TEXAS UNIVERSITY INTERSCHOLASTIC LEAGUE
MIDDLE SCHOOL STARTER PACKET

Debaters throughout Texas and the nation have selected for debate during the 2024-25 school year the following resolution dealing with the protection of intellectual property:

The Resolution
Resolved: The United States federal government should significantly strengthen its protection of domestic intellectual property rights in copyrights, patents, and/or trademarks.

The Affirmative Team argues **FOR** the Resolution.
The Negative Team argues **AGAINST** the Resolution.

Suggested format and time limits for UIL Middle School Debate in Texas:

Constructive Speeches (Speeches laying out the affirmative and negative case)

1st Affirmative Constructive (1AC) (Given by **AFF**irmative Speaker #1): 5 Minutes
Cross-Examined by NEGATIVE Speaker #2: 1 Minute

1st Negative Constructive (1NC) (Given by **NEG**ative Speaker #1): 5 Minutes
Cross-Examined by **AFF**irmative Speaker #1: 1 Minute

2nd Affirmative Constructive (Given by **AFFi**rmative Speaker #2): 5 Minutes
Cross-Examined by NEGATIVE Speaker #1: 1 Minute

2nd Negative Constructive (Given by **AFF**irmative Speaker #1): 5 Minutes
Cross-Examined by **AFF**irmative Speaker #2: 1 Minute

Rebuttal Speeches (Not for new arguments, but for answering the other team)

1st Negative Rebuttal (1NR) (Given by **NEG**ative Speaker #1): 3 Minutes

1st Affirmative Rebuttal (1AR) (Given by **AFF**irmative Speaker #1): 3 Minutes

2nd Negative Rebuttal (2NR) (Given by **NEG**ative Speaker #2): 3 Minutes

2nd Affirmative Rebuttal (2NR) (Given by **NEG**ative Speaker #2): 3 Minutes

Preparation Time: 4 Minutes (divided any way the team wishes to take it within the round)

Total Debate Time: 40 Minutes

Why does the Affirmative get to speak first and last? This is just like in the courtroom – the Prosecution speaks first (it lays out the case) and also speaks last (because the affirmative has the burden of proof).

The Four Novice Case Areas Within the Resolution (as determined by a national vote administered by the National Federation of High Schools)

1. Patents: Emerging Technologies
2. Patents: Green Technology
3. Copyrights: Protect the Creative Arts
4. Trademarks: Trademark Trolls

How Do I Use the Sample cases*?* In the following pages are sample affirmative cases and negative arguments for the first three of the novice case areas; they are designed to give an idea of the arguments that you might make. Each first affirmative speaker would choose one of the case areas and use the sample case as a starting point. Negative debaters will need to be prepared for any one of the areas.

Can I Add Evidence From My Own Research? Yes, but remember that in policy debate, you must quote exactly what your experts say (you are not just paraphrasing the evidence), and you must provide a complete citation for where you found the evidence – you can use the evidence citations in the sample packet to show you how evidence is cited.

Should I fully write out the first affirmative speech? Yes. You will want to fully write it out and time it so that you are sure you can deliver it within the five minute time limit. When you practice the speech, be sure to practice it "out loud" – don't just think through the speech.

What is the format for writing the first affirmative speech? Typically, first affirmative speakers start by stating the resolution – something like "My partner and I stand resolved that "The United States federal government should significantly strengthen its protection of domestic intellectual property rights in copyrights, patents, and/or trademarks. In support of the resolution, we offer the following plan: Congress should pass and the President should sign the Patent Eligibility Restoration Act. We offer the following three contentions; First, recent Supreme Court decisions have denied patent protection to vital areas of emerging technologies . . ." It is important to support each of the contentions with authoritative evidence that is DIRECTLY QUOTED." Evidence rules in policy debate do not allow for the paraphrasing of evidence. You do not have to read every word of the evidence, but you cannot add your own words to a quotation. See the next paragraph for a explanation of how this works.

Do I have to read all of the evidence under each of the contentions? No, as you will see, some of the pieces of evidence are quite long. You can underline the parts of the evidence that you will plan to read – just make certain that the portion you choose to read doesn't distort the meaning that the expert intends. You also do not have to read all of the citation (though UIL rules require that it be available to show the other team and the judge). Consider the following piece of evidence – the example will show how you can underline enough to give a sense of the source as well as the key reasoning contained in the evidence.

Andrei Iancu, (Former Director of the U.S. Patent and Trademark Office), A WAKE-UP CALL FOR AMERICAN INNOVATION, Nov. 13, 2023. Retrieved May 10, 2024 from https://www.realclearhealth.com/blog/2023/11/13/a_wake-up_call_for_american_innovation_992537.html

American innovation faces an existential threat: the steady erosion of intellectual property rights. Without strong and reliable IP protections, future generations will be deprived of life-changing – and potentially life-saving – new medicines. Early-stage biotech funding is on track to decline 40% this year, and leading investors have made clear that one reason for the retreat is their declining faith in the sanctity of patents. This retreat is understandable. Investing in life science is risky and expensive. Patents and other intellectual property are what protect new technologies from easy duplication by competitors. They're what offer the possibility of financial upside if all the risks are overcome and the technology actually makes it to market. Yet in recent years, Washington has seemed hellbent on weakening the patent system.

What About the Other Speeches, Do I Write Them Out as Well? No, only the first speech is fully written out. You will, however, as you get more experience, add re-support evidence briefs. You will try to anticipate the kinds of arguments that your opposing team will make so that you can be ready to answer those arguments.

Sample Affirmative Case on Emerging Technologies

PATENT PROTECTION TO PROMOTE U.S. LEADERSHIP IN EMERGING TECHNOLOGIES

Thesis: At present, the U.S. patent system discourages the filing of new patents in high technology areas such as biotechnology and artificial intelligence. This failure threatens to give over U.S. leadership in these areas to other countries such as China. There is a bill in Congress, called the Patent Eligibility Restoration Act (PERA) which, if passed, would correct this problem and restore U.S. leadership in emerging technologies.

Plan: The United States federal government should pass the Patent Eligibility Restoration Act.

CONTENTIONS:

I. RECENT SUPREME COURT DECISIONS HAVE DENIED PATENT PROTECTION TO VITAL AREAS OF EMERGING TECHNOLOGIES.

A. The Supreme Court denies patents for genetic research.

Benjamin Foote-Huth, (JD, Case Western Reserve School of Law), CASE WESTERN RESERVE LAW REVIEW, Fall 2022, p. 139.

The courts have denied patent eligibility to an array of ingenious, lifesaving innovations over the past decade. Such innovations include: a method for the isolation and modification of specific DNA segments to detect a patient's risk of breast cancer; a method to detect fetal genetic defects in otherwise discarded maternal blood; and the retooling of known genetic methods to detect Mycobacterium tuberculosis the organism behind the disease tuberculosis and a "major contributor to antimicrobial resistance worldwide." All of these cases now instruct researchers, institutions, and investors where not to devote their time, money, and effort. Why have such innovations been denied patent eligibility? The answer lies with the Supreme Court's 2012 decision in Mayo Collaborative Services v. Prometheus Laboratories, Inc. Mayo was joined two years later by Alice Corp. v. CLS Bank International; together they establish the Mayo/Alice test for patent subject matter eligibility.

B. The Supreme Court has made it difficult to patent artificial intelligence (AI)-based inventions.

Jerry Hsiao, (Prof., Law, U. of Macau), ALBANY LAW JOURNAL OF SCIENCE AND TECHNOLOGY, 2021, p. 179.

In recent years, the Federal Circuit and the Supreme Court have given increased attention to the question of what subject matter is eligible for patent protection. "The resulting case law, developed mostly in the context of business methods or other relatively straightforward technologies, exhibits a number of trends that broadly call into question the patentability of inventions in the field of AI."

II. CURRENT WEAKNESSES IN PATENT PROTECTION UNDERMINE U.S. LEADERSHIP IN EMERGING TECHNOLOGIES.

A. Inadequate patent protection means a loss of investment in emerging technologies.

Shahrokh Falati, (Prof., Law, Albany Law School), NORTH CAROLINA JOURNAL OF LAW & TECHNOLOGY, Mar. 2020, p. 119.

These findings further support the position that Congress should act to overturn the Supreme Court's new eligibility standard to prevent additional lost investment in technological development in the United States. Indeed, given the results of at least the above two comprehensive recent surveys, it seems likely that the Supreme Court's eligibility decisions have resulted in lost investment in the biotechnology and medical diagnostics fields and that this has delayed or altogether prevented the development of new medicines and diagnostics tests. This coupled with China taking market share from the U.S. in emerging new technologies ought to spur lawmakers to turn their attention to this pressing issue.

B. Tech companies are moving overseas because of the absence of patent protection.

Xuan-Thao Nguyen & Jeffrey Maine, (Dir., Center for Intellectual Property & Innovation, Indiana U./Prof., Law, U. of Maine School of Law), BOSTON U. LAW REVIEW, Sept. 2019, p. 1726.

The weakening of the patent system has negatively impacted investment in new drugs and new technologies. Moreover, the jobs relating to invention in the life sciences and many other areas are moving offshore, as investors turn their attention to different sectors or to different jurisdictions that are more willing to extend patent protection for similar inventions.

