argentina, Brazil, Chile, Dominican Republic, Egypt, India, Indonesia, Lebanon, Malaysia, Mexico, Pakistan, Paraguay, Turkey, and Vietnam). This number of citations is down from twenty one countries similarly cited in 2009.

The vague complaints about lack of data protection are best interpreted as a demand for a new form of pharmaceutical marketing monopoly known as “data exclusivity.” The issue arises because of requirements that manufacturers must prove the safety, efficacy, and quality of medicines through clinical trials or other data. When a generic manufacturer subsequently attempts to obtain marketing approval for a therapeutically equivalent medicine, it is normally required to prove only bioequivalence to the already approved drug. In this way, the generic firm relies on the original safety and efficacy data. “Data exclusivity” rules delineate a time period in which a generic firm may not rely on the originator’s safety and efficacy data to approve a competing product, thus requiring that the generic product either remain off the market or repeat costly clinical trials.\textsuperscript{27}

The TRIPS Agreement requires that certain pharmaceutical test data submitted to registration authorities be protected from “unfair commercial use.”\textsuperscript{28} Article 39.3’s literal scope is relatively narrow.\textsuperscript{29} Importantly, countries have great leeway in defining what use or reliance on test data may be “unfair” or “commercial.”\textsuperscript{30} A World Health Organization paper advises that “[c]ountries are not obliged under Article 39.3 to confer exclusive rights on the originator of marketing approval data,”\textsuperscript{31} and most traditional uses of registration data “to assess the efficacy and toxicity of a pharmaceutical or agrochemical product is not a commercial use subject to Article 39.3.”\textsuperscript{32}

The practice of providing a form of exclusivity for pharmaceutical test data originates with the Hatch-Waxman Act in the U.S. The Act included a political compromise by providing an avenue for generic firms to register based on originator safety and efficacy data, but prohibiting such reliance in the first five years after the data is filed. In the EU, data exclusivity periods were later enacted that can run as long as eleven years.\textsuperscript{33} These periods operate independently of any period of patent exclusivity and in the EU have been interpreted to be impervious to compulsory licensing, even in a health emergency.\textsuperscript{34} Most countries in the world do not follow exclusivity rules.\textsuperscript{35} In such countries, the only marketing monopoly companies receive is through the patent system rather than the registration system.\textsuperscript{36}

USTR has adopted a legal interpretation of TRIPS

24. Id.
28. TRIPS, supra note 13, at art. 39.3.
29. Test data must be protected only if: (1) national authorities require its submission; (2) it is undisclosed, nor already public, (as many clinical trial results in the U.S. are by virtue of state and local clinical trial registry laws); and (3) it concerns a new chemical entity, i.e., the undisclosed data is “the result of significant investment,” proof which could be required.
31. Id, at x.
32. Id.
33. See, e.g., Brook Baker, Ending Drug Registration Apartheid—Taming Data Exclusivity and Patent/Registration Linkage, 34 Am. J.L. 
34. Letter from Martin Teberger, Head of Unit for Consumer Goods to the Eur,Generic Pharmas. Ass’n. to Greg Perry, Eur. 
edu/pijip/go/eu022202006).
35. Sisule F. Musungu & Cecilia Oh, The Use of TRIPS By Developing Countries: Can they Promote Access to Medicines?, Comm’n 
that Article 39.3 requires data exclusivity similar to the U.S. or EU. This interpretation is in direct conflict with the negotiating history of the TRIPS agreement, during which the U.S. proposal to include language in Article 39 requiring that pharmaceutical test data be “reserved for the exclusive use of the registrant for a reasonable period.” was rejected and amended out of the final text. Despite this rejection of a data exclusivity requirement by TRIPS negotiators, both PhRMA and the USTR have argued that Article 39.3 of TRIPS requires countries to implement data exclusivity regimes.

Data exclusivity can have particularly harmful effects in developing countries. In many developing countries, drug companies lack patents because they were never sought or granted. In such circumstances, data exclusivity grants a marketing monopoly in the absence of patent protection. Another problem is that companies often register their products in developing countries very late, focusing instead on the wealthy markets. When this is the case, data exclusivity can extend monopoly periods past the point at which the medicine is subject to full competition in the U.S.

The USTR’s use of Special 301 to push its interpretation of Article 39.3 on developing countries displays the inadequacy of Special 301 as a just and neutral adjudicative process and highlights the reason why it violates the WTO. Countries cannot have the right to list and sanction other countries for violating their own interpretation of the WTO accord. The proper route for pressing TRIPS complaints is through dispute resolution.

3. Registration and Patent Linkage

The 2010 report indicates a policy change in the Obama Administration on the issue of linkage. “Linkage” refers to requirements that FDA-like marketing authorities not register generic copies of medicines for which there is a patent claimed by a supplier. This is an added enforcement process favored by patent holders. It permits them to use patent claims to block marketing of products without the need to sue the alleged infringer in courts to enforce the patent rights. The rule in the US has led to “ever-greening,” — where marketing monopolies are extended with new (often baseless) applications for patents that may be used to prohibit marketing approval of generics unless and until the generic firm successfully challenges the patent in court. Evergreening problems are likely to be more pronounced in developing countries that lack the rigorous patent examination process and other regulatory resources and expertise of the U.S. TRIPS does not require countries to implement linkage rules.

In 2009, a lack of linkage was the second most cited medicines-related complaint in Special 301 (after data exclusivity). The complaint was normally framed as an alleged failure by countries to “implement an effective system to prevent the issuance of marketing approvals for unauthorized copies of patented pharmaceutical products.” A nearly identical complaint was raised against twelve countries in the 2009 report.

In 2010, the number of countries cited for lacking linkage requirements decreased to eight — Chile, Pakistan, Columbia, Dominican Republic, Ecuador, Egypt, Malaysia and Mexico. Of these, Chile, Columbia and the Dominican Republic are signatories to free trade agreements with the U.S. that already require linkage. The other countries have no outside obligations to enforce linkage rules.

Perhaps more importantly, the language used to define the complaint also shifted. Instead of requesting a “system to prevent the issuance of marketing approvals,” as in 2009, the 2010 report asks for “an effective system to address patent issues expeditiously in connection with applications to market pharmaceutical products.” Such a system could be an effective court

37. See Correa, supra note 30 at 53.
44. 2010 Special 301 Report, supra note 17, at 30.
adjudication process for the enforcement of patent rights. But so interpreted, the complaint becomes incredibly vague, leaving the reader with very little idea as to what is in fact being complained about.

4. Restrictions on Compulsory Licensing

Compulsory licensing is perhaps the most important flexibility in the TRIPS agreement. Despite the express mention of respect for the rights of countries to issue compulsory licenses in the 2010 report, the Obama Administration is continuing to use Special 301 to pressure countries to reduce the use of this important tool to promote public health.

A compulsory license is a government-issued license to one or more competitors permitting entry in the market upon payment of adequate royalties to the patent holder. The Doha Declaration affirms the right of all countries to use compulsory licenses to promote access to medicines, stating that each country “has the right to grant compulsory licenses and the freedom to determine the grounds upon which such licenses are granted.”

The Obama Administration is continuing to use Special 301 to pressure Thailand over its use of compulsory licenses. In 2007, Thailand was elevated to the Priority Watch List (“PWL”) in large part for its announcement of compulsory licenses for excessively priced medicines needed to treat AIDS and heart disease. The official U.S. complaint was not about the license per se, but the alleged failure of Thai government to “engage openly and transparently with the companies that developed the drugs that are at issue.” In 2009, Thailand was kept on the PWL, noting “the uncertainty created by the previous Government’s policies concerning the issuance of compulsory licenses on patented pharmaceutical products.” Thailand remained on the 2010 PWL as well. Although the words “compulsory license” were eliminated from the entry, the issue was indicated through a call for Thailand “to engage in a meaningful and transparent manner with all relevant stakeholders, including owners of intellectual property rights, as it considers ways to address Thailand’s public health challenges.”

5. Patent Extensions

Under TRIPS, WTO members are required to grant patents for a period of twenty years from the time the patent is filed. This period takes into account the known delays in regulatory processes. But the U.S. has long used Special 301 to pressure countries to extend patent terms for delays in granting patents or marketing approvals for medicines. In response to the public health concerns with such extensions, the Bush Administration’s 2007 New Trade Policy demanded that the U.S. “[e]liminate [the] requirement that an FTA country extend the term of a patent on a pharmaceutical product for delays in the patent and regulatory approval process,” and instead “ensure expeditious patent and regulatory approval.” In 2009 and 2010, no developing country was targeted for a failure to grant patent extensions to compensate for regulatory delays. But Israel was cited for lack of patent extensions in both reports.

6. Patentability Criteria

One of the key flexibilities in the TRIPS agreement is the ability of a country to decide for itself what inventions qualify for patents for being sufficiently “new,” involving an “inventive step” and being “capable of industrial application.” In pharmaceuticals, the definition of these terms can determine whether a country grants patents for new uses or formulations of existing products that are already known. The grant of such patents is controversial between countries and among experts, and there are no provisions in TRIPS restricting country flexibility in making these basic policy decisions.

The 2009 and 2010 reports single out Brazil, India and Philippines for their similar laws that ban patents on polymorphs (i.e. new forms) and new uses of known inventions. These complaints press countries to grant patents on a larger range of inventions than TRIPS requires and thereby limit access to affordable medicines in each country. In the case of India, the claim is particularly troublesome because it is the largest

47. 2010 Special 301 Report, supra note 17, at 28.
48. See Waxman Report, supra note 16, at 8 (criticizing patent extensions which “can work to delay access to low-cost generic drugs in developing nations”).
50. See 2009 Special 301 Report, supra note 43.
51. TRIPS, supra note 13, at art. 27(1).
52. See 2010 Special 301 Report, supra note 17, at 26 (India), 29 (Brazil), 36 (Philippines).
supplier of generic medicines in the world. The more patents India grants, the less possibility there will be to find a source of generic supply for other countries.

7. Vague Definitions of “Counterfeit” Pharmaceuticals

The 2009 and 2010 reports list concerns about “counterfeit” pharmaceuticals in several countries. But it is unclear what definition of “counterfeit” is being used. Under TRIPS, “counterfeit” has the particular meaning of a product that willfully deceives consumers by using an identical mark to the originator. It is not correctly applied to an allegedly unauthorized generic version of a patented product or to lesser forms of trademark infringement that do not use identical marks.

The reports frequently allege concerns with “unauthorized use of bulk active pharmaceutical ingredients” by manufacturers in Brazil, China and India, but fail to identify who determined that these uses were unauthorized. Civil litigation is the proper mechanism for enforcing a patent and determining if a particular use is in fact a violation. Yet, USTR cites no such litigation and appears to be simply taking industry complaints as fact.

In all references to “counterfeit” medicines, USTR should ensure that the U.S. position respects the legitimacy of generic medicines and clearly distinguishes generic equivalents from actual trademark counterfeits. And when it makes accusations about violations of patent law, such as targeting “unauthorized uses” of patents, it should support those claims with proof.


The 2009 and 2010 reports make many vague allegations that a particular country’s patent law is “weak” or otherwise deficient, with little indication as to what is specifically wrong with its system.

The 2009 report lists the Philippines on the Watch List and comments, “The United States is troubled by the amendments to the patent provisions in the Philippines Intellectual Property Law only as they apply to pharmaceuticals. The amendment significantly weakens patent protection for pharmaceutical products.” There is no citation to the law or what part of it USTR opposes. There is no ban in TRIPS from having patent law requirements that apply specifically to pharmaceuticals. As the WTO panel noted in the Canada — Patent Protection decision, TRIPS only bans unjustified discrimination by field of technology, not mere differentiation. And the Doha Declaration specifically requires countries to promote access to medicines for all. There is nothing in the recent amendments to the Philippines patent law that violates the TRIPS Agreement. The new law puts in place TRIPS-compliant compulsory licensing and government use provisions, excludes minor new uses or new forms of existing medicines from patent protection, authorizes TRIPS-compliant parallel importation, and adopts recognized limitations to patent rights, such as limitations for experimental use.

9. Enforcement Requirements

In many instances in the 2009 and 2010 Reports, USTR presses countries to adopt TRIPS-plus intellectual property enforcement procedures that could limit access to medicines. Particularly troubling are the many vague complaints about the need to give border officials (and others) the ability to instigate raids and confiscate suspected infringing products. These allegations are not specifically limited to trademark counterfeit or commercial copyright infringements. Seizures of legitimate medicines by border officials have become a massive problem for access to medicines around the globe, particularly through the so-called “Dutch seizure” cases in Europe. The U.S. should not be encouraging border officials to confiscate products that allegedly violate patents. Patent violations cannot be identified by sight by border officials or police. The reason we enforce patents through complex civil proceedings is that such proceedings are necessary to avoid wrongful confiscations. Wrongful confiscations of medicines harm more than economies (which itself threatens social welfare), they directly threaten the lives

53. TRIPS, supra note 13, at art. 51 n. 14.
54. See 2010 Special 301 Report, supra note 17, at 24 (Algeria cited for “weak” patents); 26 (India cited for needing “stronger” protection). See 2009 Special 301 Report, supra note 23, at 34 (citing “shortcomings in Paraguay’s patent regime”).
56. Since late 2008, customs officials in the Netherlands, Germany and France have seized at least twenty shipments of legitimate generic medicines. Of the shipments, nineteen were legally manufactured and exported from India and intended for developing countries where they could be legally imported. Patents did not exist on the medicines in either the country of origin or destination. These shipments were seized as a result of national implementation of an EU regulation that empowers border officials to classify and seize medicines as counterfeit if the customs official determines (often at the direction of pharmaceutical companies) that the medicines violate territorial patents of the relevant EU country.
of people who depend on uninterrupted supplies of the medicines.\textsuperscript{57}

10. Restrictions on Evidence-Based Reimbursement Programs

In the 2009 and 2010 reports, the USTR included sections on “Supporting Pharmaceutical [and Medical Device] Innovation” that promote only one narrow pro-innovation policy: convincing other countries to abandon regulatory and reimbursement programs that restrain the high cost of patented prescription drugs. The reports single out all Organization for Economic Co-operation and Development (“OECD”) members and specifically mention Finland, France, Italy, Japan, Korea, Canada, Germany, New Zealand, Taiwan, and Poland for administering “unreasonable . . . reference pricing or other potentially unfair reimbursement policies.”\textsuperscript{58}

TRIPS does not restrict how countries regulate the market power of companies created by patents. Patents on medicines create particularly strong and socially harmful market power because people will pay anything they can for life-savings drugs. There are often no substitutes if a truly innovative medicine is under patent, and the burdens of lack of access fall almost exclusively on the poorest people (or, in the U.S., the uninsured).