III. PASSAGE OF THE PATENT ELIGIBILITY RESTORATION ACT (PERA) SOLVES THE HARM.

A. The PERA would provide the certainty necessary for investment in emerging technologies.

Ann Mueting, (Pres., American Intellectual Property Law Association), AIPLA ISSUES LETTER IN SUPPORT OF THE PATENT ELIGIBILITY RESTORATION ACT OF 2023, Nov. 14, 2023. Retrieved May 10, 2024 from https://www.aipla.org/docs/default-source/advocacy/aipla-letter-in-support-of-s.-2140-pera.pdf?sfvrsn=5203369b_1

The American Intellectual Property Law Association supports the passage of S. 2140, the 'Patent Eligibility Restoration Act of 2023,' because we believe that the bill addresses the uncertainty and unpredictability resulting from the Supreme Court's subject-matter eligibility jurisprudence over the past two decades. The lack of certainty and predictability about what is eligible for patenting in the United States has and continues to disincentivize investment in various fields of technology, including emerging technology, risking our nation's position as an economic and technological leader.

B. The PERA would restore U.S. leadership in emerging technologies.

Chris Coons, (U.S. Senator from Delaware), SENATORS COONS, TILLIS INTRODUCE PATENT ELIGIBILITY RESTORATION ACT TO REVITALIZE AMERICAN INNOVATION, June 22, 2023. Retrieved Aug. 21, 2024 from https://www.coons.senate.gov/news/press-releases/senators-coons-tillis-introduce-patent-eligibility-restoration-act-to-revitalize-american-innovation

There is now widespread bipartisan agreement in Congress and across all recent administrations that reforms are necessary to restore the United States to a position of global strength and leadership in key areas of technology and innovation, such as medical diagnostics, biotechnology, personalized medicine, artificial intelligence, 5G, and blockchain. The Patent Eligibility Restoration Act achieves this critical goal by restoring patent eligibility to important inventions across many fields while also resolving legitimate concerns over the patenting of mere ideas, the purported discovery of which already exists in nature, and social and cultural content that everyone agrees is beyond the scope of the patent system. In short, this system is aimed at promoting technology-based innovation.

Sample Affirmative Case on Green Technology

PATENT PROTECTION TO PROMOTE SOLUTIONS TO CLIMATE CHANGE

Thesis: The thesis of this case is that current patent legislation does not sufficiently prioritize green technology, thus failing to make an appropriate effort to slow climate change. New technologies are essential if climate change is to be managed and patent promotion is the key to the development of such technologies.

Plan: The United States Patent and Trademark Office should establish and implement a program to properly incentivize the filing of new patents designed to slow climate change.

CONTENTIONS:

I. CLIMATE CHANGE IS SERIOUSLY HARMFUL.

A. Climate change threatens human existence.

Craig Calhoun & Benjamin Fong, (Prof., Social Science, Arizona State U./Dir., Center for Work & Democracy, Arizona State U.). THE GREEN NEW DEAL AND THE FUTURE OF WORK, 2022, pp. 1-2.

Climate change challenges the very future of human existence, and environmentalists are right to emphasize the dire situation we are in. But we will not meaningfully address this problem without also seriously addressing job loss and degradation. This is both a reality and a threat of damage to whole communities, jeopardizing both the fabric of society and the capacity to believe in a good future. Climate change and the crisis of work and livelihoods are both urgent. Both are potentially devastating. And yet, although both have attracted the attention of activists and policymakers, neither have received the response they demand. Too often, moreover, a focus on one has seemed to come at the expense of the other.

B. Action must be taken soon to avoid greater disaster.

] Mark Nevitt, (Prof., Law, Syracuse U. College of Law), U. CALIFORNIA AT DAVIS LAW REVIEW, Dec. 2021, 600.

The science is now irrefutable: we must take transformational action today to avoid massive physical destabilization tomorrow. It is increasingly clear that climate change is an existential crisis that requires immediate and innovative legal, technical, and policy solutions.

II. TECHNOLOGICAL BREAKTHROUGHS ARE URGENTLY NEEDED.

A. Technological solutions must be prioritized.

Caoimhe Ring, (Ph.D. Candidate, Intellectual Property Law, U. Oxford), HARVARD JOURNAL OF LAW & TECHNOLOGY, Fall 2021, p. 374.

Technological solutions are needed to reduce greenhouse gas ("GHG") emissions in what may call for a "climate-technology revolution" or a "Manhattan Project" for climate change that would rapidly develop new green technologies. This could be the most formidable challenge for innovation policy in the twenty-first century. The last-minute decision to water down commitments on phasing out coal at the 26th United Nations Climate Change Conference of the Parties only serves to highlight that emissions will be stabilized by novel technologies, not by putting an end to fossil fuels. It signals to the prioritization of technological means to solve what is essentially a social problem: the need to lower GHG emissions. But there is much uncertainty about the feasibility of delivering the technological advances needed. One open question for legal scholars is the role that patent law will play in the race for green innovation.

B. Technological innovation is best spurred by patent protection.

Johanna Rahnasto, (Attorney), CHICAGO-KENT JOURNAL OF INTELLECTUAL PROPERTY, Dec. 20, 2023, p. 62.

Patents impact what kind of technologies are available to the public. Patents affect incentives, promote disclosure, and inspire follow-up innovation; they can also restrict or enable the use of specific technologies.

C. Current programs for the promotion of green patents are inadequate.

Alice Yoon, (JD Candidate), BOSTON COLLEGE INTELLECTUAL PROPERTY & TECHNOLOGY FORUM, 2023, p. 11.

Both scholars and the innovators have questioned whether the American IP system, as currently designed, is truly stimulating innovation. The costs associated with research, developments and receiving patent rights disincentivizes innovators from making their technology widely available at reasonable prices. The prohibitive costs associated with research and patenting must be reformed to properly allow innovators to share their technology with the world.

III. GREEN PATENT PROMOTION OFFERS A SUPERIOR WAY TO ADDRESS CLIMATE CHANGE

Benjamin Desch, (JD Candidate), WASHINGTON LAW REVIEW, 2023, p. 652.

Moreover, given the unique urgency of the climate crisis, a green technology fast-track program should be made available to facilitate as rapid development and diffusion of technology as possible. Using the lessons from the Accelerated Examination Program, the Green Technology Pilot Program, the Track One Program, and the Climate Change Mitigation Pilot Program to inform the analysis, there are substantive changes that can be made to establish a useful fast-track program that does not unnecessarily mitigate the attractiveness of such an option to inventors and upon which a green technology prize system can be built.

Sample Affirmative Case on the Creative Arts

PROTECTING CREATIVE ARTISTS FROM AI THEFT

Thesis: Creative artists, writers, and musicians are losing their livelihoods because of the growing use of generative AI software. Human creatives have been doubly victimized: first, their livelihoods have been marginalized, and second, their very own copyrighted works have been used to train their replacements. Passage of the Generative AI Copyright Disclosure Act of 2024 would best protect the intellectual property of creatives by disclosing the database used to train the software.

Plan: Congress should pass and the President should sign H.R.7913, the Generative AI Copyright Disclosure Act of 2024. This Act will require that AI companies submit any copyrighted works in their training datasets to the Register of Copyrights before releasing new generative AI systems, which create text, images, music or video in response to users' prompts.

OBSERVATIONS

I. PRESERVING HUMAN CREATIVITY IS VITAL TO THE GOOD SOCIETY.

A. PRESERVING HUMAN CREATIVITY CONTRIBUTES TO COMMUNITY AND TOLERANCE.

Edward Lee, (Prof., Law, Illinois Tech Chicago-Kent College of Law), UNIVERSITY OF ILLINOIS LAW REVIEW, 2023, 1059.

Many studies have also found that exposure to art promotes health and wellness. Especially in the turbulent time in which we live, artists are vital. Their artworks reflect, critique, interrogate, and challenge society's flaws, biases, bigotry, narrow-mindedness, and intolerance.

B. PRESERVATION OF HUMAN CREATIVITY SUPPORTS HEALTH AND WELL-BEING.

Amira Resnick, (Analyst, Boost Collaborative), PATHWAYS TO WELLNESS: REFLECTIONS ON THE CORE VALUE OF CREATIVITY, Apr. 15, 2021. Retrieved Dec. 15, 2023 from https://boostcafe.org/pathways-wellness-reflections-core-value-creativity/

Rounding out my top three core values is creativity – the positive, generative energy that flows within and around us, and offers opportunities for healing throughout. As an admirer of the arts, I love taking in the typical ways we imagine creativity – dance, theater, music, comedy, visual and graphic arts, and more. While heeding a craving for creative outlets this year in particular, I experienced creative expression to have a powerful impact on health and well-being.

CONTENTIONS

I. USE OF GENERATIVE AI SOFTWARE SIGNIFICANTLY UNDERMINES HUMAN CREATIVITY.

A. GENERATIVE AI SOFTWARE THREATENS THE LIVELIHOODS OF CREATIVE ARTISTS, WRITERS, AND MUSICIANS.

Dani Di Placido, (Staff), FORBES, Dec. 30, 2023. Retrieved May 6, 2024 from www.forbes.com/sites/ danidiplacido/2023/12/30/ai-generated-art-was-a-mistake-and-heres-why/?sh=27c845223fef

Generative AI threatens the livelihood of artists, pitting their labor against the cheap slop produced by dead machines. The technology only benefits those who wish to produce content as quickly and cheaply as possible, by removing artists from the creative process.