As in other areas, the use of Special 301 to target reimbursement programs appears linked to a broader international regulatory agenda. The free trade agreements negotiated with Australia and Korea under the Bush Administration included chapters imposing restrictions on pharmaceutical reimbursement programs. During and after the negotiation of these agreements, U.S. state officials repeatedly warned USTR and Congress that the norms adopted in these agreements, if applied to U.S. state governments, would cripple Medicaid programs.\textsuperscript{59} This is because Medicaid programs rely on preferred drug lists to exact lower prices from pharmaceutical companies, which operate very similarly to the formularies and other programs targeted by the U.S. in other countries.

The concerns of state officials protesting the use of Special 301 to criticize reimbursement policies abroad that are similar to those used by U.S. Medicaid programs had minimal effect. The 2010 report, as in 2009, continues to target unfair reimbursement policies without describing what is unfair about them or how these programs differ from what states now do to reduce drug prices. There is nothing in the Special 301 statute that authorizes USTR to pressure or sanction other countries for their pharmaceutical reimbursement policies.

IV. Conclusion

The continuation of the Special 301 program to threaten and sanction countries for TRIPS plus intellectual property and pharmaceutical regulation policies stands in stark contrast to the principles that the Obama Administration states that it espouses. Global health groups have developed the outlines of a trade and access to medicines agenda that needs to be expanded into a broader campaign. The first step should be to expand President Clinton’s Executive Order 13155 to all developing countries. No developing country anywhere in the world should be pressed by the U.S. to adopt an intellectual property or pharmaceutical regulation policy in excess of those required by the WTO accords if the effect will be to raise prices of needed medicines in that country.

\textsuperscript{57} In the case of AIDS and other illnesses, an interruption in supply of medicines can lead to drug resistance -- which harms not only the patient but the greater society effort to combat the disease.  
\textsuperscript{58} 2010 Special 301 Report, \textit{supra} note 17, at 14; 2009 Special 301 Report, \textit{supra} note 23, at 7-8.  
\textsuperscript{59} See S.J. Res. 50 (Vt. 2006) (urging USTR to “pursue an exchange of Interpretive notes” with Australia to formally ensure state Medicaid programs would not be covered by Annex 2(c)).
Innovation in the United States is directly correlated to the number of patents granted by the United States Patent and Trademark Office ("USPTO"), and the country needs innovation in order to boost its suffering economy. Approximately 18 million workers in the U.S. are employed in business sectors that rely heavily on intellectual property protection, accounting for $5 trillion of the U.S. gross domestic product. In October 2010, the unexamined patent backlog was over 700,000, and approximately 450,000 new utility applications are filed annually. As the patent application backlog grows at the USPTO, jobs are put on hold, dreams are stalled, and innovation is delayed. In the global economy, intellectual property determines both America’s competitiveness and prosperity. To boost the economy by injecting a new wave of innovation, changes must be made to the patent system in order to decrease total patent pendency, which is directly related to the amount of time it takes an applicant to obtain a quality patent.

Before analyzing programs which may help to reduce patent pendency and ultimately the amount of time required for a qualified applicant to have a patent granted, it is important to first understand the patent application process.

I. Background on the Patent Examination Process

Current practice at the USPTO is to examine non-provisional utility patent applications in order of their U.S. filing date. A patent examiner’s docket is organized based on regular new applications, regular amended applications, special new applications, and special amended applications. Special applications are granted a higher examination priority than regular applications. Various initiatives have been established at the USPTO to grant specific applications special examination status in order to speed up the patent prosecution process.

On the surface, the current patent backlog of unexamined patents is often attributed in part to the decrease in the number of patents approved, increasing requests for continued examination (RCE), the attrition rate of patent examiners, and the projected decrease in fee collections, which will not permit the

8. Homegrown Innovation: Event with Undersecretary of Commerce David Kappos on Job Creation and Innovation (June 4, 2010), http://www.americanprogress.org/issues/2010/06/homegrown_innovation.html. David Kappos, Director of the United States Patent and Trademark Office, affirms that the USPTO can play a vital role in pulling the United States out of a recession by encouraging inventors, researchers, and businesses to create innovations that give rise to new businesses and jobs.


10. A provisional patent application is temporary as it expires one year from filing, may not be extended and is not examined. Conversely, a non-provisional patent application is examined, and the life of the application may be extended through prosecution. A provisional patent application acts as a cost efficient place holder, giving an inventor time to obtain the funds necessary to file a non-provisional application.

agency to hire the number of needed examiners.\textsuperscript{12}

When the USPTO receives a new patent application, the application is screened for compliance and then classified with the appropriate art unit to direct it to the proper examination area in the Office.\textsuperscript{13} Each art unit is responsible for examining a range of classes and subclasses of applications.\textsuperscript{14} After the appropriate art unit receives an application, a supervisory patent examiner will docket the case within the art unit to an examiner to begin prosecution. Most patent applications are published, and therefore available as prior art, eighteen months after filing.\textsuperscript{15} Although the agency goal is to have a final decision on a patent application within eighteen months of filing, it is currently approximately twenty to thirty-three months before an application begins the examination process and then nine to nineteen additional months before a final decision is rendered.\textsuperscript{16} Patent application pendency is increasing, as first action pendency increased from twenty-three months in 2005 to over twenty-five months in 2008.\textsuperscript{17} At the end of FY 2009, first action patent pendency was almost twenty-six months, and total pendency was almost thirty-five months.\textsuperscript{18} Unfortunately, the pendency issue has deterred inventors from filing applications, as new patent application filings fell in 2009 for the first time in thirteen years.\textsuperscript{19} Therefore, when comparing program options to reduce patent pendency, one must consider the impact that the program has on decreasing the amount of time prior to the examiner receiving a case that is ready to be examined and the amount of time that it takes for an examiner to complete the examination process.

Delegates from the USPTO have proposed several reform options to accelerate examination of patent applications and reduce pendency, which include the “Backlog Reduction Stimulus Plan,”\textsuperscript{20} “Three Track” initiative,\textsuperscript{21} “Green Tech” initiative,\textsuperscript{22} and the “Ombudsman Pilot Program”\textsuperscript{23} in addition to the currently implemented “Accelerated Examination”\textsuperscript{24} program and “First Action Interview Pilot.”\textsuperscript{25} Although the USPTO has already implemented the “Patent Prosecution Highway”\textsuperscript{26} for the fast track examination of patent applications, this paper will discuss policies from different proposed initiatives and other possible options to implement pendency goals of the FY 2011 President’s Budget. The Budget is a five-year plan which specifically aims to reduce the time between filing and a first action on the merits to ten months by FY 2013, and reduce the average total pendency to twenty months for patent applications by FY 2014.\textsuperscript{27}

II. REDUCING TOTAL PATENT PENDENCY USING THE ACCELERATED EXAMINATION PROGRAM (PETITION TO MAKE SPECIAL)

As of August 25, 2006, a patent application’s examination may be accelerated to advance an application out of turn if the applicant files a petition to make the application special and the petition is subsequently granted by the Office.\textsuperscript{28} Essentially, the

\textsuperscript{13} 17 Fed. Cir. B.J. 133 (2008).
\textsuperscript{15} See 35 U.S.C. § 122 (b) (where applications are either published after the expiration of a period of eighteen months from the earliest filing date unless a non-publication request is submitted by the inventor or published earlier than the eighteen month period at the request of the applicant).
\textsuperscript{16} Pendency Statistics, supra note 9.
\textsuperscript{18} 2011 President’s Budget, supra note 3.
\textsuperscript{21} See 75 Fed. Reg. 31763 (June 4, 2010).
\textsuperscript{22} Josie Garthwaite, Express Lane for Green Patents Can Help Startups (Dec. 9, 2009), http://www.businessweek.com/technology/content/dec2009/rc/2009129_816926.htm.
\textsuperscript{28} See 71 Fed. Reg. 36323 (June 26, 2006). Specifically, the requirements for petitions to make special under the accelerated examination program are: A. A petition to make special under the accelerated examination program must accompany an application, along with the petition fee of $130.00 (see 37 CFR 1.17(h)) or a statement that the basis of the petition is the applicant’s age or health, or that the invention will enhance the quality of the environment, or contribute to the development or conservation of
petition to make an application special places it on an examiner’s special new docket, which gives it priority over regular new applications. The program is only available to applications filed after the effective date of August 25, 2006. For applications filed prior to the effective date, a petition to make special will only be granted based on the applicant’s health or age or by the Patent Prosecution Highway (PPH) pilot program. The goal of this program is to complete examination of a patent application within twelve months of its filing date.

If the Office grants a petition to make an application special, an examiner should take up the application for examination within two weeks of it being docketed to him or her, saving the applicant the initial twenty to thirty-three months before an application usually begins the examination process. If the examiner determines that a possible rejection must be addressed, the examiner will telephone the applicant for an interview to discuss how the possible rejection or issue may be resolved. If the interview does not result in the application being placed in condition for allowance, an office action may be mailed to the applicant outlining the rejection. At this point, the application will proceed through the prosecution system normally, with the exceptions that the examiner is required to conduct a conference before finally rejecting the application, and the application will retain special status in the event that an RCE is filed after a final rejection.

The accelerated examination program is an excellent option for expedited examination of an application which enhances the quality of the environment, contributes to the development or conservation of energy or resources, counters terrorism, or whose applicant is facing age or health issues. By applicants limiting their total claims and taking a proactive approach with the examiner, applicants may bypass the need for the examiner to write up an office action detailing rejections based on prior art, which could save an applicant approximately nine to nineteen additional months before a final decision is rendered using the normal process. By conducting a pre-examination search and submitting the search results to the examiner through an Information Disclosure Statement (IDS), the applicant helps to speed up the examination process of searching for the most relevant prior art. An IDS identifies relevant prior art by title, author, and publication date. By working proactively with the examiner, RCEs may not be necessary, and worthy applications will be granted patents in an efficient manner. By allowing the application to retain special status after filing an RCE, an applicant using the accelerated examination program will again realize the benefit of jumping to the front of the queue, saving months out of the initial period.

While the accelerated examination program will help applications within certain disciplines speed through the patent prosecution system, it does not directly address the patent backlog. Unfortunately, the amount of applications that will likely be made special through this program may be less than one percent of total patent applications due to the cost of pre-examination searches. By implementing the accelerated examination program, the backlog and pendency are indirectly decreased because the special new applications are prosecuted in a more efficient manner, thus, allowing the examiner to perform examination more quickly.

energy or resources or counter terrorism (see 37 CFR 1.102(c)). B. The application must be a design application or a utility application, which is a non-reissue. C. The petition, application, and required fees must be filed with the USPTO electronically. D. The application must be complete and ready for examination at the time that it is filed. E. The application must not contain more than three independent claims or twenty total claims. F. The claims must be directed to only one invention. G. The applicant must agree to have an interview before any action on the merits to discuss any relevant art with the examiner and any potential objections or rejections. H. The applicant must assert at the time of filing that a preexamination search was conducted. The applicant must identify the field of search within the United States patent classification system to include a class and subclass, date of search, and database search history. I. The applicant must provide an accelerated examination support document at the time of the filing, which includes an information disclosure statement (IDS). The information disclosure statement must cite references closely related to the claimed subject matter, and for each reference cited, the document must identify the claim limitations disclosed by the reference. Additionally, the support document must include an explanation of how each claim is patentable over the reference cited.

33. Id.
34. Id.
35. Id.
36. Id.
37. MPEP, supra note 31, § 609.
III. Reducing Total Patent Pendency Using the First Action Interview Pilot

The First Action Interview Pilot allows applicants to quickly advance through patent application prosecution by having an interview with an examiner before an office action is written with rejections.39 After an examiner has conducted a search for prior art and prior to the examiner mailing an office action outlining rejections or objections, the examiner must conduct an interview with the applicant to discuss possible issues outlined in a pre–interview communication prepared by the examiner. Through this program, applicants are able to rapidly advance prosecution by dealing with issues up front in the prosecution process by allowing applicants to amend claims and benefit from enhanced interaction with the examiner, which could save an applicant approximately nine to nineteen additional months on average before a final decision is rendered using the normal process.40

The first action interview pilot is a good option to expedite examination of an application. By taking a proactive approach, the applicant may bypass the need for an office action detailing rejections based on prior art. Similar to the scenario with the accelerated examination program, the need for RCEs may be diminished through proactive interaction between the applicant and the examiner.

While the first action interview pilot will help applications progress through the patent prosecution system more quickly than normal, it does not directly address the patent backlog or the amount of time that it takes the application to get to the top of the examiner’s regular new docket. By implementing the first action interview pilot, the backlog is indirectly decreased because the affected applications are prosecuted in a more efficient manner, thereby allowing the examiner to perform examination more quickly. Similar to the accelerated program, patent pendency is mildly reduced by the examiner’s ability to perform work more quickly.

IV. Reducing Total Patent Pendency Using the Backlog Reduction Stimulus Plan (Project Exchange)

The Office temporarily implemented a procedure between November 27, 2009 and February 28, 2010, which has now been extended,41 that gives applications belonging to small entities special examination status if the applicant expressly abandons another co–pending unexamined non–provisional application.42 The USPTO opened the application exchange program to all applicants to reduce the backlog, where each entity is limited to fifteen applications through December 31, 2010.43

The backlog reduction stimulus plan is a great option to expedite examination of an application by small entities, which have more than one application. Similar to the accelerated examination program, the backlog reduction stimulus plan helps jump an application to the head of the examination queue by making it special, thereby, possibly saving the applicant the initial twenty to thirty-three months before an application usually begins the examination process.

While the backlog reduction stimulus plan will help reduce the backlog by one application for each application that enters the plan, the cost is that one less innovation will be realized in the marketplace.