Henry Perritt Jr., (Former Dean, Chicago-Kent College of Law), LOUISIANA LAW REVIEW, Fall 2023, p. 237.

Authors, artists, musicians, reporters, and others in the creative professions join technology critics in fearing that deployment of generative AI will throw millions of people out of work, as robots use their capability to generate mundane stories about corporate financial results, athletic contests, celebrities, self-help, and self-improvement. Artists and animators fear the generative AI will replace them in creating movie trailers and animated movies, and musicians fear that robots will write country songs and movie background music that is their bread and butter. Actors are afraid of what they may look like after AI gets done with them. Their cries of danger are alarming workers more generally.

Jackie Wang, (Poet & Prof., English, U. Southern California), quoted in WILL AI REPLACE WRITERS – AND THE REST OF US?, Aug. 23, 2023. Retrieved Dec. 15, 2023 from https://www.latimes.com/entertainment-arts/books/story/2023-08-23/will-ai-replace-writers-christopher-soto-jackie-wang-game-out-the-future

But since we live in a market society, we must pay attention to the question of how writers are going to be able to put food on the table. The fact that generative AI is parasitic on the archive of human creativity is fundamentally a labor problem. Should AI be allowed to imitate living writers and artists, and will the imitations be commercialized at the expense of living creators? Should AI be able to clone the voice and image of living actors? No, I don't think so. I'm ultimately in favor of enshrining strong labor protections for living creators.

B. THE ART PRODUCED BY GENERATIVE AI SOFTWARE IS INFERIOR – IT LACKS SOUL.

Kyle Chayka, (Staff, New Yorker), IS A.I. ART STEALING FROM ARTISTS?, Feb. 10, 2023. Retrieved Dec. 15, 2023 from https://www.newyorker.com/culture/infinite-scroll/is-ai-art-stealing-from-artists

[Artist and illustrator, Kelly] McKernan described typical A.I. style as having "this general sugary, candy look," adding, "It looks pretty, but it tastes terrible. It has no depth, but it serves the purpose that they want." The new generation of tools offers the instant gratification of a single image, shorn of the messy association with a single, living artist. One question is who gets to profit from such works. Another is more existential. "It kind of boils down to: what is art?" McKernan said. "Is art the process, is art the human component, is art the conversation? All of that is out of the picture once you're just generating it."

Kylie Clifton, (Staff, Los Angeles Loyolan), ARTIFICIAL INTELLIGENCE ART IS DISPOSABLE, AND IT'S RUINING ART, Mar. 15, 2023. Retrieved Dec. 15, 2023 from https://www.laloyolan.com/opinion/artificial-intelligence-art-is-disposable-and-it-s-ruining-art/article_8d49c891-85c4-52c5-97f6-9a6cf7c0eaf4.html

A picture is worth a thousand words because there is craftsmanship, flaws, heart and perspective involved in creating art. What story does an AI-generated work even tell? The lack of humanity in AI-generated art compromises everything about art that is treasured. AI is more closely related to a calculator than any sentient being with thoughts, emotions and experiences to draw upon.

II. AT PRESENT, COPYRIGHT PROTECTION FOR CREATIVES IS INADEQUATE.

A. THE COPYRIGHTED WORKS OF CREATIVES ARE USED TO TRAIN GENERATIVE AI MODELS.

T Bone Burnett & Jonathan Taplin, (Grammy and Academy Award-winning producer, guitarist and songwriter/Dir., Emeritus, U. of Southern California Innovation Lab), PROTECTING ARTS, CREATIVITY MEANS COPYRIGHT LAWS FOR AI, Mar. 14, 2023. Retrieved May 21, 2024 from https://www.heraldnet.com/opinion/comment-protecting-arts-creativity-means-copyright-laws-for-ai/

Big Tech companies are "training" generative AI models by stealing music, books, photographs, paintings and videos off the internet under the guise of copyright "fair use."

B. COPYRIGHT LAW FAILS TO KEEP UP WITH THE PACE OF MODERN TECHNOLOGY.

Morgan Sung, (Staff, NBC News), LENSA, THE AI PORTRAIT APP, HAS SOARED IN POPULARITY. BUT MANY ARTISTS QUESTION THE ETHICS OF AI ART. Dec. 6, 2022. Retrieved Dec. 15, 2023 from https://www.nbcnews.com/tech/internet/lensa-ai-artist-controversy-ethics-privacy-rcna60242

It's more complicated when it comes to the content that AI models generate, and it's difficult to enforce, which leaves artists with little recourse. "They just take everything because it's a legal gray zone and just exploiting it," [artist Jon] Lam said. "Because tech always moves faster than law, and law is always trying to catch up with it."

III. PASSAGE OF THE GENERATIVE AI COPYRIGHT DISCLOSURE ACT OF 2024 WILL BEST PROTECT THE INTELLECTUAL PROPERTY RIGHTS OF CREATIVES.

A. THE ACT WILL REQUIRE THAT THE U.S. COPYRIGHT OFFICE BE INFORMED OF THE DATABASE USED TO TRAIN GENERATIVE AI PROGRAMS.

Adam Schiff, (U.S. Rep., California), REP. SCHIFF INTRODUCES GROUNDBREAKING BILL TO CREATE AI TRANSPARENCY BETWEEN CREATORS AND COMPANIES, Apr. 9, 2024. Retrieved May 17, 2024 from https://schiff.house.gov/news/press-releases/rep-schiff-introduces-groundbreaking-bill-to-create-ai-transparency-between-creators-and-companies

The Generative AI Copyright Disclosure Act would require a notice to be submitted to the Register of Copyrights prior to the release of a new generative AI system with regard to all copyrighted works used in building or altering the training dataset for that system. The bill's requirements would also apply retroactively to previously released generative AI systems.

B. THE ACT PROVIDES TRANSPARENCY WHERE NONE NOW EXISTS.

Elizabeth Matthews, (CEO, ASCAP), REP. SCHIFF INTRODUCES GROUNDBREAKING BILL TO CREATE AI TRANSPARENCY BETWEEN CREATORS AND COMPANIES, Apr. 9, 2024. Retrieved May 17, 2024 from https://schiff.house.gov/news/press-releases/rep-schiff-introduces-groundbreaking-bill-to-create-ai-transparency-between-creators-and-companies

Without transparency around the use of copyrighted works in training artificial intelligence, creators will never be fairly compensated and AI tech companies will continue stealing from songwriters. This bill is an important step toward ensuring that the law puts humans first, and we thank Congressman Schiff for his leadership.

C. DISCLOSURE BEST ALLOWS CREATIVES TO PURSUE COPYRIGHT PROTECTION.

Ken Doroshow, (Chief Legal Office, Recording Industry of America), REP. SCHIFF INTRODUCES GROUNDBREAKING BILL TO CREATE AI TRANSPARENCY BETWEEN CREATORS AND COMPANIES, Apr. 9, 2024. Retrieved May 17, 2024 from https://schiff.house.gov/news/press-releases/rep-schiff-introduces-groundbreaking-bill-to-create-ai-transparency-between-creators-and-companies

Any effective regulatory regime for AI must start with one of the most fundamental building blocks of effective enforcement of creators' rights - comprehensive and transparent recordkeeping. RIAA applauds Congressman Schiff for leading on this urgent and foundational issue.

Sample Negative Arguments

PATENTS DISCOURAGE INNOVATION

1. PATENTS DISCOURAGE RESEARCH.

Anthony Chavez, (Prof., Law, Northern Kentucky U. College of Law), DUKE ENVIRONMENTAL LAW AND POLICY FORUM, Fall 2021, p. 22.

The ability to exclude under the patent system also may discourage follow-on inventions. Despite the benefits of invention disclosure, empirical evidence nevertheless suggests that the patent system discourages subsequent innovations. Economists have found that the restrictions of the patent system may impede both follow-on research and subsequent innovations.

Janet Freilich, (Prof., Law, Fordham Law School), VIRGINIA LAW REVIEW, May 2023, p. 647.

Many other countries allow researchers, particularly at non-profit institutions, to infringe patents in the course of their research without fear of liability. The United States does not. The lack of a research exception is unpopular, but fears of its potential consequences – most notably, impeding follow-on research – are lessened because patents are broadly ignored.

2. PATENTS REDUCE COMPETITION.

Bipartisan Policy Center, ADVANCING INNOVATION, COMPETITION, AND ACCESS FOR BIOLOGICS THROUGH PATENT POLICY, Apr. 4, 2018. Retrieved May 10, 2024 from https://bipartisanpolicy.org/event/advancing-innovation-competition-and-access-for-biologics-through-patent-policy/

In some instances, however, IP policies can have unintended consequences. When patent protections are broader than the scope of the invention they protect, they may actually discourage innovation. In such cases, they may also discourage or even block others from pursuing new inventions, thereby reducing competition. This approach ultimately hurts patients by narrowing the range of potential treatments.

3. PATENTS SLOW THE UPTAKE OF NEW TECHNOLOGIES.

Daniel Farber, (Prof., Law & Technology, University of California, Berkeley), TEXAS A&M LAW REVIEW, Winter 2024, p. 316.