V. Reducing Total Patent Pendency Using the Green Tech Program

Under the Green Tech initiative, around 3,000

42. See 74 Fed. Reg. 62285 (Jan. 28, 2009). Specifically, the requirements to qualify for the backlog reduction stimulus plan: A. The application requesting special status must be a non-provisional application with a filing date earlier than October 1, 2009, and the applicant must be established as a small entity under 37 C.R.F. § 1.27; B. The applicant must have another co-pending non-provisional application with a filing date earlier than October 1, 2009, where the requirements of 37 C.R.F. § 1.53 have been met (i.e., the application contains an executed oath or declaration and the filing fee, search fee, examination fee, any applicable application size fee, and any applicable excess claims fee have been paid); C. The same party must own the application for which special status is sought and the other co-pending non-provisional as of October 1, 2009, or they must name at least one inventor in common; D. The applicant must file an express abandonment under 37 C.R.F. § 1.138(a) for the co-pending non-provisional application before it has been taken up for examination, along with a statement that the applicant has not and will not file an application that claims the benefit of the expressly abandoned application, and that applicant will request a refund of any fees paid in the expressly abandoned application; E. The applicant files a petition under 37 C.R.F. § 1.102 in the application for which special status is sought, identifying the basis under which special status is being sought; F. The fee to consider a petition to make special for applications pertaining to Project Exchange/Patent Application Backlog Reduction Stimulus Plan is currently waived.
applications for patents on clean technologies will be expedited through the USPTO in a pilot program designed to reduce the review time from an average of forty months to twelve months. By reducing review time, the process for "inventors to secure funding, create businesses, and bring vital green technologies into use much sooner" will be achieved in a timely and efficient manner. The USPTO estimates that there may be as many as 25,000 applications already in the system that could potentially qualify for the new pilot. However, in the first five months that the program was active, special status was only awarded to 342 patent applications.

Because the focus of the Green Tech initiative is on clean technology, qualifying applications may also be eligible for the accelerated examination program. While it is helpful for these applications to be given special status and placed on an examiner's special new docket, a delay in prosecution may occur when there are not enough examiners to examine applications based on clean technologies and when an examiner's special new docket becomes lengthy. If applications in the special new docket must be acted on with precedence over regular new applications, the backlog of regular new applications will not be reduced significantly.

VI. Reducing Total Patent Pendency Using the Three–Track Initiative

The Three–Track Initiative, also known as the "Enhanced Examination Timing Control Initiative or Enhanced Examination Timing Control Initiative," aims to efficiently prosecute patents by leveraging work previously done at foreign patent offices. By participating in the Three–Track Initiative, an applicant may elect one track within the Three–Track Initiative as follows:

A. Track 1: Applicants may request prioritized examination, or
B. Track 2: Applicants may have their applications processed under the current procedure, or
C. Track 3: Applicants may request a delay lasting up to thirty months before docketing an application for examination.

Applications claiming foreign priority will not be examined by the USPTO until the USPTO receives a copy of the foreign search report and until after a first action is mailed to the applicant by the foreign office and the applicant replies properly to the foreign office. Then, the application claiming foreign priority would be eligible for the Three–Track Initiative.

By participating in the Three–Track Initiative, overall pendency will be decreased because Track 1 will result in increased resources and output; Track 3 will result in increased output by reusing search and examination work done by other offices, resulting in greater efficiency; and Track 2 will result in applications with lower priority or value being removed or abandoned from the system, freeing more resources for examination.

VII. Reducing Total Patent Pendency Using the Ombudsman Pilot Program

By implementing the Ombudsman Pilot, the USPTO seeks to provide patent applicants, attorneys and agents with assistance when applications have become stalled in the examination process. By enhancing customer service, the Office hopes to address issues hindering the most efficient, or compact prosecution of an application and provide feedback to management regarding training needs based on complaint statistics.

While the Ombudsman Pilot is not likely to substantially decrease the amount of time that it takes for an application to begin the examination process, it will help to speed up the examination process because it will put more pressure on examiners to address issues that are slowing prosecution.

44. Josie Garthwaite, Express Lane for Green Patents Can Help Startups (Dec. 9, 2009), http://www.businessweek.com/technology/content/dec2009/tc2009129_816926.htm.
45. Id.
50. Id.
52. See 75 Fed. Reg. 17380 (Apr. 6, 2010).
VIII. Suggestions to Reduce Total Patent Pendency

To boost the economy by injecting a new wave of innovation, the amount of time it takes an applicant to obtain a quality patent may be further decreased by updating the USPTO classification system to allow an examiner to more quickly find relevant prior art, by implementing a strict standard with consequences for inventors and attorneys unwilling to explicitly point out and claim their invention, by implementing a three-tiered examination approach, and by hiring more patent examiners.

A. Updating the USPTO Classification System

The examination process will run more efficiently if more classes within the USPTO classification system are updated. The U.S. Patent Classification system is vital for use in prior art searches. It facilitates quick retrieval for relevant prior art for both inventors and examiners. However, technology has evolved since the current classification system was created, and there are classes that need to be refined to allow specific and quick retrieval. By updating the classification system, the amount of time it takes for an examiner to receive a regular new application will decrease, and fewer applications will bounce between art units because it is unclear where they should be examined. Correctly classifying cases ensures that an examiner with the proper expertise receives the case, limiting unnecessary research and search delay.

B. Assessing Penalties for Attorneys Deliberately Slowing Down Prosecution

Inventors and their attorneys should be held to a strict standard for explicitly pointing out and claiming their invention. Rather than specifically stating the novelty of the invention in the claims, many attorneys muddle the claims with confusing and sometimes redundant language in order to increase independent claim length. Consequently, examiners are forced to spend time sifting through the relevant claim limitations and finding prior art to map to limitations that are nothing more than fluff. By penalizing the applicant or attorney who is unwilling to properly advance prosecution, the examination process would be made more efficient, reducing the need for many requests for continued applications.

C. Implementing Three–Tiered Examination

The USPTO should consider using a tiered approach for implementing prior art searches to speed up examination and ensure high patent quality because there are an infinite number or resources to search. Unfortunately, after an examiner has performed one lengthy prior art search, the examiner rarely requests that a searcher in the electronic information center perform another search for the same application because there are not enough resources available. Creating a three–tiered approach will help to more efficiently classify patent applications from the start and ensure that the most qualified examiner receives the application for examination. After the classifier has performed a classification search, they should annotate search terms and possible resources in the first tier. When the second searcher receives the application, they should also annotate relevant resources and possible relevant prior art to further limit the scope of the search. In the third tier, when examiners receive the application, they will be able to understand the application quickly based on notes and annotations from previous searchers, so a search may be conducted more efficiently.

D. Increasing Patent Examiner Hiring

In order to reduce the patent backlog to achieve pendency on first actions to ten months by 2013, the USPTO estimated in February 2010 that it will need to hire 600 examiners in FY 2010, 1,000 examiners in FY 2011, 1,000 examiners in FY 2012, 100 in FY 2013, 100 in FY 2014, and 100 in FY 2015. The USPTO created a simulation tool that predicts patent output based on historical data and input assumptions. The following graph was produced using the simulation tool with the estimated number of needed examiners. Intersection of the green and blue lines shows that first action pendency at ten months will be achieved sometime in 2013.

57. 2011 President’s Budget, supra note 3, at 1, 19 – 20.

55. Id.
Conversely, as illustrated in the simulation below, if the USPTO curbs hiring to 300 examiners in FY 2010, 300 examiners in FY 2011, 300 examiners in FY 2012, 100 in FY 2013, 100 in FY 2014, and 100 in FY 2015, ideal first action pendency of ten months will not be achieved, and the backlog will likely remain between 500,000 and 700,000 applications.

By refining the classification system, requiring that inventors and their attorneys be held to a stricter standard for claiming their invention, creating a tiered approach to implementing prior art searches, and hiring more examiners, the amount of time for a qualified applicant to have a patent granted may be reduced.

IX. Conclusion

While the USPTO is running at full capacity to implement the discussed initiatives, it is clear that the agency needs more resources to hire examiners to reduce patent pendency and the patent backlog. Although the initiatives to make the system more efficient will likely be somewhat effective, they require additional examiners and more resources than are currently available. While the various initiatives provide opportunities for certain individual applications to skip through the system quickly, they do not significantly contribute to reducing the patent backlog as a whole.

Considering the economic struggles that the United States is facing, it is difficult to prioritize where to direct scarce financial resources. Unfortunately, although the USPTO has made valiant efforts to develop initiatives to optimize their current resources, the reality is that more financial resources are needed to consistently hire patent examiners through 2015. The United States must take an active position to show the public that innovation is important. Otherwise, the backlog will continue to grow and the United States will indefinitely ride on the innovation coat tails of other countries.


60. Nin – Hai Tseng, Behind China’s Surge in Patents (Oct. 14, 2010), available at http://money.cnn.com/2010/10/14/news/international/china_patents_innovation.fortune/. China has the potential to become the world’s top innovator, as China will likely surpass both the United States and Japan in patent filings in 2011.
I. Introduction

Everyone has ingrained in their memory one line of dialogue from a television program or movie that they consider as their favorite and will remember for the rest of their lives. For me, no line has seemed to eclipse: “There’s no such thing in this world as a perfect man and a perfect woman, just a perfect love built together by an imperfect man and imperfect woman.” This line of dialogue was not spoken in any American television program or movie, but rather, in a Korean television drama. Through the proliferation of “fansubbing,” I was able to experience and reflect on the dialogue that I now consider as one of my favorite lines of all time. This cross-cultural experience transformed my perception of world culture and broadened my horizons into a whole new realm of media and entertainment.

I am not alone in my cross-cultural experience. Chinese fans transfixed by American television shows such as “Lost” and “C.S.I.,” download the American television programs and create Chinese fansub translations in order to experience another world view on entertainment. Copyright law, however, threatens to distort the ability to have such a cross-cultural experience. Enforcement and illegalities established in copyright law negate the ability for individuals to have multicultural viewing experiences in foreign television programs and movies worldwide in a limited market or where no market is being exploited.

This comment examines fansubbing and the implications that copyright law has on its efforts as an endeavor. Part II provides an overview of fansubbing, its practice and its ethos. Part III discusses translations as a copyrighted work, including the history and development under copyright law. Part IV analyzes the complexities of fansubbing practices under existing copyright law through legal analysis and how the doctrine of fair use can be utilized to protect fansubbing practices under copyright law. Part V discusses access to foreign television programs and movies, the cultural benefits of exposure to foreign works, technology implications on fansubbing, and suggests a model for reforming the perception of fansubbing. Part VI provides in closing that copyright law protects the needs of artists, but does little to protect the needs of consumers. Consumers desire fan-based activities and need exposure and access to other views and dimensions on world culture. Existing copyright law limits the progression of societal access to foreign television programs and movies through fansubbing activities.

II. The Fansubbing Phenomenon

Fan culture appears in different mediums of expression. Among the most noted and recognized in fan culture is fanfiction. At the opposing end of the fan culture genre is fansubbing. Fansubbing, otherwise known as fan-subtitled, is defined primarily as “an unauthorized translation . . . in the form of subtitles.” The definition, however, as it appears on many websites of fansub groups is “a video . . . subtitled by fans.” There are two main styles of fansub translations: softsubs and hardsubs.

Softsubs are simple text files “whose format depends on the exact subtitle encoding software to

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4. This comment will use the term “artist,” which includes references to authors and copyright owners.

5. See Rebecca Tushnet, Payment in Credit: Copyright Law and Subcultural Creativity, 70 SPG LAW & CONTEMP. PROBS. 135 (2007).

6. See id. at 140. Fanfictions are “fan-created stories and artwork focusing on the relationship between the main characters.”


be used for [interpretation].”

They are not encoded in the video stream of a television program or movie and as a result they can be turned on or off and edited based on preferences. Softsubs are often in plain text form and only provide a translation of the program or the movie. Hardsubs are “video containers where subtitles have been encoded into the video stream.”

The hardsub format will often have graphic fonts that change color to reflect the opening and closing credits, dialogue of different characters, song lyrics and cultural context.

The practice of fansubbing is conducted by either an individual, a group of individuals collectively known as fansub groups, or through community translations teams. Fansub groups are composed of persons who work together focused on the translation of one language for multiple foreign television programs and movies. Fansub groups recruit staff composed of volunteers who serve in various roles as either: “Coordinators,” “Translators,” “Timers,” “Editors,” and “Spot Translators.” A community translation team offers the opportunity for any individual to assist with providing translations and is formed based around a common interest in a specific television program or movie. An individual can assist with contributions to either add translations or to improve upon existing translations to a television program or movie. Community translation teams also work with an individual or team, designated as the Moderator, over a channel for a specified television program or movie in order to police what fansub translations are provided. Additional persons on community translation teams, known as Segmenters, provide proper fansub translation timings to the dialogue provided in the television program or movie. In community translations, unlike fansub groups, fans who view the television program or movie are often invited to provide a running commentary and interactive dialogue on the work.

The inherent goal in fansubbing is to get access

vilii.net is an example of a community translation environment and also evidence of the actual running commentary across the video screen in all of the television programs and movies that are available. Many use the commentary section as a means of voicing appreciation for the diligence of the community translation team in producing fast subs of the work (which is often much faster than the fansub group versions) and also share in the angst and anticipation of viewing another episode of their favorite television program or movie.

A. The Fansubbing Ethos

“Fansub[translations] are made for fans, by fans, and not for commercial purposes.” No profits are involved in fansubbing. Many fansub translations boldly display within the translated text of the television program or movie that it is not for sale. Selling fansub translations is frowned upon in the fansubbing community and is considered bootlegging.

There are, however, live streaming websites and torrent sites that have fansub translations of television programs and movies and accept donations as gifts for running their websites.

The fansubbing process is intense. At least eleven critical steps must occur before a final version of either the television program or movie is released. These steps include: “(1) Raw acquisition,” “(2) Translation,” “(3) Rough Timing,” “(4) Edit,” “(5) Fine Timing,” “(6) Translation check,” “(7) Typesetting,” “(8) Quality Control,” “(9) Encoding,” “(10) Distribution,” and “(11) Release.” The amount of prep time for each step can range from a few hours to up to twelve hours depending on the role and task.

12. Id.
13. The use of the term “fansub group” will also include references to the categories of individuals conducting fansub translations and community translation teams, where explicit mentions of both categories are not provided.
14. See WithS2, supra note 9.
16. See Infusion Fansub Newbie Guide, http://www.lolikon.org/guide.html (last visited August 29, 2010). The Raw Acquisition-get the video of the episode that you want; Translation-Episode is watched a few times to translate into understandable English; Rough Timing-Insert dialogue lines into script form via timing; Edit-The editor of the script of dialogue; Fine Timing-Make sure that subtitles are removed during scene changes; Typesetting-Choosing what fonts are appropriate for dialogue; Quality Control-For typos, spelling mistakes, etc.; Encoding-Video files with the final subtitles applied (this is for a hardsub format); Distribution-Given to a group of individuals who then share with others; Release-Distributors prepare the file for viewers to download and obtain.
17. Id.
18. Bloomsburg University Manga and Anime Club, supra note 11.
19. See WithS2, supra note 9.
21. See Aja-Aja, www.aja-aja.com (last visited October 14, 2010) (Membership is only accessible with a donation that is made based on the discretion of the website moderator); www.d-addicts.com (last visited October 14, 2010) (No donation is required to access the torrents).
and increase exposure to unlicensed foreign television programs and movies. The majority of fansubbers only work with unlicensed foreign television programs and movies that have not aired in their native country. Fansubbers understand that once licensing occurs, the distribution of the fansub translations for the television program or movie will cease. Once a domestic company licenses a title, fansubbers request that all previous distributions of the fansub translations for the foreign television program or movie cease, be destroyed and permanently deleted, and if they enjoyed the television program or movie to go out and buy it. Exceptions are made, however, to continue the fansub translation if the licensed product will be heavily edited or localized.

The fansubbing process for distribution has occurred in various formats over the years. Present technology for fansub distribution occurs through a process known as digisubbing. A digisub, known otherwise as a “digital fansub,” is an “unauthorized translation . . . in the form of a subtitled digital video, usually distributed over a computer network in the form of a DivX-coded avi-file.”

Digisubs are distributed through either BitTorrent or Internet Relay Chat Direct Client Connection (IRC DCC) servers. There is a discord among fansub groups over the use of digisubs. The ability of fansub groups to create of cheap, high quality digital subs, which are produced by some fansub groups, leads many to feel that there is no incentive to purchase a licensed copy of the television program or movie, if available.

Understanding the basics of fansubbing are important; yet, the principles surrounding rights and protection to the translation of works have cultivated a perception that has contributed to the current dynamic for fansubbing practices in copyright law.

III. The Lost and Found in Translation

The first known work subject to any form of translation was the Bible, which was translated in 1522. Prior to 1886 there was no formal copyright protection for the rights of artists, including rights to translations of their works. The implementation of the Berne Convention for the Protection of Literary and Artistic Works (Berne Convention) in 1886 defined the rights artists had to their translations. The 1908 amendment of the Berne Convention formally included the right of translation in the reproduction right. Article 8 of the Berne Convention expressly provides: “Artists of literary and artistic works . . . shall enjoy the exclusive right of making and of authorizing the translation of their works throughout the term of protection of their rights in original works.” Literary and artistic works is expansively defined under the Berne Convention. Early copyright law in Europe and the United States did not adopt the international interpretation on the rights of artists and did not

23. Id.
25. Bloomsburg University Manga and Anime Club, supra note 11. Localized is a concept that will be discussed in Part IV of this comment.
26. Fansubbing distribution began with Anime and occurred by copying episodes on videotapes in low quality formats. Early fansubbers would rely on local residents to record and send copies of various anime on VHS tapes to various anime clubs. The anime clubs would provide fansub translations of the anime on VHS tapes and then provide them to fansub distributors which would sell them to fans. VHS quality was poor, expensive and difficult to reproduce. Fansubbing distribution evolved with the creation of the computer and the ability to use “high speed Internet access, desktop video editing and DVD ripping.” The modern process for fansub distribution is now almost exclusively done by digisubbing.
29. Id.
30. See Bloomsburg University Manga and Anime Club, supra note 9.
31. Id. Digisubbing can produce HD quality sub translations, which in appearance are equivalent as the original television shows or movies.
34. Berne Convention, supra note 33, Ketzan, supra note 32 at 209.
35. Berne Convention, supra note 33.
36. Id. (stating that literary and artistic works includes “dramatic or dramatico-musical works; choreographic works and entertainments in dumb show; musical compositions with or without words; cinematographic works. . . . works of drawing, painting, architecture, sculpture, engraving and lithography; photographic works. . . . works of applied art; illustrations, maps, plans, sketches and three-dimensional works relative to geography, topography, architecture or science.”)
provide translation rights.

Early European copyright law during the eighteenth and nineteenth century permitted translations of artists’ works without any formal permission requirements on use. Case law supported the right, and the ability, to make translations of artists’ works. In the English Chancery court case of *Burnett v. Chetwood*, the court held that the publication of a translation under the then current copyright statute, the Statute of Anne, was not unlawful. In the King’s Bench case of *Millar v. Taylor*, the court recognized the translation of a work is a separate entity that specifically creates a new work. Artists were not granted rights in translations of their works in the United Kingdom until the Copyright Act 1911. Early copyright law in the United States shared the original English interpretation that the translation right in an artist’s work was a separate entity, essentially creating a new work. The case of *Stowe v. Thomas* held the translation of “Uncle Tom’s Cabin” was not a copy under copyright law, and no infringement was found. The perception that translations were not infringements on copyrights, however, would not remain. In the Copyright Act of 1870, Congress explicitly overturned the *Stowe* ruling by providing that “[a]uthors may reserve the right to dramatize or to translate their own works.” This right was further enhanced under the Copyright Act of 1909. Under the current copyright law, the Copyright Act of 1976, an author’s right to translation now has protection as a “derivative work.”

The historical interpretation of translation rights for artists shifted from valuing the labor and effort expended in providing translations, to an enhancement of statutory protection for an artist’s exclusive right to translate their works. This new form of protection for artists lacks a perception of a proper balance between protecting artists’ rights and recognizing the social value of translations for certain works. Consideration of balancing test between the translation rights of artists and the social value of translations is needed to comprehend the role and importance of fansubbing.

IV. CHALLENGING THE LEGALITIES OF COPYRIGHT

Under existing copyright law, fansubbing is illegal and viewed as “illicit access to art without properly compensating artists,” because many individuals view fansubs without ever purchasing the work of the author. If the work is never licensed, the artist never receives any profit from viewing the work. Some fansub groups have acknowledged it is illegal. Within the first few hours of airing, fans download the television program or movie, and have begun the translating process for public distribution worldwide. Fansubbing is a violation of both International and United States copyright law.

A. The International Perspective

Laws governing international copyright law include: The Berne Convention, as discussed in Part III, the Uruguay Round Agreements Act...
(URAA), and the Universal Copyright Convention (UCC). The Berne Convention and the URAA require copyright protection of a copyrighted work to be extended within a party state or provided to a party national of a state. Article V of the UCC explicitly declares the right of translation to artists by stating: “[c]opyright shall include the exclusive right of the author to make, publish, and authorize the making and publication of translations of works. . . .” Beyond translation rights, international laws provide a type of protection that is available only in a limited respect in the United States - moral rights.

Moral rights consist of a “bundle of rights,” with the most central rights being attribution and integrity. Attribution is the right to claim authorship in a work and “[t]he right to prevent others from falsely attributing to him the authorship of a work that he has not in fact written.” Integrity is defined as the artist’s right “to prevent any deforming or mutilating changes to his work”, the public presentation of which would “injure [the author’s] honor or reputation.” Moral rights were included in the Berne Convention in 1928.

International law enhances the challenges of fansubbers. Authors have significant rights and protection to control the creation of translations for their works. The rights of artists to control the quality and appearance of translations of their works should not diminish. International law, however, provides artists the ability to impose significant time delays in making a determination whether a work will be translated, particularly in the areas of television programs and movies. As a result, the translation rights of artists should be limited in scope depending on the type of work that is created.

B. The United States Perspective

Under copyright law an artist’s rights are violated when one commits an act of copyright infringement. In order for an artist to succeed on a copyright infringement claim in the United States, the artist must prove: (1) the ownership of a valid copyright, (2) an unauthorized copy of the work, and (3) the allegedly infringed work is substantially similar to the work. A “derivative work” is defined as “a work based upon one or more preexisting works, such as a translation.” For infringement, a “derivative work must be based upon a copyrighted work.” Similar to the Berne Convention, United States copyright law provides limited moral rights protection under the Visual Artists Rights Act of 1990 (VARA). Under VARA, the rights of attribution and integrity are applied only to works of visual art. Moral rights in the United States are limited to protect only works of visual art. Fansub translations are not considered a work of visual art and are not entitled to protection under moral rights. As a result, United States copyright law protects an artist’s right to prevent fansub translations of their works based on the derivative works right. The doctrine of fair use is used as a defense to copyright infringement. As described in Title 17 of the Copyright Act of 1976, an infringing use is considered “fair use” if the work is

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52. Universal Copyright Convention, supra note 52.
54. Spangler, supra note 55, at 1302.
55. Id.
57. Spangler, supra note 55, at 1302 (quoting Carter v. Helmsley-Spear, Inc., 71 F.3d 77, 81 (2d Cir. 1995)).
59. Berne Convention, supra note 33. Article 6bis provides: “Independently of an author’s economic rights, and even after the transfer of said rights, the author shall have the right to claim authorship of the work and to object to any distortion, mutilation, or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to his honor or reputation.”
64. See id; See also Joshua M. Daniels “Lost in Translation”: Anime, Moral Rights, and Market Failure, 88 B.U. L. Rev. 709, 716-718 (2008).
used for “criticism, comment, news reporting, teaching . . . scholarship, or research . . .”65 Factors examined to
determine whether fair use is appropriate include:

1. Examining Factor One: Purpose and Character
   of the Work

In Sony Corp. of America v. Universal City Studios, Inc., the Supreme Court held that it is
presumptively unfair “to make copies for a commercial or profitmaking purpose.”66 The Court further
expounded, in Harper & Row, Publishers, Inc. v. Nation Enterprises, that commercialism is a “separate factor
that tends to weigh against a finding of fair use.”67 In Campbell v. Acuff-Rose Music, Inc., the Court added
the additional element to the first factor of fair use by examining the transformative nature of the new work.68

In applying the first factor of fair use to fansubbing,
according to the fansubbing ethos, fansub translations
are not commercial in nature.70 As stated in Part II,
distribution of fansub translations are free and often
provide notice that the fansub translations are not to be
sold or used for any commercial purpose.71 Due to the
nature of fansub translations, commercialism is not a
concern. Therefore, analyzing the first factor of fair use
relies on determining whether fansub translations are
transformative in nature.

Language translations are composed of multiple
interpretations and styles.72 While there are no
steadfast rules as to what type of translation should be
used for any given text, different forms can be chosen
based on the following: “the purpose of the translation,
the translation team itself, [and] the receptor language
audience for whom the translation is intended.”73

Language translations are either “literal translations”
which translate the forms “the grammatical and lexical
forms of the source language”; or in the case of fansub
translations, “idiomatic translations,”74 which focus on
the communication of the source language in a natural
way or through slang for the subbing audience.75 The
“idiomatic translations” style of fansub translations
can create a translation that is a transformative work
of its own. This potential transformative nature of
fansub translations requires that fansub translations
should be examined on a case-by-case basis, rather than
generalizing the genre as infringing activity. A majority
of fansub groups offer more than dialogue translation
to provide cultural and language reference notes in the
fansub translations.76 Within television program or
movies, references are provided to explain the context

66. Id.
69. 510 U.S. 569, 579 (1994) (“The central purpose of
this investigation is to see . . . whether the new work merely
‘supersedes’ the objects’ of the original creation, or instead adds
something new, with further purpose or different character,
altering the first with new expression, meaning or message; it
asks in other words, whether and to what extent the new work is
‘transformative’.”).
70. See Bloomsburg University Manga and Anime Club, supra
note 11.
71. Id.
72. Types of Translations, SIL International formerly Summer
(last visited October 14, 2010).
73. Id.
74. Id.
75. Wang Song, U.S. TV Dramas Hot in China, Chinatoday, March
October 14, 2010, link no longer active) (stating that, in China,
there are presently three main fansub groups where “unlike standard
professional translations which are blunt in expression, the versions
by the subtitling groups are full of the flavor of life. They use
everyday expressions and local idioms . . . . They also usually add
some annotation to the dialogue, explaining cultural references like
the names of American celebrities.”).
76. See Appendix-Fansub Samples, http://www.law.ed.ac.uk/ahrc/
script-ed/vol2-4/otaku_appendix.pdf (last visited October 14,
2010).
of certain dialogue, attractions and venues, or provide an expanded reference to a general colloquialism that is frequently used within the local culture or community. Fansubs translations that include reference and context should be recognized as having a transformative nature.

a. Cultural and Educational Benefits of Exposure

The first factor of fair use also provides a defense when the use is for “nonprofit educational purposes.” To reinforce the non-commercial element, fansubs translations are nonprofit. Moreover, beyond its appeal as a form of entertainment, exposure to television programs and movies are educational. The learning process by viewing television programs and movies is informal, but effective. Television programs provide an informal explicit learning setting where one can learn about “love, sex and relationships.” Educational opportunities from viewing foreign television shows and movie assist with learning the language by “[improving one’s] listening skills,” “[picking] up vocabulary and colloquial phrases” and allowing an individual to “immerse [themselves] in a language.” Viewers are able to learn cultural norms and values and discover the importance of daily interaction with respect to relationships. As an example, when viewing Japanese television programs, one can learn of socio-economic status and their relationships by examining the role of Bento boxes.

Viewing foreign television programs and movies can also improve diplomatic relationships and influence the creation of new works. The Korean wave of programs has helped fuel relationships with Japan with an emphasis on tourism and relationships. Japanese television programs have influenced Hong Kong television programs in terms of “story and plot, music, photography, [and] dialogue.” Taiwanese television programs are influenced by Western culture and other parts of Asia.