U.S. innovation policy has long relied on the *patent* system to provide incentives for innovators. Scholars have increasingly emphasized the limits to this approach. The *patent* system relies on the prospect of high profits from the use of a *patent* to incentivize invention, but this mechanism raises prices for users and thereby disincentivizes actual use of the invention. Thus, a side effect of using *patents* as an incentive for invention is to reduce the spread of desirable technologies. Moreover, consumers will generally pay extra only for the benefits of the invention to themselves. Thus, the *patent* incentive system does not take into account the possible benefits that a technology has for third parties, which is a critical aspect of clean energy technologies. For these reasons, the *patent* system under-incentivizes innovation in technologies that reduce carbon emissions. It also inhibits the uptake of new technologies because the *patent* monopoly results in a higher price that slows adoption.

5. PATENTS SLOW PROGRESS IN EMERGING TECHNOLOGIES.

Raphael Zingg, (Prof., Institute for Advanced Study, Waseda U.). ARTIFICIAL INTELLIGENCE AND INTELLECTUAL PROPERTY, 2021, p. 77.

Patenting the building blocks of a technology risks interfering with its progress, as each upstream patent allows its owner to request royalty payments from downstream users. There exist many documented cases amongst other emerging technologies such as semiconductors or nanotechnology where an extensively crowded set of patents has locked up or retarded innovation.

PATENTS ARE ALREADY TOO EASY TO OBTAIN

1. THERE IS A GLUT OF LOW-QUALITY PATENTS.

Charles Duan, (Prof. Law, American University Washington College of Law), BELMONT LAW REVIEW, Fall 2023, p. 101.

This glut of low-quality patents cannot simply be ignored. It strains the USPTO's limited examination resources, potentially delaying the issuance of valuable patents representing commercializable innovation. More importantly, it increases potential liability for American innovators and businesses. A company entering a market often conducts a "freedom to operate" analysis, assessing what patents cover a certain technological area. In performing that analysis, the company must wade through all the patents in the relevant area, high-quality or not. A mass of low-quality patents multiplies this search cost many times over. Indeed, these filings may impede American firms from protecting their IP rights, as they facially constitute prior art that could lengthen the patent examination process.

2. PATENTS ARE LAUGHABLY EASY TO OBTAIN.

Mark Bartholomew, (Prof., Law, U. of Buffalo School of Law), INTELLECTUAL PROPERTY AND THE BRAIN: HOW NEUROSCIENCE WILL RESHAPE LEGAL PROTECTION FOR CREATIONS OF THE MIND, 2022, p. 39-40.

Despite the letter of the law and its rigorous application in the utility patent context, courts largely fail to police design patent applications for nonobviousness, only denying protection when confronted with a single virtually identical prior design. This makes design patent laughably easy to obtain.

3. THE U.S. PATENT OFFICE IS NOTORIOUSLY LAX.

Dean Baker, (Senior Economist, Center for Economic and Policy Research), THE GREAT POLARIZATION: HOW IDEAS, POWER, AND POLICIES DRIVE INEQUALITY, 2022, p. 276.

The U.S. Patent Office is notoriously lax in the standards it applies to patents. It famously issued a patent on a peanut butter and jelly sandwich in 1997. Many companies, especially in the pharmaceutical industry, have taken advantage of this laxness to obtain frivolous patents. Even a patent of dubious validity may allow a company to extend the duration of its monopoly for several years.

4. THE U.S. ALREADY IS FLOODED WITH PATENTS.

Jessica Silbey, (Prof., Law, Boston U. School of Law), AGAINST PROGRESS: INTELLECTUAL PROPERTY AND FUNDAMENTAL VALUES IN THE INTERNET AGE, 2022, p. 8.

In the 1980 Diamond v. Chakrabarty decision, the Supreme Court held, in what would become a famous turn of phrase, that “anything under the sun that is made by man” can be patented as long as the invention meets the statutory criteria of novelty, utility, and non-obviousness. Since that decision, patentable subject matter has broadened to include algorithms, financial business methods, and living organisms such as genetically modified seeds, animals, and DNA. The U.S. Patent and Trademark Office has issued over ten million patents, with an average of approximately three hundred thousand per year during the first decade of the twenty-first century.

5. PATENTS ARE SO NUMEROUS THAT INFRINGEMENT IS INEVITABLE.

Janet Freilich, (Prof., Law, Fordham Law School), VIRGINIA LAW REV., May 2023, p. 604.

Avoiding patent infringement is infeasible because there are simply too many patents covering too many aspects of day-to-day life. In fact, the task of avoiding patent infringement is so difficult that even big companies often cannot (or choose not to) do it. Indeed, many companies are surprised by patent infringement complaints that arrive after a product has been launched.

TECHNOLOGICAL INNOVATION IN THE U.S. IS HIGH NOW

1. THE U.S. LEADS THE WORLD IN ENTREPRENEURSHIP AND STARTUPS.

Stefan Calimanu, (Vice President, Research FDI: Investment Attraction), WHY THE U.S. LEADS THE WORLD IN ENTREPRENEURSHIP AND INNOVATION, May 17, 2023. Retrieved Apr. 21, 2024 from https://researchfdi.com/resources/articles/why-the-us-leads-the-world-in-entrepreneurship-and-innovation/

The United States has long been recognized as a global leader in entrepreneurship, innovation, and business creation. With its diverse population, strong economy, and a culture that encourages risk-taking and innovation, the US has fostered a thriving entrepreneurial ecosystem that continues to attract entrepreneurs from around the world. From Silicon Valley's tech giants to Wall Street's financial powerhouses, the USA offers a fertile ground for entrepreneurs and startups to thrive.

2. THE U.S. LEADS THE WORLD IN CUTTING-EDGE RESEARCH INSTITUTIONS.

Stefan Calimanu, (Vice President, Research FDI: Investment Attraction), WHY THE U.S. LEADS THE WORLD IN ENTREPRENEURSHIP AND INNOVATION, May 17, 2023. Retrieved Apr. 21, 2024 from https://researchfdi.com/resources/articles/why-the-us-leads-the-world-in-entrepreneurship-and-innovation/

The US has a robust infrastructure that supports the growth and development of startups. This includes world-class research institutions, such as MIT, Stanford, and Harvard, which not only produce cutting-edge research and innovation but also provide a steady stream of talented graduates who go on to become successful entrepreneurs. Collaborations between academia, industry, and government entities provide entrepreneurs with access to cutting-edge research, technological advancements, and a highly skilled workforce. This convergence of intellectual capital creates an ecosystem where ground-breaking ideas can flourish and shape the future. Additionally, the US has numerous business incubators, accelerators, and co-working spaces that provide startups with the resources and support they need to succeed.

3. ENTREPRENEURS CONTINUE TO FLOCK TO THE U.S.

Stefan Calimanu, (Vice President, Research FDI: Investment Attraction), WHY THE U.S. LEADS THE WORLD IN ENTREPRENEURSHIP AND INNOVATION, May 17, 2023. Retrieved Apr. 21, 2024 from https://researchfdi.com/resources/articles/why-the-us-leads-the-world-in-entrepreneurship-and-innovation/

In conclusion, the United States' entrepreneurial ecosystem is unparalleled in its dynamism and support for entrepreneurs. The country's strong economy, diverse and skilled workforce, supportive infrastructure, favorable government policies, culture of innovation, global influence, technological advancements, intellectual property protection, and entrepreneurial education all contribute to making the US the world's most dynamic entrepreneurial business ecosystem. As a result, the US continues to attract entrepreneurs from around the world and maintain its position as a global leader in entrepreneurship.

4. INTERNATIONAL INNOVATION RANKINGS SHOW THE U.S. IS FAR AHEAD OF CHINA.

Stefan Calimanu, (Vice President, Research FDI: Investment Attraction), WHY THE U.S. LEADS THE WORLD IN ENTREPRENEURSHIP AND INNOVATION, May 17, 2023. Retrieved Apr. 21, 2024 from https://researchfdi.com/resources/articles/why-the-us-leads-the-world-in-entrepreneurship-and-innovation/

The United States has been at the forefront of technological advancements in various fields. This culture of innovation has created a fertile ground for entrepreneurs to develop new products and services that address market needs and solve global challenges.

U.S. Department of State, INNOVATION POLICY, March 21, 2024. Retrieved Apr. 21, 2024 from https://www.state.gov/innovation-policy/

The United States is the most innovative economy in the world. U.S companies drive global innovation and the development of advanced and emerging technologies.

ACCESS TO RESEARCH INVESTMENT IN THE U.S. IS HIGH

1. VENTURE CAPITAL IN THE U.S. HAS INCREASED BY 300% OVER THE PAST FEW YEARS.

Ben Popken, (Staff, Omaha World Herald), HOW U.S. VENTURE CAPITAL HAS GROWN IN THE LAST 15 YEARS, Feb. 9, 2024. Retrieved Apr. 21, 2024 from https://omaha.com/news/nation-world/business/personal-finance/how-us-venture-capital-has-grown-in-the-last-15-years/collection_546b15fd-90ae-56e4-9c62-781b95325791.html#1

Venture capital has recovered steadily from the global financial crisis. From 2008 to 2022, the number of venture capital firms increased from about 1,000 to a little over 4,000, a 300% increase. The period saw a surge in the development of "seed funding," the initial funds raised in exchange for shares in the company, and it became an investment class in its own right. This expanded access in investing in the earliest stage of companies to a broader array of investors beyond traditional friends, family, and angel investors, catalyzing new growth and opportunities. The industry saw the proliferation of new funds specializing in specific areas, such as software, biotech, and the environment. Venture capital firms also began creating multiple funds with different investment strategies, diversifying their portfolio and increasing revenue from management fees.