Insight into other cultures, languages and experiences provide opportunities for educational learning opportunities, and should also be considered when examining the first factor analysis of a fair use defense in favor of fansub translations. The transformative nature and the educational value of foreign television programs and movies should warrant a closer examination of its application to the first factor analysis of fair use to determine its relevance in United States copyright law.

2. Examining Factor Two: The Nature of the Copyrighted Work

The second factor of a fair use analysis is the nature of a copyrighted work. In examining the nature of a copyrighted work, courts have considered: “(1) the scope of originality of the work; (2) the informative nature of the work; (3) the intended use of the original and the copy; (4) the availability of the work; and (5) whether the work is published or unpublished.” A work is considered original if it is “independently created by the author [and] possesses at least some minimal degree of creativity.” The Supreme Court provides that creative works “are closer to the core of intended copyright protection.” A creative work is protected under copyright law if it exists in tangible form and meets the minimal threshold requirement for creativity.

79. See WithS2, supra note 9.
81. Id.
83. Id.
84. Id.
85. Huei, supra note 83.
88. Id.
90. Huei Lan Wang, supra note 83.
92. Scott M. Martin, Jonathan Zavin, Photocopying and the Doctrine of Fair Use Under the Copyright Act, 317 PLI/Pat 601, 609-610 (1991) (discussing the courts various interpretations of the second fair use factor).
95. See 17 U.S.C. §102(a) (2006) (providing that “[c]opyright protection subsists . . . in original works of authorship fixed in any
Since creative works receive copyright protection, the use of creative works will be scrutinized against the fair use doctrine. The creativity of television programs and movies, as tangible creations made by artists, meet the minimum threshold requirements to receive protection as creative works. An analysis of whether a work is creative does not resolve an examination of the second fair use factor; a consideration of access to the creative work must also be applied. Access to foreign television programs and movies are limited in the market. Due to market access limitations, the fansub translations of this creative work should receive some form of consideration under the fair use doctrine.

The goal in fansubbing is to bring awareness to, and get licensing for, various foreign television programs and movies. Fansub groups also desire to “include programs that are commercially unviable.” Commercial viability is based in large part on the production year, market appeal, and the timing component in waiting to have access to the television program or movie. Unless an individual is located in a particular country and/or understands the language of a country, it is very difficult to obtain access to, or become aware of, what television programs or movies are airing in the region without some assistance. As a result of these geographical and linguistic obstacles, access to foreign television programs and movies usually occurs in one of three formats: VCDs, DVDs or the Internet.

Access to foreign television programs and movies are also limited by the process of localization. Through localization—a process of censorship, visual transformations of the foreign work, and/or dubbing—access to the original creative work is limited. The lost access to the original creative work also serves as a catalyst for fansubbing.

As a creative work, foreign television programs and movies are entitled to copyright protection. The scope of the protection and use of creative works should be as analyzed in accordance to market access under the fair use doctrine. Fansubbing provides an opportunity to view creative works of limited access and warrants further review under copyright law.

3. Examining Factor Three: Amount and Substantiality of the Portion Used

The Supreme Court expounded upon the third factor as an examination of “the quantity and value of the materials used” as a test of reasonableness in purpose and relation to the copying done.

Fansub groups copy the original work in its entirety. The type and quality of the fansub translations can range depending on where the television program or movie is obtained, but the full embodiment of the original work is still produced. Despite the use of the entire work, fansub groups have a distinct argument for copying the work for reasonableness purposes. The intent behind copying the entire work is for the express purpose of subtitling the original work into another language that was not provided in the original work. Fansub translations for a foreign television program or movie cannot occur without full access to the original work. For that reason, the quantity of material used and the extent of copying of that material is reasonable in light of the intended use of translation.

4. Examining Factor Four: Effect of the Use Upon the Market

The Court in Harper declared that the fourth factor, “effect of the use upon the potential market for or value of the copyrighted work,” is the “single most important element of fair use.” This factor considers the original and derivative works in the context of the potential harm to the market, and also “whether unrestricted and widespread conduct . . . would result in a substantially adverse impact on the potential market.”

The market effect of fansub translations can be examined from a variety of perspectives. Viewing each perspective as the total correlation of the market may shed some light on the role and impact of fansub translations versus licensed foreign television programs and movies in the market. The analysis for analyzing market effect requires an understanding of the market’s
impact on the local country of origin of the work, the factors impacting the marketing and development of a licensed television program or movie, and the factors affecting the fansub translation itself.

First, the impact on the market from a local perspective, where the television program or movie originally airs, must be examined. Fansub groups obtain a large portion of television shows and movies through local broadcasts. Local broadcasts display commercial advertisements during each episode. Fansub groups will often remove the commercial advertisements from the television programs and movies. Production costs of foreign television programs and movies are extensive and impact the overall budgets of producers based on sponsorship opportunities. For example, in South Korea, advertisers and producers work together on product placements in television programs through sponsorships. If a sponsor is not happy with product placements, producers are required to pay a penalty. Similarly, in Japan, sponsorship is a prominent aspect of all television programs. The names of the sponsors appear throughout the airing of each television program. Removing commercial advertisements can cause harm to the local market. Due to the high production costs of producing television programs and movies, sponsors may have a reduced incentive to produce commercial advertisements if the local viewership market is limited and fansub groups remove the opportunity for exposure abroad, even if it the product or service is not accessible in a foreign market. The reduced incentives and increased costs of foreign television programs and movies can impact development, future distribution and access.

Second, from a worldwide consumer perspective, the market is based on the creation of licensed television programs and movies. Since the current market of available foreign licensed television programs and movies are limited, the question becomes what information is used to determine which particular television programs and movies should be licensed, and to which particular regions? Determining which programs and movies get licensed, and in which regions, may be based on the preexisting popularity brought to the program or movie by fansub translations, the pop culture surrounding the program or movie, or the market demand of a license request for a particular program or movie based on the request of fans.

Third, the overall quality of a fansub translation versus the overall quality of a translation of a licensed television program or movie also has an impact on the market and its direct implications to licensed versions of the work. Factors used to compare the quality between a fansub translation and licensed television program or movie translation includes: miscellaneous features, localization, “type/quality of translation,” subbing techniques and style, “sound work,” “picture quality,” and timing of release. Each factor supports the notion that fansub groups are in competition with other fansub groups within the fansubbing world, and also in competition with licensed distributors.

a. Miscellaneous Features

As discussed earlier in this Part IV, fansub groups often provide cultural and translation notes in fansub translations as a miscellaneous feature not offered in licensed translated versions of the work. A licensed version, however, has the ability to offer additional incentives such as “commentary tracks, still photos . . . interviews, and collectible packaging.” In a market dynamic, depending on the desires of fans, the features

106. Kirkpatrick, supra note 53, at 144.
107. Id.
108. See Id. at 144.
111. Id.
112. For instance, the exclusive licensed distributor and publisher of Korean television drama programming in North America, YA Entertainment LLC, has shared through its CEO, Tom Larsen, that its decision to license television dramas in North America is based on: “[R] equests we receive from Korean TV drama ‘fans’ via email. We collect all the email requests, count them up, and rank them. When we receive a certain number of requests, our licensing team approaches the applicable TV production studios in Korea to get the USA distribution rights. From time to time a production studio will ask us to release some of their other titles as part of a ‘package deal’. So in those small cases we also release titles that are not necessarily driven by customer requests.” E-mail from Tom Larsen, CEO YA Entertainment, to LaToya Lang, (April 13, 2010, 03:39 PM. EST) (on file with author).
114. See also id. at 529.
115. Id. at 528.
provided by the fansub translation and the licensed translation are valuable miscellaneous features that offer a perspective as to market preferences, especially when considering the costs associated with a licensed television program or movie.

b. Localization

Localization by licensed distributors can also have a market effect on preference for fansub translations versus licensed television programs and movies. The editing of the original foreign television program or movie to adapt to “cultural differences” or “broadcast rules or to obtain a favorable television content rating”\(^\text{116}\) leads fans to desire fansub translations as opposed to the licensed content of television programs and movies.\(^\text{117}\)

c. Type/Quality of Translation

The various quality and types of translations may also impact the market. Fansub groups and licensed translations may differ in translation styles or idioms used. As a result, fans may have a preference and may migrate to a preferred style.\(^\text{118}\)

d. Subbing Techniques and Style

As discussed in Part II, fansub groups use different font styles, graphic techniques, and cultural notes.\(^\text{119}\) Fansub groups also gain notoriety for their work these groups may work to trademark and develop some special techniques in this area.\(^\text{120}\) Such techniques may impact market trends, as there may be a preference for such characteristics and styles to distinguish tone and has direct implications on the development of licensed translation versions of television programs and movies.

e. Sound Work

The quality of sound in a television program or movie may have a higher production value in a licensed television work rather than a version provided by fansub groups since access is not limited to copies from television.\(^\text{121}\) Foreign television programs and movies also produce original music soundtracks and scores—which are desired by many fans. In a market dynamic, the licensed television program or movie may have an advantage over fansub translations when sound quality for both picture and musical composition are applied.

f. Picture Quality

Fansub translations and licensed television programs and movies can both produce DVD quality standard merchandise. Licensed distributors have more resources to reflect the quality of not only the picture, but the translations as well.\(^\text{122}\) The overall picture quality enhances the marketability of a television program or movie. Licensed distributors can have the ability to create direct implications on market dynamics; however, the extent of influence is limited to only licensed television programs or movies that are produced.

g. Timing of Release

The timing of release of a foreign television program or movie can impact a market dynamic. Licensed distributors may delay the release date of a foreign work by several months after it has aired in the country of origin.\(^\text{123}\) Through fansub translations, fans are able to see the television program or movie within a few hours or days after it has originally aired in its country of origin.\(^\text{124}\) A delay in timing, when there is a high demand for the program or movie, can impact its marketability when other means of accessibility is available. Another market dynamic to consider is the relationship of artists and distributors, their respective bargaining powers and the language constraints. Distributors of foreign works are often held to the requirements of artists, sponsors, actors and actresses and their staff.\(^\text{125}\) Moreover, distributors may not be allowed to engage in negotiations regarding foreign marketability since the entertainment industry in some countries is based on contract clauses among the agents of actresses and actors or channels in which they work.\(^\text{126}\) The unequal bargaining power of foreign distributors presents difficulty in participating in the global market with respect to their television programs and movies, and has direct implications on access to their television programs and movies abroad. When considering market dynamics, one must also consider the language barriers of foreign artists and distributors. Artists and distributors may not be fluent or conversant

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116. Id. at 529.
117. Id.
118. Id.
119. See also id.
120. Id.
121. Id.
122. Id.
123. Id.
124. Id.
125. Daniels, supra note 58 at 718-727.
126. See also Daniels, supra note 58, at 718-727 (specifically discussing the market failure implications on behalf of the author due to lack of information, bargaining power and negotiation dynamics, and externalities on behalf of third parties).
in the language of other countries. As a result, they are unaware of the popularity of their particular program and are often unskilled in proper translation techniques that would allow them to better negotiate the licenses of use for their television programs and movies. Interaction within the global market without the intersession of a translator presents difficulties and creates disadvantages and non-incentives for participation by foreign authors and distributors.

The market analysis of fair use suggests that fansub translations can challenge the marketability of licensed television programs and movies since there are certain aspects that present areas of direct competition. There are, however, certain components of licensed television programs and movies that are not easily duplicated by fansub translations. The quality and various styles of translations may also have implications on what substantially impacts the market. Considering the various factors and elements presented, based on the market analysis and the varying degrees of fansub translations, the marketability of a fansub translation should be determined on an individual case-by-case basis, and given greater deference if there is no accessible licensed version of the television program or movie. The examination may not warrant a fair use in favor of fansub translations, but the analysis should consider whether a feasible alternative of the television program or movie exists beyond a fansub translation.

5. Fair Use: In Conclusion

There are valid arguments for allowing fansub translations under the doctrine of fair use. Because fair use analysis is a copyright infringement defense, fansub translations may overcome this hurdle under copyright law, but cannot overcome other legal considerations with respect to the right to translation and the right to reproduction for authors. Fansubbing is a form of piracy activity. The act of illegally downloading television programs or movies through digisubbing or distributing through peer-to-peer (P2P) networking files or in other formats is considered “the next big craze in illegal file sharing.” Inevitably, the activities of many fansub groups will always be at the opposing end of compliance with copyright law. Therefore, a new model of reform must be introduced to protect the needs of fansub groups while balancing and protecting the interests of artists.

V. The Societal Model for Copyright Reform

Fansub translations are not the only source of access to foreign television programs and movies. Licensed television programs and movies are in the market. Accessibility of a particular television program and movie, however, will vary depending on region, and will lag in timely distribution compared to the country in which it originally aired. Delayed access to foreign television programs and movies reduces the value of an interactive world dialogue that is provided by fansub translations. Although fansubbing does not fit within the modern interpretation of copyright law as an acceptable practice, the continuing expansion of language tools and increasing access to television programs and movies will continue. This growth in global communication and access capabilities means the prevalence of fansub translations and fansub groups will not diminish.

A. Web 2.0 and Beyond: Advances in Translating Venues and Access

Progress in technology has allowed for greater ease and availability for fansub translations to expand in a variety of mediums. The advent of online machine translation tools, torrents, peer-to-peer networking technology and online streaming sites, have contributed to this growth, and will enhance its developments over time.

Machine translation is the method by which a computer translates one language into another language through a series of computer processes and procedures. Technological advances have created a new method of access to methods for translating text in a variety of forms. As a result of these new tools and resources, translation and accessibility to foreign works is even more prevalent. Moreover, through translation tools, fans are now able to connect with their interests on a local level, explore more background on their favorite foreign celebrities, and increase exposure to other television program or movie projects the actor or actress may be working on.

Technology standards have also increased the use of torrents through peer-to-peer networking. A

127. Hatcher, supra note 116 at 526.
torrent is a file sent through a P2P file sharing protocol, otherwise known as BitTorrent. To use BitTorrent, a BitTorrent client must also be used. Online streaming sites have also made fansub translations accessible. Online streaming sites provide an alternative to downloading torrents, as individuals now have the ability to view a television program or movie from a website online. As interest in foreign television programs and movies expands, online streaming sites will continue to emerge.

A new model of fansub translations has emerged that is not considered illegal and complies with existing copyright law by obtaining appropriate permission from artists and distributors prior to its public distribution. Online streaming viewership of television programs and movies, which provide fansub translations from fansub groups, are now available. Copyright law compliant websites such as, Dramafever and Crunchyroll, offer English subtitled television programs with proper legal permission. The Korean Broadcasting System (KBS), which is South Korea’s largest television network, has also launched an American online viewing station known as KBSWORLDi. The television programs provided through KBSWORLDi are current shows in South Korea that Americans can purchase based on a point system. As Dramafever, Crunchyroll and KBSWORLDi have modeled, there are ways to channel the use of technological advances that would provide protection under copyright law and allow cultural educational opportunities. A majority of fansub groups, however, are not copyright law compliant, and still engage in activity that is a violation of copyright law.

2. Carving out Protection for Fansubbing

Though a majority of fansubbing activity violates copyright law, it brings educational and global market exposure to foreign television programs and movies. The social benefits that result from fansubbing activities outweigh any of the potential damages that could emerge because of copyright infringement and should entitle the activity to some form of protection under copyright law. This form of protection, fansubbing nullification, would engender market growth distribution for foreign television programs and movies where it is currently lacking from a worldwide standpoint. Fansubbing nullification provides protection for fansub groups by ignoring the activity as a violation of copyright law, and instead relies on its benefits of providing educational value and global market exposure. Outlining Fansubbing Protection

In order to obtain basic fansubbing protection, fansubbers must reaffirm a commitment to their ethos. Fansubbers must uphold a standard of non-commercialism, and if a television program or movie occupies the market, the fansub group must respectively remove all access to the licensed television program or movie immediately and place notifications on their website requiring consumers to destroy all copies and to support the licensed versions.

The creation of a notice of use method not only ensures protection for authors, but also carves out protection for fansub groups that provide timely distribution of foreign television programs and movies. The notice of use method creates a translation right and allows fansub groups to have a form of copyright protection, yet also protects the rights of authors.

132. See id.
134. See id.
137. Each television program episode is allocated a certain number of points to watch, or a standard package amount to watch the entire series. Americans are able to choose how many points they want to buy based on a standard amount or based according to their television viewing preference.
139. See Nathaniel T. Noda, Copyrights Retold: How Interpretive Rights Foster Creativity and Justify Fan-Based Activities, 20 SETON HALL J. SPORTS & ENT. L. 131, 142 (2010) (providing a similar discussion based on “interpretive rights.” “When an author places his or her original creative work in the stream of public consciousness, he or she implicitly cedes to the public certain rights of interpretation.”) See also Daniels, supra note 58 at 726-743, (discussing an anime compulsory license); Lisa A. Zakolski, J.D., §199 Obtaining license to publish translation, 18 Am Jur 2d Copyright and Literary Property §199 (discusses that a contracting state of the UCC “may pass legislation providing that if an author fails to publish or authorize the publication of a translation of the author's work into the language in general use in the contracting state may obtain an nonexclusive license to publish such translation if he or she meets certain requirements”). The goal of this comment is not to require fansub groups to obtain a license, since licensing would create a cost component and legitimate fansub translations are nonprofit.
notice of use would require all fansub groups to send to television networks, producers, or artists of a respective television program or movie, a notice of use that specifies the intent to translate the prospective program or movie. The notice of use must be sent in the original language of the country of origin of television program or movie. The purpose and goal of this method is to place individuals on notice, and allow an informal right of translation. The notice of use should be sent as soon as possible upon the development of an interest in subbing the television program or movie, preferably prior to its public airing date. By having this formal notice, broadcasters, producers and artists are aware of which programs or movies are being subbed, and can evaluate the potential for licensing interests abroad.

The notice of use for a translation right can be provided to fansub groups in a variety of circumstances. For example, allowing fansub groups to have translation and downloading rights to a television program or movie until the artist chooses to provide a translation, or, the artist may choose not to provide a translation, and instead rely solely on the use of the fansub translation as the translated version of the work. Through this method, if authors, producers and television networks want to expand to the online viewing model, similar to the model utilized by Dramafever, they have tools and resources from individuals who could assist in providing quality translations services that fans enjoy.

There are arguments in opposition to this notice of use concept. The main argument opposing this concept is that the method that drives this notice of use concept of fansubbing nullification is the cause of the problem: one must blatantly disobey the canons of copyright law to comply with this theory. Moreover, carving out such an explicit exception for fansubbing may create a chilling effect on new types of media that may also want explicit protection against copyright infringement liability. Any new media type that desires to obtain protection against copyright infringement must, like fansub translations, go through the fair use analysis. Overall, the benefits of protecting a new media type, including the social considerations (educational value, cultural representation, access to the work and localization), must outweigh the potential harm against the original work.

VI. Conclusion: Piercing the Veil of Translation and Culture

Copyright law takes great care in protecting the needs of the author, but does not take into account the needs of the consumer. Television programs and movies have been eschewed merely as forms of entertainment. Although they are entertaining; television programs and movies are a vehicle to understand the “culture, society, and all else human in the world’s industrial economies.” Globalization is not defined by tangible borders. The internet has forged a new medium to accessing world culture. Fansub translations continue to spread the notion of globalization in an entertaining and educational setting.

Under existing copyright law, fansub group practices may commit two wrongs—copyright infringement (if not subject to the defense of fair use) and piracy. The framework, however, of copyright law should be fluid and adapt to the needs of not only the author, but also to the consumer. Fan-based activities are a strong consumer desire. Specifically, among these fan-based activities is fansubbing. Though fansubbing has been cultivated as a wrong, copyright law has the tools to formulate it into a positive, legal activity. In an era plagued by terrorism, building a bridge to new cultural understandings is an important endeavor.

My favorite line of all time was through a fansub translation of a Korean television drama. Although there may have been literal context that was lost in translation, the context of the final English version still resonated with me and in my memory. Perhaps there are other great lines out there that I may want to add to my repertoire. Through fansubbing, I have the ability. Copyright law needs to offer protection to fansubbing. It is only then that society as a whole evolves and appreciates the world in which we all live in.

140. Dramafever uses subs that have been translated by WithS2 Fansubs group.
Reverse Engineering: Exploitation for Benefit of All

by Daniel Lee

I. Introduction

Technology is evolving every day as consumers spend countless amounts of money buying new products and companies compete to produce better products. One catalyst of this technological innovation is reverse engineering by both developers and consumers. Reverse engineering is a method of recreating existing engineering concepts by analyzing the design and components of a final product to ascertain how the product operates. Although this is clearly distinguishable from the traditional concept of forward engineering—which requires creating a product from abstract engineering ideas and concepts—it has been practiced as a useful tool to learn how to build a technology and make improvements. Reverse engineering is well-exemplified in the computer software industry, where programmers constantly examine existing software to better understand the structure and make improvements on its operability.

However, the legal threshold of reverse engineering is still unclear and controversial. The scope of using existing protected technology differs depending on both the type of technology and the organizations devising regulations on reverse engineering. The U.S. courts have allowed reverse engineering in a few occasions in the past, favoring competition for the development of technology over exclusive property rights. On other occasions, courts have disallowed reverse engineering where a contract provision prohibited reverse engineering practices for unfair competition reasons. Congress also has enacted laws that allow reverse engineering in several areas, such as semiconductor chips, but it remains relatively silent on other technological areas. The legal issue becomes increasingly more complex today, as more consumers start exploring devices that they purchased in order to customize, maintain, and improve the devices using aftermarket components. This Article will examine the current legal scope of reverse engineering in the United States and present recommendations to better serve consumer interests without deterring innovation by companies.

II. The Supreme Court and Congress endorse the concept of reverse engineering

The Supreme Court and Congress have each allowed reverse engineering to promote competition and innovation of technology in the marketplace. The first time that the Supreme Court dealt with the concept of reverse engineering was in Kewanee Oil v. Bicron, a case involving trade secret protection for synthetic crystal manufacturing. In Bicron, a division of the plaintiff company, Harshaw Chemical, developed a seventeen-inch crystal for detection of ionizing radiation.

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radiation using a secret process that took seventeen years to develop.\textsuperscript{13} The defendant company, Bicron, hired the plaintiff's former employees, who executed an agreement not to divulge confidential information or trade secrets that they obtained while working for Harshaw Chemical.\textsuperscript{14} Bicron started manufacturing the same seventeen-inch crystal, and Kewanee Oil brought a diversity action against Bicron to seek injunction and damages for misappropriation of the trade secret.\textsuperscript{15} The Sixth Circuit reversed the district court's decision for Kewanee Oil, reasoning that the crystal manufacturing process was an appropriate patentable subject matter under the federal patent law that preempts Ohio's trade secret law, and the process lost its patentability after being in the market for more than one year before its patent registration.\textsuperscript{16} The Supreme Court in Bicron reversed the Sixth Circuit's decision and held that Ohio state trade secret law is not preempted by federal copyright and patent law in this case since there is no conflict among them.\textsuperscript{17} The Court further held that trade secrets do not protect discovery by reverse engineering, which is defined as "a fair and honest means of starting with the known product and working backwards to define the process which aided in its development or manufacture."\textsuperscript{18}

Later, in Bonito Boats, Inc. v. Thunder Craft Boats, Inc., the Court re-acknowledged the concept of reverse engineering and its importance by striking down a Florida law prohibiting the application of the "direct molding process" that helped replicate design boat hulls.\textsuperscript{19} In Bonito Boats, Florida passed a state anti-plug molding law to protect boat hull designers from threats of competitors duplicating unpatented hull designs using a direct molding process.\textsuperscript{20} The Court reversed the Florida Supreme Court's decision and held that states cannot offer patent-like protection to subject matter that is not deemed to be protected under the federal patent law.\textsuperscript{21} The Court further held that federal patent law protects inventors from reverse engineering; however, "reverse engineering of chemical and mechanical articles in the public domain often leads to significant advances in technology," and that "the competitive reality of reverse engineering may act as a spur to the inventor, creating an incentive to develop inventions that meet the rigorous requirements of patentability."\textsuperscript{22}

Congress also acknowledged the concept of reverse engineering when it passed legislation in a number of different technological areas specifically permitting reverse engineering. Such legislation includes the Semiconductor Chip Protection Act ("SCPA") and the Competition of Contracting Act of 1984 ("COCA").\textsuperscript{23} The SCPA grants a reverse engineering privilege, allowing semiconductor chip designers to examine the design of the chips and circuits and use the knowledge obtained to design new chips.\textsuperscript{24} In return for this privilege, the SCPA requires the chip designers to engage in enough forward engineering to develop an original chip design that qualifies for SCPA protection, fulfilling the purpose of furthering competition and technological development.\textsuperscript{25} Similarly, COCA allows the defense industry to examine the spare parts it has purchased to promote competition in government contracts.\textsuperscript{26}

Although reverse engineering is an approved method of technological advancement, it can do the exact opposite if no clear limitation is given to its practice. For example, critics of Bonito Boats argue that the decision did not benefit the market because approving the direct molding practice allowed boat hull designers to directly copy other competitors' hull designs, like photocopying a paper.\textsuperscript{27} They claim that simply allowing one to almost directly copy another's design involves little or no reverse engineering, and it deters other designers from innovating by removing incentives.\textsuperscript{28} To resolve this concern, Congress enacted a unique intellectual property protection statute in 1998 to protect boat hull designers from exploitation of their hull designs by unauthorized copying.\textsuperscript{29}

In sum, the concept of reverse engineering seems to rely on an economic cost-benefit analysis of each practice.\textsuperscript{30} Reverse engineering is likely allowed

\begin{thebibliography}{10}
\bibitem{13} Id. at 473.
\bibitem{14} Id.
\bibitem{15} Id.
\bibitem{16} Id. at 474.
\bibitem{17} Id.
\bibitem{18} Id. at 476.
\bibitem{20} Id. at 144-45.
\bibitem{21} Id. at 156-57.
\bibitem{22} Id. at 159–60.
\bibitem{23} Samuelson, supra note 4, at 1595-96; J.T. Westermeier, Reverse Engineering, 984 PLI/Pat 289, 312 (2009).
\bibitem{24} Samuelson, supra note 4, at 1595–96 ("[The SCPA] permits the copying of protected chip designs in order to study the layouts of circuits, and also the incorporation of know-how discerned from reverse engineering in a new chip.").
\bibitem{25} Id. at 1296.
\bibitem{26} Westermeier, supra note 22.
\bibitem{27} Zieminski, supra note 1, at 293
\bibitem{28} See Samuelson, supra note 4, at 1593 ("Professor Heald has . . . point[ed] out that the Florida law ‘primarily discriminates against those interested in reproduction rather than innovation.’").
\bibitem{29} Id. at 1594.
\bibitem{30} See Zieminski, supra note 1, at 293 (arguing that reverse engineering protections are appropriate where innovative advancements can be cheaply reverse engineered, but that protections are not appropriate where the innovator can make an adequate return on their investment before their product could be reverse engineered).
\end{thebibliography}
where the technology takes much effort and time to replicate, giving the innovator enough leading time to benefit from his invention.\(^{31}\) On the other hand, it is likely prohibited where replication of technology is simple and inexpensive, because reverse engineering may deprive the innovator of the benefit of his lead-time.\(^{32}\) Additionally, the Court seems to allow reverse engineering where it is necessary to understand basic fundamentals of technology in order to produce a new competing product.\(^{33}\)

### III. Effect of Overprotective Licensing and User Agreements

Ever since the Supreme Court and Congress allowed practices of reverse engineering, many producers have tried to avoid losing their exclusivity by putting specific terms in their license agreements that prohibit reverse engineering.\(^{34}\) This is particularly seen in the computer software industry, where reverse engineering is used to decompile the source codes of existing programs in order to create a new program using the mechanism learned from decompiled source codes, mostly for “interoperability” purposes between other programs.\(^{35}\)