2. VENTURE CAPITAL HAS INCREASED STEADILY OVER EACH OF THE PAST FIVE YEARS.

Ben Popken, (Staff, Omaha World Herald), HOW U.S. VENTURE CAPITAL HAS GROWN IN THE LAST 15 YEARS, Feb. 9, 2024. Retrieved Apr. 21, 2024 from https://omaha.com/news/nation-world/business/personal-finance/how-us-venture-capital-has-grown-in-the-last-15-years/collection_546b15fd-90ae-56e4-9c62-781b95325791.html#1

After five years of steady increases, in 2022, the average venture capital fund size, the amount of capital raised for investing, suddenly soared from $150 million to over $200 million. This growth was propelled by several factors. One was the entrance of mega funds, or funds with $500 million or more in capital, backed by institutional and sovereign investors seeking bigger and more diverse investing opportunities.

3. PROJECTIONS SHOW VENTURE CAPITAL WILL CONTINUE TO INCREASE.

Mordor Intelligence Briefing, UNITED STATES VENTURE CAPITAL MARKET SIZE & SHARE ANALYSIS, Dec. 6, 2023. Retrieved Apr. 21, 2024 from https://www.mordorintelligence.com/industry-reports/united-states-venture-capital-market

The United States Venture Capital Market size in terms of assets under management value is expected to grow from USD 1.30 trillion in 2024 to USD 1.94 trillion by 2029, at a CAGR of 8.25% during the forecast period (2024-2029).Venture capital generally comes from well-off investors, investment banks, and other financial institutions.

4. THE VENTURE CAPITAL AVAILABLE IN THE U.S. IS MORE THAN HALF OF THE WORLD TOTAL.

Stefan Calimanu, (Vice President, Research FDI: Investment Attraction), WHY THE U.S. LEADS THE WORLD IN ENTREPRENEURSHIP AND INNOVATION, May 17, 2023. Retrieved Apr. 21, 2024 from https://researchfdi.com/resources/articles/why-the-us-leads-the-world-in-entrepreneurship-and-innovation/

Access to capital is essential for entrepreneurs to transform their ideas into viable businesses. The USA offers a robust financial infrastructure, including venture capital firms, angel investors, and well-developed capital markets. Entrepreneurs in the USA benefit from a diverse range of funding options, enabling them to secure the necessary capital to start and scale their ventures. In 2021, US-based startups raised a total of $345 billion in venture capital funding, which is more than half of the global venture capital investments.

THE U.S. ECONOMY IS STRONG NOW

1. THE U.S. GROSS DOMESTIC PRODUCT IS LARGEST IN THE WORLD.

Stefan Calimanu, (Vice President, Research FDI: Investment Attraction), WHY THE U.S. LEADS THE WORLD IN ENTREPRENEURSHIP AND INNOVATION, May 17, 2023. Retrieved Apr. 21, 2024 from https://researchfdi.com/resources/articles/why-the-us-leads-the-world-in-entrepreneurship-and-innovation/

The US boasts the world's largest economy, with a Gross Domestic Product (GDP) of over $25.5 trillion USD in 2022. This economic strength provides a solid foundation for entrepreneurs to build and scale their businesses.

2. THE U.S. ECONOMY CONTINUES TO GROW FASTER THAN ANY OTHER COUNTRY.

Neil Irwin, (Staff, Axios News), U.S. WINNING WORLD ECONOMIC WAR, Jan. 31, 2024. Retrieved July 23, 2024 from https://www.axios.com/2024/01/31/us-economy-2024-gdp-g7-nations

The United States economy grew faster than any other large advanced economy last year — by a wide margin — and is on track to do so again in 2024. Why it matters: America's outperformance is rooted in its distinctive structural strengths, policy choices, and some luck. It reflects a fundamental resilience in the world's largest economy that is easy to overlook amid the nation's problems. By the numbers: U.S. GDP looks to have grown 2.5% in 2023, according to the IMF's hot-off-the-presses World Economic Outlook, the highest among the G7 economies (Japan was second at 1.9%).

3. U.S. PRODUCTIVITY GROWTH CONTINUES TO LEAD THE WORLD.

Kristalina Georgieva, (Dir., IMF Communications Department), UPDATE ON THE U.S. ECONOMY, June 28, 2024. Retrieved July 23, 2024 from https://www.imf.org/en/News/Articles/2024/06/28/tr062824-usa-transcript-of-art-iv-press-briefing

The U.S. is the only G-20 economy whose GDP level now exceeds the pre-Pandemic level. This is good for the U.S., and it is good for the global economy. We expect growth to be a healthy 2 percent on a fourth-quarter over fourth-quarter basis and sustain a similar pace over the medium-term. Inflation has declined in response to the Federal Reserve's actions and we see inflation on a path towards the 2 percent target. The Fed's efforts were aided by important gains in labor supply including of women and strong productivity gains. This is what makes U.S. economy so remarkable vis-a-vis its peers.

4. CHINA'S ECONOMY IS IN DECLINE.

Evie Steele, (Staff, Voice of America), IMF PREDICTS CHINA ECONOMY SLOWING OVER NEXT FOUR YEARS, Feb. 2, 2024. Retrieved July 23, 2024 from https://www.voanews.com/a/imf-predicts-china-economy-slowing-over-next-four-years/7468960.html

The International Monetary Fund says China's economic decline is likely to continue over the next four years as the world's second largest economy deals with a range of challenges from a rapidly aging population, higher unemployment and a property crisis.

Joel Mathis, (Staff, The Week), WHY CAN'T CHINA TURN ITS ECONOMY AROUND?, July 18, 2024. Retrieved July 23, 2024 from https://theweek.com/business/economy/china-economy-struggle-market-third-plenum

China's economy is stumbling, again. Slower-than-expected second-quarter growth statistics are putting "further pressure on the Communist Party" as its leaders gathered this week to plan the way forward, said The New York Times. Those leaders have tried to offset the country's longstanding real estate slump with a boost to export-driven manufacturing, but that has led to a "glut of goods, from chemicals to cars" and a backlash — in the form of tariffs — from countries whose leaders "fear the flood of Chinese goods will overwhelm local industries." The result? China is "limping along precariously," said one analyst.

OPENNESS AND SHARING IS SUPERIOR TO PATENT PROTECTION

1. WITHOUT PATENTS, RESEARCHERS COULD MORE FREELY EXCHANGE IDEAS.

Dean Baker, (Senior Economist, Center for Economic and Policy Research), WANT TO REVERSE INEQUALITY? CHANGE INTELLECTUAL PROPERTY RULES, Feb. 8, 2021. Retrieved Mar. 8, 2024 from https://www.thenation.com/article/economy/inequality-patents-taxes-copyright/

We would be far better served if American researchers freely exchanged their ideas, allowing the technology to advance as quickly as possible. Think of how much better off the entire world would have been if all the research on coronavirus vaccines had been fully open, so that anyone with manufacturing capacity could have been producing the vaccines in large quantities as soon as they went into Phase 3 testing. That would have allowed the manufacture of large stockpiles as soon as the vaccines had been approved for use. It appears that the vaccines developed by Chinese companies are not as effective as the ones by Moderna and Pfizer—we certainly need more transparency from the Chinese on their trial results—but in the absence of sufficient supplies from Moderna and Pfizer, they are far better than nothing. We share a common, global goal in taming the pandemic as quickly as possible, so we should be using every tool available to accomplish it.

2. MAJOR COMPANIES ARE NOW ABANDONING PATENT PROTECTION.

Samuel Cayton, (JD Candidate), SEATTLE JOURNAL OF ENVIRONMENTAL LAW, 2020, p. 232.

Some companies have gone the extra mile by taking the initiative to open their own patents to the general public. For example, in 2014, Tesla Motors's founder and chairman Elon Musk announced on behalf of his company that he will be releasing Tesla's patents to anyone who wants to use them. As a legal effect, Tesla made an irrevocable pledge to not initiate lawsuits against anyone who uses its patented technology for electric car development, which covers its patents for battery charging systems, electric motors, thermal management, and other inventions.

3. CLOSED INNOVATION AND PATENT PROTECTION WAS A 20TH CENTURY THING.

Toshiko Takenaka, (Prof., Law, U. Washington School of Law), MICHIGAN TECHNOLOGY LAW REVIEW, Fall 2019, p. 104.

In the early twentieth century, closed innovation prevailed as the development model. Closed innovation embraces exclusive control over all steps in the process of delivering an invention to market because all steps are performed within each commercial producer firm that vertically integrates upstream through downstream stages of the value chain. In the closed innovation model, a producers' R&D investment is recouped through the sale of products and services with supracompetitive prices that are enabled by the patent monopoly.

4. THE "COPYLEFT" SHARING PHILOSOPHY HAS NOW SPREAD TO PATENTS.

Toshiko Takenaka, (Prof., Law, U. Washington School of Law), MICHIGAN TECHNOLOGY LAW REVIEW, Fall 2019, p. 112.

Some producer firms – SMEs [small and medium-sized enterprises] that were founded by individual programmers, in particular – disclose their innovations free of patent exclusivity because they aspire to the same idealistic goal as the open source philosophy: spreading free software and promoting cooperation in the OSS community through Copyleft software development. It often makes sense for SMEs to join the OSS community in order to take advantage of the collective innovation power that would otherwise be unattainable with their limited resources.

5. CUTTING EDGE RESEARCHERS NOW SEE PATENT PROTECTION AS HARMFUL.

Toshiko Takenaka, (Prof., Law, U. Washington School of Law), MICHIGAN TECHNOLOGY LAW REVIEW, Fall 2019, p. 132.

For many commercial firms that engage in open innovation, in particular firms in complex technologies, the exclusive side of patent rights is not only useless but is also harmful to their reputation and to their work with innovators who subscribe to the open source philosophy. Thus, many of them voluntarily renounce their exclusive patent rights through open patent licenses and pledges.

IN GENETICS, SHARING IS SUPERIOR TO PATENT PROTECTION

1. THE MYRIAD DECISION PREVENTED PATENTING OF COVID GENOMIC SEQUENCING.

Jorge Contreras, (Prof., Law, U. Utah College of Law), NYU JOURNAL OF INTERNATIONAL LAW AND POLICY, Summer 2023, p. 537.

Data sharing at the speed and on the scale observed with COVID-19 has not always been the norm. During the H5N1 influenza pandemic and the SARS and MERS coronavirus outbreaks, researchers sought to patent newly identified viral genomic sequences shortly after they were determined. These efforts stymied research cooperation and imposed delays and barriers to the development of diagnostics, vaccines, and therapeutics. The genomic sequence of SARS-CoV-2 and its many variants, however, were not patented. This lack of patenting activity on a potentially lucrative pathogen is likely due to the unavailability of U.S. patents on naturally occurring genomic sequences following the 2013 Supreme Court decision in Association for Molecular Pathology v. Myriad Genetics.

2. OPENNESS WAS ESSENTIAL TO INTERNATIONAL COOPERATION ON THE COVID RESPONSE.

Jorge Contreras, (Prof., Law, U. Utah College of Law), NYU JOURNAL OF INTERNATIONAL LAW AND POLICY, Summer 2023, p. 537.

The speed and extent of international research cooperation in response to COVID-19 was immediate and widespread. SARS-CoV-2 sequence data was utilized by a broad range of researchers from geneticists and virologists to epidemiologists and public health officials. As one researcher observed, "[t]he enormous, immediate impact of sharing this data highlights the wealth of information encoded in pathogen genomes, particularly for understanding their origins and potential to cause disease." This sentiment was echoed by the Director of the U.S. Office of Science and Technology Policy (OSTP), who stated that "[i]mmediate public access to COVID-19 research is a powerful case study on the benefits of delivering research results and data rapidly to the people." The COVID-19 pandemic has brought into sharp focus the value of open access to and rapid sharing of pathogenic genomic data in response to infectious disease outbreaks.

3. OPENNESS WILL BE ESSENTIAL TO DEAL WITH FUTURE PANDEMICS.

Jorge Contreras, (Prof., Law, U. Utah College of Law), NYU JOURNAL OF INTERNATIONAL LAW AND POLICY, Summer 2023, p. 579.

Open, global research collaboration will be essential to address future pathogenic disease outbreaks, and measures should be taken to ensure that pathogenic sequence information is not appropriated by individual researchers, institutions, or states. A first step toward this goal is defeating legislative attempts in the United States that would overturn judicial precedents establishing that naturally occurring genomic sequences are ineligible subject matter for patent protection, while retaining ample opportunities to patent downstream innovations.

4. THE MYRIAD DECISION CREATED AN INTERNATIONAL NORM OF OPENNESS IN GENETICS RESEARCH.

Jorge Contreras, (Prof., Law, U. Utah College of Law), NYU JOURNAL OF INTERNATIONAL LAW AND POLICY, Summer 2023, p. 558.

Why does Myriad, a U.S. Court decision, seem to carry such weight on a global scale? One possibility is that the demise of genomic sequence patents in the United States established a new set of international norms and expectations around pathogenic patenting. Researchers identifying a new pathogenic strain, aware that patents are unavailable in the United States, might not find it worthwhile to file elsewhere when research, development, and production could proceed there unimpeded by such patents.

GREEN TECHNOLOGY BENEFITS MORE FROM SHARING THAN FROM PATENT PROTECTION

1. PATENTS SLOW THE TRANSITION TO ENVIRONMENTAL SUSTAINABILITY.

Samuel Cayton, (JD Candidate), SEATTLE JOURNAL OF ENVIRONMENTAL LAW, 2020, p. 244.

The Green Patent Paradox demonstrates that the patent system impedes innovation by allowing rights' holders to sit on their patent rights further slowing the transition to an environmentally sustainable economy. Although eBay is a victory in that it helps encourage continued use of other patent holder's green patents, the ITC functions as a loophole for patent holders who want to halt secondary users or pressure them to take unwanted licensing agreements.

2. MOST SO-CALLED “GREEN PATENTS” ARE FILED BY ENERGY COMPANIES TRYING TO REDUCE THE ENVIRONMENTAL FOOTPRINT OF FOSSIL FUELS, THUS ACTUALLY PROLONGING THE USE OF FOSSIL FUELS.

David Ellis, (Staff, Digital Science), “GREEN” ENERGY PATENTS MORE FOCUSED ON “CLEAN” CONVENTIONAL ENERGY INSTEAD OF RENEWABLES, Jan. 25, 2023. Retrieved May 31, 2024 from https://www.digital-science.com/news/green-energy-patents/

According to our analysis, the lion’s share of ‘green’ patents are focused on modifying the negative effects of conventional energy sources, such as fossil fuels – to make those sources of energy ‘cleaner’ – rather than renewables receiving R&D investment.

3. PATENTS CAN BE BOUGHT AND BURIED; SOME EVIDENCE INDICATES OIL COMPANIES ARE ACCUMULATING GREEN PATENTS IN ORDER TO SHELVE THEM.

Mark Hulbert, Staff, Callaway Climate Insights), ARE OIL COMPANIES CREATING PATENT THICKETS TO WARD OFF GREEN TECH?, Nov. 17, 2020. Retrieved May 31, 2024 from https://www.callawayclimateinsights.com/p/are-oil-companies-creating-patent

The possibility that fossil fuel companies may be creating such thickets for devious purposes was prompted by my recent column about the surprising number of green energy patents that are being awarded to energy companies. Not only are many of the top 50 “green patent” producers in the oil and gas industry, by several different measures these firms’ patents are especially consequential. Many of their patents even are considered blockbuster, in fact. This led one Callaway Climate Insights reader to wonder: “If their [energy companies’] motive is getting the tech under their control to shelve, eliminating potential future threats, like pharma often does (for better tech that makes their existing large market products irrelevant)?”

4. COLLABORATION AND SHARING IS SUPERIOR TO PATENT PROTECTION.

Samuel Cayton, (JD Candidate), SEATTLE JOURNAL OF ENVIRONMENTAL LAW, 2020, p. 232.

Perhaps the most successful private sector initiative to remedy the Green Patent Paradox is demonstrated through companies freeing up their exclusion rights by sharing their patents. An entity that engages in open-sourcing of their patent rights permits other users to use and adapt their idea. Open-sourcing originated in software development, which thrives off of the liberal usage of source code. Its concept has since expanded to include environmental innovation and has permitted second comers to expand on patented green technology without the fear of patent infringement.

Jorge Contreras, (Prof., Law, U. Utah College of Law), UTAH LAW REVIEW, 2021, p. 862.

In January 2008, IBM, Nokia, Pitney Bowes, and Sony launched an innovative project known as the EcoPatent Commons (EcoPC). The announced mission of EcoPC which was "to manage a collection of patents pledged for unencumbered use by companies and IP rights holders around the world to make it easier and faster to innovate and implement industrial processes that improve and protect the global environment." A total of thirteen firms eventually joined the EcoPC and collectively pledged a total of 248 "green technology" patents between its formation in 2008 and its discontinuation in 2016.

NO MIRACLES NEEDED: WE ALREADY HAVE THE GREEN TECHNOLOGY THAT WE NEED

1. WE ALREADY HAVE THE TECHNOLOGY TO CONVERT TO REPLACE FOSSIL FUELS.

Mark Jacobson, (Prof., Environmental Engineering, Stanford U.), NO MIRACLES NEEDED: HOW TODAYS' TECHNOLOGY CAN SAVE OUR CLIMATE AND CLEAN OUR AIR, 2023, p. 261.

So far, this book has examined the main technologies needed for a 100 percent clean, renewable energy and storage system. Virtually all of these technologies exist today, and none is a miracle technology.

Bill McKibben, (Founder of the environmental group, Third Act), NO MIRACLES NEEDED: HOW TODAYS' TECHNOLOGY CAN SAVE OUR CLIMATE AND CLEAN OUR AIR, 2023, p. xii.

To state it plainly: there is no longer any technical or economic obstacle to the swift transition of our energy system to something far cleaner, cheaper, and more rational. We have the miracle technologies we require firmly in hand.