In general, the courts have allowed reverse engineering of computer software if it is necessary to “develop a program that will interoperate with the decompiled or disassembled program.”\(^{36}\) A leading case cited for this rule is *Sega Enterprises v. Accolade Inc.*\(^{37}\) In *Sega Enterprises*, Accolade wanted to produce game titles that would be compatible to Sega’s Genesis platform.\(^{38}\) However, Sega only licensed the initialization code and interface protocols necessary to produce games for the Genesis platform to game developers that would agree make Sega the exclusive manufacturer of all games produced by them.\(^{39}\) When negotiations failed between Sega and Accolade, Accolade reverse engineered Sega’s video games to figure out the Genesis’ interface specifications, and then released several unlicensed game titles on the Genesis platform.\(^{40}\) The Ninth Circuit held that Accolade’s conduct was fair use under copyright law because it was done “solely in order to discover the functional requirements for compatibility with the Genesis console—aspect of Sega’s programs that are not protected by copyright.”\(^{41}\)

The Ninth Circuit reaffirmed *Sega Enterprises* in *Sony Computer Entertainment, Inc. v. Connectix Corp.*, where it held that Connectix’s reverse engineering of Sony’s Playstation in order to make a competing platform—not compatible games—was permissible fair use.\(^{42}\) The court discussed that due to the nature of the copyrighted work, fair use of software needs to copy protected expression within the software to access unprotected elements of the software.\(^{43}\) The Ninth Circuit’s decision in *Sega Enterprises* has been subsequently adapted in other circuits regarding similar issues.\(^{44}\)

In order to discourage legitimate reverse engineering of software by competitors, as held in *Sega Enterprises*, many software developers began using license contracts attempting to limit reverse engineering of their software.\(^{45}\) These limiting contract terms define permitted uses and are often contained in shrink-wrap, click-wrap, or browse-wrap agreements.\(^{46}\)

The courts’ rulings on the enforceability of these license contracts are in conflict among themselves and highly controversial.\(^{47}\) Courts sometimes reject reverse engineering defenses in trade secrecy cases when the

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31. *Id.*
32. *Id.*
33. See infra Part B (discussing courts’ rulings allowing decompilation of software for interoperability purposes).
34. See Abruzzi, *supra* note 6, at 106 (asserting that licensing agreement prohibiting reverse engineering are frequent).
35. See Samuelson, *supra* note 4, at 1613-15 (noting that computer programs are often reverse analyzed to customize the program for the user’s needs, among other reasons).
36. See *Id.* at 1609, 1612.
37. Zieminski, *supra* note 1, at 294 (asserting that *Sega Enterprises* is the most cited case establishing permissible reverse engineering of software in video game hardware).
38. Sega Enter. Ltd. v. Accolade, Inc., 977 F.2d 1510, 1514 (9th Cir. 1992).
39. *Id.* at 1514.
40. *Id.* at 1514–15 (stating that after reverse-engineering several Sega games to discover the compatibility requirements for compatibility with the Genesis console, Accolade released its own game, “Ishido” for the Genesis).
41. *Id.* at 1522–23.
42. Sony Computer Entmt., Inc v. Connectix Corp., 203 F.3d 596, 602 (9th Cir. 2000).
43. *Id.* at 603–04.
44. See DSC Communications Corp. v. DIGI Techs., Inc., 81 F.3d 597, 601 (5th Cir. 1996) (adopting the Fourth Circuit’s characterization of the copyright misuse defense in *Lasercomb*); Bateman v. Mnemonics, Inc., 79 F.3d 1532, 1539 N.18 (11th Cir. 1996) ("we find the *Sega* opinion persuasive in view of the principal purpose of copyright . . . ."); Mitel, Inc. v. Iqtel, Inc., 896 F. Supp. 1050, 1056–57 (D.Colo.1995) (characterizing the *Sega* principle as fair use and adopting it), aff’d on other grounds, 124 F.3d 1366 (10th Cir. 1997)).
45. See Zieminski, *supra* note 1, at 301 (noting that during the *Sega* era many companies tried to limit reverse engineering by including ‘shrinkwrap’ licenses with their software although these were rarely if ever enforced).
46. Shrink-wrap agreements are contained in sealed boxes of software; click-wrap agreements appear on computer screens before installation; and browse-wrap agreements are listed online where the users visit or download software. Abruzzi, *supra* note 6, at 110–12.
47. Samuelson, *supra* note 4, at 1626-27 ("The case law in the United States is in conflict on the enforceability of anti-reverse-engineering clauses in software contracts. . . Legislative approaches, however, have also been contentious").
use of the software is out of the scope of the license. In other cases, courts decline to honor the shrink-wrap restrictions against reverse engineering because either the conflict license provision under state contract law is preempted by the federal copyright law or the license provision is unenforceable under contract law itself.

The Fourth and Fifth Circuits decided two notable cases concerning these principles. In *Vault Corp. v. Quaid Software LTD.*, Vault manufactured floppy disks with PROLOCK feature, which enabled software developers to require the original copy of the floppy disk inserted in a computer to run the program. PROLOCK disks also contained a user license agreement, as allowed under the Louisiana License Act, which prohibited purchasers from making copies of software. Quaid software developed a program called RAMKEY, which enabled the computers to run and copy unauthorized copies of PROLOCK protected software. The Fifth Circuit held that Quaid’s decompilation of PROLOCK source codes was allowed as it was an essential step and federal copyright law preempted shrink-warp licenses under Louisiana contract law, and thus, the restriction within the license was invalid.

In *Lasercomb America, Inc. v. Reynolds*, Lasercomb sold copies of its CAD/CAM die-making software to Reynolds with a licensing agreement that prevented Reynolds from making their own CAD/CAM die-making software. After purchasing four copies of Lasercomb’s software, Reynolds developed their own CAD/CAM die-making software by almost entirely copying Lasercomb’s software. The Middle District of North Carolina issued Lasercomb a permanent injunction and damages. However, the Fourth Circuit reversed the district court’s decision and struck down Lasercomb’s shrink-wrap license, holding that Lasercomb’s use of copyright to control competition within its license in an area outside copyright was a misuse of copyright.

Thus, even though courts remain split on the enforcement of the limiting license contracts, more weight can be given to the opinion that these license terms unlawfully discourage competition, taking the benefits of competition away from the public. It seems unfair for the software producers to prohibit what is otherwise perfectly lawful and beneficial to society by taking a side step to change the legal scope of reverse engineering.

IV. Reasonable Interoperability exception for reverse engineering

A lot of consumer electronics today have aftermarket producers for replacement parts. The aftermarket parts industry is quickly growing as consumers have started to look for aftermarket parts that they can use to fix or upgrade their belongings. Replacement parts range from simple items such as coffee maker filters and vacuum cleaner bags to more complicated items such as automobile parts. However, replacement parts are often time model specific, and for these technically complicated aftermarket products, reverse engineering is a necessary step for the interoperability of their product with the original product.

The Digital Millennium Copyright Act (“DMCA”) adopted by Congress in 1998 makes reverse engineering of copyrighted material illegal, except when authorized by another statute. Other than several exceptions to circumvention, the DMCA prohibits both individual acts of circumvention and distribution of tools and products of circumvention.

A controversial aspect of the DMCA from a financial perspective is that it denies consumers’ access to sub-program or components that are part of what they legally purchased as a package. The DMCA’s restriction on reverse engineering puts consumers in a financial disadvantage because the price for replacement parts to maintain the host product significantly goes up due to monopolistic control of product design by the

58. See Adelmann, supra note 9, at 187–88 (citing printers and toner cartridges as an example)
59. Id at 188 (noting that in 2004 toner supplies made up more than 80% of Hewlett Packard’s profits).
60. Id. at 188.
61. Id. at 190 (stating that such reverse engineering is generally allowed as long as the underlying software’s copyrights are not infringed).
62. Samuelson, supra note 4, at 1635-36 (explaining that the DMCA permits circumvention for seven purposes: legitimate law enforcement and national security purposes, achieving program-to-program interoperability, engaging in ‘legitimate’ encryption research, testing the security of computer systems, enabling nonprofit libraries, archives, and educational institutions to make purchasing decisions, allowing parents to control their children’s use of the internet, and protecting personal privacy”).
63. See id. at 1630.
64. Adelmann, supra note 9, at 203 (asserting that the DMCA’s continuing protection for copyrighted material after its lawful purpose depends on whether the end user is within the bounds of his first sale rights).
producers. This is especially so where certain software is needed to communicate between a replacement part and the host product. For example, a printer cartridge often requires original cartridge software that allows the printer to recognize the cartridge as the original manufacturer’s cartridge. Even if mechanical specification of a third party’s cartridge is the same as the original manufacturer’s cartridge, the third party’s cartridge would not function unless it could mimic the software signals generated by the original manufacturer’s cartridge software.

Aftermarket producers are allowed to use reverse engineering on manufacturer’s software for interoperability purposes. However, this is challenging because many manufacturers use security features, known as technological protection measures, to make it harder for aftermarket manufacturers to break into their copyrighted software. These electronic security measures are protected by the DMCA’s anti-circumvention provision, which generally prohibits circumvention of the technological protection measures for copyrighted material regardless of the existence of a copyright violation. In addition, DMCA also contains an anti-trafficking provision, which makes development and distribution of tools for circumvention of protected work illegal. This makes developers of circumvention tools liable even if they do not ever use these tools to infringe copyrighted materials. Today, DMCA protection can be extended to all software that has electronic locks, which is most. Unless some exceptions are clearly outlined for circumvention of the electronic lock protection, aftermarket part producers would be reluctant to enter into the market, losing potential competition. This could lead consumers to suffer greater economic loss from expensive original manufacturer’s tangible aftermarket parts.

Many inventors agree with the strict protection mechanism in the DMCA. On the other hand, some scholars argue that a reasonable degree of reverse engineering should not be banned unless the activity is parasitic or market destructive. However, if we want to achieve the goal of a greater public good by promoting competition, there must be more flexible interoperability exceptions to tangible aftermarket parts to ease the entry into the market and bring the cost down for consumers.

V. Conclusion

Reverse engineering is an effective tool to drive competition and innovation, when a reasonable limit can be found. The Supreme Court and Congress have both acknowledged its usefulness and tried to draw a clear line in which reverse engineering constitutes infringement or fair use. Regardless of much effort, however, reverse engineering is still a controversial topic. If we want to promote a greater good for consumers and the public at large, we need to focus on bringing in more competition to best utilize our innovation. One way to do this is by providing more flexible interoperability exceptions for reverse engineering to expand choices and reduce costs for consumers.

65. Id. at 187–89 (emphasizing that manufacturers may maintain a monopoly on aftermarket parts necessary to operate a host device or intentionally cause non-communicative parts to function poorly, creating a monopoly on competitive parts).
66. Id. at 189.
67. Id.
68. Id.
69. Id. at 194–95.
70. Id. at 190; See also Samuelson, supra note 4, at 1631–32 (citing cable and satellite television as examples of technology with copy-protection measures).
71. Adelmann, supra note 9, at 190.
72. Id. at 193 (stressing that this is the most discussed, debated, and novel aspect of the DCMA).
73. Id.
74. Id. at 191.
75. See generally Samuelson, supra note 4, at 1634–35 (implying that copyright industry representatives agreed with DCMA protection but “opposed any exception for fair uses”).
76. Id. at 1653.
Congress’s latest battle against piracy websites has begun with the aptly named “Combating Online Infringement and Counterfeits Act” (COICA or Bill). Led by Senator Patrick Leahy (D-Vt.) and Senator Orin Hatch (R-Utah), a group of U.S. Senators has sponsored legislation that would give the U.S. Department of Justice the ability to obtain federal court orders shutting down those websites deemed to be dedicated to the illegal online sharing of intellectual property, such as music, film, and software.

Specifically, the language in COICA targets websites “primarily designed” as pirating sites which are “dedicated to infringing activities” with “no demonstrable, commercially significant purpose or use” besides distributing pirated or counterfeited files. The Justice Department would file an in rem civil action against these types of sites, and if a federal court found the particular site satisfied the language within the bill, the U.S. Attorney General could then serve an injunction that would require the website’s U.S.-based registrar to immediately cease resolving the infringing site’s domain name.

Wired magazine has referred to this legislation as “the Holy Grail of intellectual-property enforcement” due to its far-reaching authority. For example, COICA would give the Justice Department the capability to also effectively shut down pirate sites overseas—the most famous being The Pirate Bay—by requiring Internet service providers (ISPs) in the U.S. to block resolution of the website’s address.

Unsurprisingly, the Bill received immediate praise from representatives of the Motion Picture Association of America (MPAA) and the Recording Industry Association of America, both of which have former employees currently working for the Justice Department.

“These sites, whose content is hosted and whose operators are located throughout the world, take many forms. But they have in common the simple fact that they all materially contribute to, facilitate and/or induce the illegal distribution of copyrighted works, such as movies and television programs,” said MPAA President and Interim CEO Bob Pisano.

On the blogosphere however, the Bill has already garnered immense dissent on a number of the Bill’s aspects. Mike Masnick of techdirt.com points out that COICA’s worldwide coverage seems to directly contradict the libel tourism Bill recently signed into law by Congress, which protects U.S. citizens from foreign libel judgments on laws going against the First Amendment.

Furthermore, as Masnick points out in his comments, when considering the validity of this Bill, it is extremely important to keep in mind exactly who this Bill is targeting. Both President Obama and Vice President Biden have promised to make intellectual property enforcement a priority—in June, Biden stated, “…piracy is theft. Clean and simple. It’s smash and grab. It ain’t no different than smashing a window at Tiffany’s and grabbing [merchandise].”

But Masnick, as well as others displeased with COICA, argue that websites like The Pirate Bay that are targeted by the legislation are simply not performing any actions that can be considered within the realm of illegal activity. To tar these websites with the same brush as those users who are in fact engaging in copyright infringement would be a detrimental misunderstanding of the way this particular file-sharing system is set up.

The Pirate Bay, for example, stores no illegal material on its website. Rather, in layman’s terms, The Pirate Bay directs torrent users to other torrent users in order to download potentially illegal files (such as copyrighted film or music) from one another. While these torrent websites do not themselves participate in illegal activity, some argue that they do indeed foster the illegal activity. On the flipside of that argument, one could perhaps draw a parallel to a library that hosts a copy machine used by students to make illegal copies of copyrighted books. The question there is, should the library be held liable for fostering the illegal activity?