2. THERE IS NO REASON TO WAIT FOR NEW TECHNOLOGIES.

Mark Jacobson, (Prof., Environmental Engineering, Stanford U.), NO MIRACLES NEEDED: HOW TODAYS' TECHNOLOGY CAN SAVE OUR CLIMATE AND CLEAN OUR AIR, 2023, p. xiv.

Do we need miracle technologies? No. Then what is the solution? It is to transition the world's current combustion-based energy to 100 percent clean, renewable wind, water, and solar (WWS) and storage for all energy purposes and to eliminate non-energy emissions.

3. ACTION SHOULD BE TAKEN NOW, BASED ON WHAT WE ALREADY HAVE.

Mark Jacobson, (Prof., Environmental Engineering, Stanford U.), NO MIRACLES NEEDED: HOW TODAYS' TECHNOLOGY CAN SAVE OUR CLIMATE AND CLEAN OUR AIR, 2023, p. xv.

Given our limited time and funding available to solve the pollution, climate, and energy security problems we face, it is essential to focus on known, effective solutions that can be implemented rapidly. Money spent on less-useful options will permit more health, climate, and energy insecurity damage to occur.

4. THE BARRIER TO CHANGE IS POLITICAL, NOT TECHNOLOGICAL.

Mark Jacobson, (Prof., Environmental Engineering, Stanford U.), NO MIRACLES NEEDED: HOW TODAYS' TECHNOLOGY CAN SAVE OUR CLIMATE AND CLEAN OUR AIR, 2023, p. 318.

The solution to global warming, air pollution, and energy security requires not only a technical and economic roadmap but also popular support, political will, and a rapid rollout of the solution. In fact, the main barriers to transitioning to 100 percent clean, renewable energy are neither technical nor economic; instead, they are social and political.

5. WAITING FOR A SILVER BULLET SOLUTION JUST DELAYS THE TRANSITION.

Annie Brett, (Prof., Law, University of Florida Levin College of Law), ECOLOGY LAW QUARTERLY, 2022, p. 617.

A true environmental silver bullet is a technological solution that aims to "fix" an environmental problem in one fell swoop. Implicit in the cultural understanding of silver bullets is their impossibility: solutions that sound too good to be true usually are.

Heather Payne, (Prof., Law, Seton Hall U. School of Law), ENVIRONMENTAL LAW, Spr. 2022, p. 278.

By protecting fossil-fuel use into the future by enabling CCS, we incent the status quo, hindering the widescape adoption of deployable renewable solutions to the issues associated with global climate change. With all such distractions, whether CCS, hydrogen, small modular reactors, or similar technologies that will solve all our problems ten years from now, we must recognize we can do far more for the planet by minimizing their use. Implementing legal paradigms allows us to do that - to stop chasing squirrels in the energy transition.

GENERATIVE AI SOFTWARE BENEFITS CREATIVE ARTISTS

1. AI FREES WRITERS FROM MUNDANE TASKS SO THEY CAN BE MORE CREATIVE.

Elisa Lorello, (Author), HOW TO MAKE PRODUCTIVE USE OF CHATGPT, Apr. 19, 2023. Retrieved Dec. 15, 2023 from https://janefriedman.com/author/chris-jane/

Meanwhile, administrative things I began using it for – outlines and timetables and daily schedules, mainly – were freeing me creatively and improving my productivity and time management. This past month, I started writing two novels with overlapping storylines, kind of like companion novels. ChatGPT generated outlines for each, and I've been writing both manuscripts as if they were one novel with alternating POVs. In three weeks, I drafted 35,000 words (combined). At this rate, I predict I'll complete the first draft of both by the end of June.

2. AI PROVIDES A SOLUTION FOR WRITERS' BLOCK.

Elisa Lorello, (Author), HOW TO MAKE PRODUCTIVE USE OF CHATGPT, Apr. 19, 2023. Retrieved Dec. 15, 2023 from https://janefriedman.com/author/chris-jane/

I think it can if you use it as a freewriting technique. For example, if I don't know what scene comes next, I could summarize (or perhaps even copy and paste) the previous scene and outright ask ChatGPT "What do you think should happen next?" In the past, I've tried to unblock myself by typing, "What I'm trying to say is…" and then proceeding to try to work it out on the page, however messy it may be. You can say that to ChatGPT and it could potentially help you organize your thoughts or give you clarity or direction.

3. AI SERVES AS A RESEARCH ASSISTANT.

Falon Fatemi, (CEO of Fireside, a Streaming Platform for Writers), WHY AI IS NOT GOING TO REPLACE HOLLYWOOD CREATIVES, June 21, 2023. Retrieved Dec. 15, 2023 from https://www.forbes.com/sites/falonfatemi/2023/06/21/why-ai-is-not-going-to-replace-hollywood-creatives/?sh=61e1e8c442bb

AI has the remarkable ability to process vast amounts of data, analyze patterns, and generate insights at lightning speed. By harnessing its power, writers can optimize their time and focus on higher-value tasks. Mundane activities like researching, fact-checking, and organizing information can be delegated to AI, freeing up those hours for writers to do the emotional storytelling that humans do best.

4. AI IMPROVES THE PRODUCTIVITY OF ARTISTS.

Jess Campitiello, (Digital Communications Specialist at Cornell Tech), AI VS. ARTIST: THE FUTURE OF CREATIVITY, Feb. 20, 2023. Retrieved May 10, 2024 from https://tech.cornell.edu/news/ai-vs-artist-the-future-of-creativity/

Generative AI allows artists to create countless visual concepts at the click of a button, making the process of fielding potential design ideas with clients exponentially more efficient. Giving clients a couple of quick AI 'thumbnail sketch' options will allow artists to finalize their work faster, as they will not be spending time creating preliminary visuals. The fabricated art is not meant to be used as a replacement but rather as a springboard for the artist's own creative output. AI can even offer design choices that the artist wouldn't have considered otherwise, mentioned Belsky. Integrating this technology into artists' tools has the potential to grant them an 'edge to a breakthrough.'

5. AI PROMOTES BRAINSTORMING.

Tojin Eapen et al. (Sr. Fellow, Conference Board), HARVARD BUSINESS REVIEW, July/Aug. 2023. Retrieved May 6, 2024 from https://hbr.org/2023/07/how-generative-ai-can-augment-human-creativity

During the early stages of new-product development, atypical designs created by generative AI can inspire designers to think beyond their preconceptions of what is possible or desirable in a product in terms of both form and function. This approach can lead to solutions that humans might never have imagined using a traditional approach, where the functions are determined first and the form is then designed to accommodate them. These inputs can help overcome biases such as design fixation (an overreliance on standard design forms), functional fixedness (a lack of ability to imagine a use beyond the traditional one), and the Einstellung effect, where individuals' previous experiences impede them from considering new ways to solve problems.

NEGATIVE DISADVANTAGE ARGUMENTS

INTELLECTUAL PROPERTY PROTECTION PROMOTES INCOME INEQUALITY

1. IP PROTECTION MEANS THE RICH GET RICHER.

Dean Baker, (Senior Economist, Center for Economic and Policy Research), THE GREAT POLARIZATION: HOW IDEAS, POWER, AND POLICIES DRIVE INEQUALITY, 2022, p. 288.

Patent and copyright protections not only involve large sums of money; they also redistribute income upward. At the most basic level, there are not many low-income households that receive royalties from patents or copyrights. These forms of protection provide the basis for the fortunes of many of the richest people in the country.

Dean Baker, (Senior Economist, Center for Economic and Policy Research), WANT TO REVERSE INEQUALITY? CHANGE INTELLECTUAL PROPERTY RULES, Feb. 8, 2021. Retrieved Mar. 8, 2024 from https://www.thenation.com/article/economy/inequality-patents-taxes-copyright/

While the Reagan, George W. Bush, and Trump tax cuts all gave more money to the rich, policy changes in other areas, especially intellectual property have done far more to redistribute income upward. In the past four decades, a wide array of changes—under both Democratic and Republican presidents—made patent and copyright protection both longer and stronger.

2. STRENGTHENING PATENT PROTECTION WILL INCREASE INCOME INEQUALITY.

Dean Baker, (Senior Economist, Center for Economic and Policy Research), THE GREAT POLARIZATION: HOW IDEAS, POWER, AND POLICIES DRIVE INEQUALITY, 2022, p. 292.

We have adopted a set of rules centered on patent and copyright monopolies that have the effect of significantly increasing inequality. We could weaken these rules or, alternatively, make use of different mechanisms to provide incentives for innovation and creative work. In deciding whether to strengthen or weaken patents, copyrights, and related protections, we need to consider whether they are the most efficient mechanisms for supporting innovation and creative work. As noted here, there is good reason for believing that often they are not.