Groups like the Electronic Frontier Foundation...
EFF’s response to COICA brings to light a number of alleged problems with the bill—namely, its censorship aspect. EFF states that not only is the language of the bill—targeting websites “dedicated to infringing activities”—incredibly broad and open to interpretation, but the proposed solution of placing a block on an entire domain, rather than limiting the block to the infringing part of the website, presents a serious possibility of widespread free speech violations.

EFF’s response notes that currently the only governments that deny their citizens access to certain parts of the Internet are mostly totalitarian, anti-democratic regimes: “With this bill, the United States risks telling countries throughout the world, ‘Unilateral censorship of websites that the government doesn’t like is okay—and this is how you do it.’” Additionally, EFF points out that the existence of the Digital Millennium Copyright Act already provides to copyright owners the legal tools to remove specific infringing material in a much more narrowly-tailored manner, whereas COICA would allow the U.S. Attorney General to take down entire domains not only consisting of the purported “infringing activity,” but the non-infringing blog posts, images, and free-to-use software as well.

On Masnick’s article, readers have left additional troubling observations. One reader notes the questionable language regarding the Attorney General’s ability to maintain a list of domain names that the Department of Justice believes to be pirate sites, based simply “upon information and reasonable belief.” This is a somewhat surprisingly low burden of proof considering the censorship potential enumerated within this bill. Another reader noticed that any ISP or financial institution related to a domain name on that list would get instant immunity for a “vigilante-like cutting off of services” against the listed domain name.

The Inquirer is not alone in questioning the Senators’ motives behind COICA, noting, “The bill is intended to appease big US media conglomerates” that have made hefty monetary contributions to political campaigns.

Cleaning up the plethora of copyright infringement on the Internet is an understandable governmental goal, but as many commentators have already pointed out, COICA seems to contain a number of questionable methods for clearly identifying what to clean up and exactly how to do it in an evenhanded way.
The Absence of Common Sense from the Copyright Act’s Treatment of Software and the First Sale Doctrine

by James Lafave

Editor’s note: The following blog post was posted on www.ipbrief.net on October 10th, 2010. On November 8th, the Supreme Court heard oral arguments in Costco v. Omega, involving how the first-sale doctrine is applied to international goods.

The Copyright Act has a long and occasionally questionable history of adopting new technologies. Whether considering photography, computer programs, or television characters (a new candidate for protection); the trend has been to widen the scope of the Act significantly to encompass new technologies. However, not all technologies fit easily into the mold of traditional copyrights. Computer programs in particular have confounded the courts, and resulted in a doctrine that tortures the English language and on occasion boggles the mind.

In order to protect the computer industry from piracy, the courts have allowed companies to sell “licenses” to their products, rather than a property interest in the products themselves. The 9th Circuit’s recent ruling in Vernor v. Autodesk highlights the occasionally absurd consequences of the licensing doctrine. Here the court followed clear precedent, ruling that the resale of licensed software was not protected by the first sale doctrine. The first sale doctrine prevents restriction of a purchaser’s right to re-sell a copy of a copyrighted work. In essence, the doctrine is an equitable one meant to prevent copyright holders from demanding a second bite at the same apple. However, the first sale doctrine does not protect Vernor’s sale of legally acquired copies of software on Ebay, because Vernor does not “own” the software, but rather owns a “license” to use the software for an undefined period. All that legal language amounts to the conclusion that none of us own any of the software that we use on our computers, we are instead renting it (the court avoids addressing how software companies can claim to license software without ever seeking its return). While legally correct, the court’s opinion failed utterly to explain the twilight zone logic wherein the purchase of a box of software does not result in ownership, despite the payment of sales tax and the absence of any expectation that the item will ever be returned.

Beyond the logical arguments, Vernor’s lawyers raised a serious question as to what prevented other copyright holders (the music or publishing industries, perhaps?) from engaging in the same restrictive behavior. Commentators generally agree that there is no legal bar to prevent a publisher from “licensing” their books rather than selling them, although they do speculate that market forces would likely prevent such an experiment. If nothing else, the Vernor decision highlights the inherent dangers that can arise when courts stretch pre-existing legal structures to encompass transformative modern technologies.
Chanel took out a full back page advertisement in Women's Wear Daily last week to dissuade further “misuse” of the Chanel name. Women’s Wear Daily, a trade journal for the fashion industry, has been referred to as “the bible of fashion.” It has a circulation of over 50,000. The ad by Chanel reads:

A note of information and entreaty to fashion editors, advertisers, copywriters and other well-intentioned mis-users of our Chanel name: Chanel was a designer, and extraordinary woman who made a timeless contribution to fashion. Chanel is a perfume. Chanel is modern elegance in couture, ready-to-wear, accessories, watches and fine jewelry. Chanel is our registered trademark for fragrance, cosmetics, clothing, accessories, and other lovely things. Although our style is justly famous, a jacket is not ‘a Chanel jacket’ unless it is ours, and somebody else’s cardigans are not ‘Chanel for now.’ And even if we are flattered by such tributes to our fame as ‘Chanel-issime, Chanel-ed, Chaneled, and Chanel-ized,’ PLEASE DON’T. Our lawyers positively detest them. We take our trademark seriously. Merci,

Chanel, Inc.

The ad was prompted by various writers’ reports of collections exhibited during New York’s fashion week, which used variations on the Chanel moniker to describe other designers’ collections. According to Anne Sterba, an intellectual property lawyer at Rothwell, Figg, Ernst & Manbeck, Chanel is trying to prevent their name from becoming generic. Sterba told Cheryl Wischhover at Fashionista that Chanel’s ad exhibits active policing of their brand, which could prove essential “if they end up in court with a trademark issue” because it would allow them to show a judge that they’ve been trying to actively protect their brand, and that would give them additional credibility.

Although, one has to wonder, was the full page ad in Women’s Wear Daily cheaper/more efficient/more effective than sending out a slew of cease and desist letters, which Chanel has done in the past? I would be curious to find out if Chanel supplemented its advertisement with cease and desist letters to the seemingly numerous “well-intentioned misusers” targeted by the ad. In addition, is the public ad addressed to the fashion industry at-large likely to create a backlash against the brand by ruffling fashion industry reporters’ feathers? Or is the Chanel brand so iconic that it can withstand any ad-related ill-will?
The news media kicked up quite a fuss this spring when a U.S. district court invalidated the patents on two isolated genes that are strong indicators of a risk of breast cancer. Association for Molecular Patenting v. United States Patent and Trademark Association, 1:09-cv-04515-RWS (S.D.N.Y. Mar. 29, 2010); see Blog Post of Kevin E. Noonan, Myriad Appeals AMP v. USPTO Decision (June 16, 2010) (collecting news articles and blog posts). The genes in question, BRCA1 and BRCA2, were researched, located, isolated, and patented by Myriad Genetics, one of the older genetics start-up companies (founded in 1991). They are among over 2,000 existing gene patents, which grant market exclusivity to inventors who have put in the work to identify and isolate specific human genes. Friday, the U.S. government unexpectedly reversed its previously held position supporting such patents, and issued a friend-of-the-court brief in the appeal of that case condemning the patenting of isolated human genes. Association for Molecular Patenting v. United States Patent and Trademark Association, No. 2010-1406, Amicus Curiae Brief for the United States in Support of No One (Fed. Cir.) (filed Oct. 29, 2010).

The government is wrong. Because it will fuel scientific progress, give a reasonable financial incentive to companies interested in genomics, and lead to further research in this rapidly expanding field, not to mention the fact that it is consistent with prevailing Federal Circuit precedent, the court should overturn this dangerous ruling. The government should not support the ruling, which in effect would invalidate over 2,000 genomic patents. Instead, Congress should selectively enact compulsory licenses on genetics patents when the test and gene in question are so significant that leaving the testing in the hands of one company puts potentially life-saving testing out of the reach of the average consumer. A sliding scale is more appropriate than the current all-or-nothing approach.

First, background is important. Myriad is a pioneer in a financially uncertain but potentially revolutionary field. In his recent book Dr. Francis Collins, the lead scientist in charge of the initial mapping of the human genome and the current head of the National Institute of Health, predicts that the most significant change in health care will come from advancements in genetic testing. Francis S. Collins, The Language of Life (2010). Three companies already offer personalized human genome mapping, and Dr. Collins predicts this will soon become a mandatory test required at birth and included in all individuals’ health records, as scientists isolate and characterize more and more genes and their hereditary effects. Id. at 44. (“Newborn screening [which already occurs for very specific and treatable genetic conditions, such as cystic fibrosis] seems almost certain to evolve into an even broader and more comprehensive survey. . . . A softer version of GATTACA may be coming soon.”)

Genes BRCA1 and 2 are well known in the genomics field as some of the first genes whose common genetic mutations show a significant increase in the risk of a specific, treatable, and even sometimes preventable condition, breast cancer. Id. at 27 (“women who carry a BRCA1 mutation have about an 80 percent lifetime risk of developing breast cancer and a 50 percent risk of developing ovarian cancer.”). Myriad was the first to identify a method of testing for the genes and has moved to protect its interest as the sole holder of a suite of patents for those isolation and testing methods. Myriad, attempting to remain profitable while conducting further research and recouping the investment it has already put in through its initial research, is charging roughly $3,000 for the test. AMP v. USPTO 1:09-cv-04515-RWS. at 52-78.

The ACLU, breast cancer interest groups, and now the U.S. government oppose these patents as profiting from what is essentially our own human body, which they argue violates the statutory grant to the USPTO under 35 U.S.C. § 101, violates our individual First Amendment rights, and prevents lifesaving testing from being widely used. Their opposition is too
extreme, misunderstands the important place of industry in genetic research, and makes it harder for technology and research in genomics to grow at the current rapid pace. Furthermore, it is consistent with all of the known precedent concerning gene isolation patents, as well as with the over 2,000 patents the USPTO has granted consistent with their policies.

To be sure, no one wants important and potentially life-saving tests for breast cancer to be out of reach of the American public. That is why a congressionally mandated compulsory license is more appropriate for genetic tests of strong indicators of treatable serious conditions, particularly in the case of public hospitals and research institutions. Such a license would allow other companies and researchers to use the tests for a set licensing fee, and in certain limited cases, for free, which would reward and compensate Myriad for their research while striking the balance with public access to the tests.

However, simply invalidating the patents would give Myriad and other genetic start-up companies absolutely no incentive to research in this volatile and uncertain field, and will actually stifle genomic innovation in the end at a key time in the industry’s adolescence. In a perfect world, well-funded government researchers in highly regarded public universities and research centers would exclusively carry out this important work, they would excel in the endeavor, and that would be sufficient. But absent some windfall grant of funding to the NIH or some newly instituted and very well-funded prize program, Congress needs to act to limit the reach of such intellectual property while ignoring a more sweeping and dangerous open grant, which offers no incentives whatsoever for companies to invest in key lifesaving research. To invalidate these patents would be far more dangerous to our health in the long run, and would put our industry and nation at a disadvantage worldwide in one of the only scientific fields in which we are still a leader, the genomics revolution.
Mark Twain’s Autobiography: In the Public Domain Before the Public’s Hands?

by Mark Tratos

Editor’s note: The following blog post was posted on www.ipbrief.net on November 5th, 2010.

Mark Twain (a.k.a. Samuel Clemens) was a man of principle and people knew it. So when he said that he did not want his autobiography published until 100 years after his death, the world knew he meant it. Mr. Clemens died on April 21, 1910, giving the Mark Twain Foundation the “free and clear” to finally publish his autobiography this year. On November 15th, The Autobiography of Mark Twain: Volume One will be published and it is already on Amazon’s and Barnes and Noble’s bestsellers list. Techdirt.com saw beyond the bestsellers lists however and posed an interesting question: Is a book written over 100 years ago, but published in 2010, covered by copyright?

Before we look at the copyright protection of the autobiography, the story of Samuel Clemens and his autobiography is one worth noting. The autobiography is not a standard chronological telling of Mr. Clemens’ life, but more of a train-of-thought dictation regarding things that tickled Mr. Clemens’ fancy. Mr. Clemens’ never pulled his punches either. According to Robert Hirst, curator of the Mark Twain Papers at UC Berkley, Mr. Clemens “liked to say nasty things – he’s really good at it – but he didn’t like the idea of being there when the person heard them, and was hurt by them!” Therefore Mr. Clemens told his publishers that the autobiography was not to be published until 100 years after his death, so that no one he hurt would actually know it. While everyone’s feelings are spared however, our confusion over copyright protection is not.

At first glance, you might think that the autobiography is in the public domain. Section 303 of Title 17 describes the duration of copyright for works created but not published or copyrighted before January 1, 1978. That section of the code tells you that protection for the book would only exist (knowing that Section 302 protection expired) if the text was published before December 31, 2002. Since the autobiography was published, in its entirety, after that date, the work would have to be in the public domain. However, the copyright page of the autobiography states that “all texts by Mark Twain in Autobiography of Mark Twain, Volume 1 have been published previously, by permission of the Mark Twain Foundation.” The entire text of the work is available at the Mark Twain Library in Berkley and individual portions of the autobiography have been previously published in other books. If all or part of the work was published (seemingly against Mr. Clemens’ wishes), we might assume that the previously published excerpts of Volume 1 are protected by copyright. If they were not properly registered or renewed however, the works are back in the public domain. Clarity of the facts is obviously needed before duration can be determined here.

Another factor to consider however, the copyright page indicates that the sections of the autobiography that were previously published had not been published together. This would make sense when you consider Mr. Clemens’ wish to publish the entire work long after his death. So could the copyright claimed be copyright protection for a compilation of all the texts that make up the autobiography or maybe it is a derivative work of the original autobiography? This would mean the scope of protection for the autobiography is not as great, but it is still protection. This is obviously something for the courts to decide, but it got the wheels in my brain turning.

What’s the funniest part about this? Mr. Clemens was a proponent of infinite copyrights. He wanted his daughters to be taken care of by the money brought in from the copyrights “because I [Clemens] have carefully raised them as young ladies, who don’t know anything and can’t do anything.” How would his family be able to profit from the sales of the autobiography though, when the entire manuscript is available online for free?