3. IP PROTECTION COSTS THE U.S. PUBLIC MORE THAN A TRILLION DOLLARS ANNUALLY.

Dean Baker, (Senior Economist, Center for Economic and Policy Research), WANT TO REVERSE INEQUALITY? CHANGE INTELLECTUAL PROPERTY RULES, Feb. 8, 2021. Retrieved Mar. 8, 2024 from https://www.thenation.com/article/economy/inequality-patents-taxes-copyright/

The upward redistribution of wealth arising from intellectual property (IP) is typically disguised in public debates as being the result of “technology.” But blaming technology attributes it to an impersonal force. When we point out that it is due to intellectual property, we make it clear that inequality is a policy choice. To take my favorite example, without Microsoft’s government-granted patent and copyright monopolies, Bill Gates would probably still be working for a living. Many other billionaires and millionaires would be far less wealthy if we had different rules for intellectual property. By my calculations, the amount of money transferred from the rest of us to those in a position to benefit from IP comes to more than $1 trillion annually. This transfer comes in the form of higher prices for prescription drugs, medical equipment, software, and many other products. This amount is almost half the size of all before-tax corporate profits, and roughly one-third larger than the current military budget. In other words, it is real money.

4. IP PROTECTION IS USED TO EXCLUDE THOSE IN NEED.

Peter Yu, (Prof., Law, Texas A&M U.), COLUMBIA LAW REVIEW, June 2023, 1458.

There are three general critiques of intellectual property law in the area of education and scientific research. First, the protection of intellectual property rights prevents or reduces access to educational materials and technologies, especially when those rights do not reflect an appropriate balance between proprietary control and public access. By enabling rights holders to charge supracompetitive prices while giving them a right to exclude, intellectual property law has made many of these materials and technologies inaccessible to those in need.

Peter Yu, (Prof., Law, Texas A&M U.), COLUMBIA LAW REVIEW, June 2023, 1463.

Finally, the existing intellectual property system has raised difficult moral questions. Intellectual property law tends to privilege the rich at the expense of the poor. A 2001 World Bank study estimated that the adoption of the Agreement on Trade-Related Aspects of Intellectual Property Rights of the World Trade Organization, the predominant multilateral intellectual property instrument, has resulted in rent transfers of more than twenty billion dollars from developing countries "to major technology-creating countries particularly the United States, Germany, and France in the form of pharmaceutical patents, computer chip designs, and other intellectual property." As activist Roberto Verzola laments, "If it is a sin for the poor to steal from the rich, it must be a much bigger sin for the rich to steal from the poor."

5. INCOME INEQUALITY KILLS.

David Ansell, (Prof., Medicine, Rush U. Medical Center), THE DEATH GAP: HOW INEQUALITY KILLS, 2021, xiii.

We all die. But tens of thousands of Americans die too early. These early deaths are not random events. These deaths strike particular individuals who live in particular American neighborhoods. And while we know that people die of cancer, heart disease, and so on, this killer isn't one that we can treat with drugs, therapy, or surgery. This killer is inequality.

David Ansell, (Prof., Medicine, Rush U. Medical Center), THE DEATH GAP: HOW INEQUALITY KILLS, 2021, 10.

That people suffer and die prematurely because of inequality is wrong. It is wrong from an ethical perspective. It is wrong from a fairness perspective. And it is wrong because we have the means to fix it.

David Ansell, (Prof., Medicine, Rush U. Medical Center), THE DEATH GAP: HOW INEQUALITY KILLS, 2021, 64-65.

We have known for decades that better-educated, richer people live longer than poorer, less-educated people. In 1980, people with family incomes in the top 5 percent had life expectancies about 25 percent higher than those in the bottom 5 percent.

Sam Ben-Meir, (Prof., Philosophy, City University of New York), FREEING AMERICA FROM THE QUAGMIRE OF INEQUALITY, Mar. 15, 2023. Retrieved Apr. 7, 2023 from https://citywatchla.com/index.php/cw/voices/26619-freeing-america-from-the-quagmire-of-inequality

The levels of wealth inequality we are currently witnessing in this country are unprecedented and alarming. The very richest among us have succeeded in grabbing ever more of the proverbial pie, and the trend is only worsening. Wealth inequality is proving disastrous for America. On both collective and individual levels, we are suffering because of the ever-growing concentration of wealth in the hands of a tiny few.

GENETIC MODIFICATION LEADS TO DEHUMANIZATION

1. GENETIC MODIFICATION TREATS HUMANS AS MACHINES.

Paschal Corby, (Prof., Bioethics, John Paul II Institute in Rome), HOPE AND DESPAIR OF BIOENHANCEMENT, 2019, 36.

Kampowski then suggests a second way in which cognitive enhancement might be considered as dehumanizing, in diminishing the subject to the status of a machine. We pump more into the person in order to get more results. Thus, in the example given, the air traffic controller is drugged-up in order to make him more productive. But in response Kampowski asks: "Could it ever be licit to ask people to perform a job in which they are no longer allowed to be human? If the job is so complex that it can no longer be done by one 'unenhanced' human being, then maybe it should be broken down, so that it can be done by two or three. What should not be done is to treat human beings as if they were machines."

2. EUGENICS IS INHERENTLY DISCRIMINATORY.

Rachel Saady-Saxe, (JD, American U. Washington College of Law), "An Analysis of State Interests in Regulating Germline CRISPR Use," ALABAMA CIVIL RIGHTS & CIVIL LIBERTIES LAW REVIEW, 2020, 90.

Eugenics is a movement designed to "improve the composition of the human race." In the United States, this concept took hold in the late 19th century. The goal at that time was to stop "undesirable traits" from passing to new generations. Specifically, the movement targeted persons who were "poor, low in social standing, immigrants, and/or minorities." The concept of eugenics ties these characteristics to a person's genes - claiming that they are born pre-disposed to a certain way of life. The concept materialized itself in sinister and discriminatory ways: sterilization of Black persons, those incarcerated for petty crimes, those living in poverty, and those with mental disabilities; frequently without their knowledge. Eugenics lost traction in the United States after Hitler adopted the practice during World War II. However, it still has a foothold in today's society, and the effects are still palpable against those most at risk.

3. GENETIC SELECTION IS DEHUMANIZING.

Paschal Corby, (Prof., Bioethics, John Paul II Institute in Rome), HOPE AND DESPAIR OF BIOENHANCEMENT, 2019, 72.

This denial of human distinction, and the elimination of boundaries, ultimately amounts to "the negation of man," or of what C. S. Lewis prophetically refers to as his abolition: of the human person treated as an artifact, as a mere "natural object," or "as raw material for scientific manipulation to alter at will." Lewis warns against this end, troubled by the prospect of human beings assuming full control over themselves through eugenics, pre-natal conditioning, and "by an education and propaganda based on a perfect applied psychology."

4. GENETIC MODIFICATION ENDANGERS THE FUTURE OF THE HUMAN SPECIES.

Teddy Ellison, (JD Candidate), "Why Genetics Is Crispr Than It Used To Be: Helping The Novice Understand Germ Line Modification And Its Serious Implications," SOUTHERN CALIFORNIA INTERDISCIPLINARY LAW JOURNAL, Summer 2017, 615.

Germ line modification not only alters the genes of the immediate child but also influences the genetic makeup of their offspring and so on and so forth. This is because all cells of the modified person are altered, including the germ cells. Therefore, due to the very speculative and remote nature of the risks, they are difficult, if not impossible to assess in any compressed timeframe. It would likely take decades or even centuries to be able to properly analyze exactly how the use of CRISPR will impact the human species.

GREEN PATENTS ARE LIKELY TO STIFLE INNOVATION

1. PATENTS CREATE MONOPOLIES THAT SLOW ADOPTION.

Daniel Farber, (Prof. of Law and Director of the Center for Law, Energy, and the Environment, at the University of California, Berkeley), TEXAS A&M LAW REVIEW, Winter 2024, p. 315.

U.S. innovation policy has long relied on the patent system to provide incentives for innovators. Scholars have increasingly emphasized the limits to this approach. The patent system relies on the prospect of high profits from the use of a patent to incentivize invention, but this mechanism raises prices for users and thereby disincentivizes actual use of the invention. Thus, a side effect of using patents as an incentive for invention is to reduce the spread of desirable technologies. Moreover, consumers will generally pay extra only for the benefits of the invention to themselves. Thus, the patent incentive system does not take into account the possible benefits that a technology has for third parties, which is a critical aspect of clean energy technologies. For these reasons, the patent system under-incentivizes innovation in technologies that reduce carbon emissions. It also inhibits the uptake of new technologies because the patent monopoly results in a higher price that slows adoption.

Jayne Piana, (Attorney), TEXAS ENVIRONMENTAL LAW JOURNAL, Spr. 2022, p. 45.

Patents are inherently exclusionary; a patent provides the owner with the right to exclude others from practicing the claimed technology. It has been observed that traditional intellectual property (IP) law "does little to encourage transfer of technology for a global response to climate change because it is so rooted in protecting one's exclusive rights and using those rights for wealth building."

2. PATENTS INCREASE THE PRICE OF ANY RESULTING SOLUTION.

Alice Yoon, (JD Candidate), BOSTON COLLEGE INTELLECTUAL PROPERTY & TECHNOLOGY FORUM, 2023, p. 12.

Easier access to patent protection would risk allowing innovators to maintain high prices, making such technology cost-prohibitive for poorer nations and counterproductively restricting public access. To ensure broad public use, green tech must be reasonably priced and knowledge must be shared globally.

3. SLOWING CLIMATE CHANGE WILL REQUIRE ACTION IN DEVELOPING COUNTRIES.

Adam Kendall et al., (Analysts, Kinsey Sustainability), SOLVING THE CLIMATE CHANGE EQUATION FOR DEVELOPING COUNTRIES, Dec. 6, 2023. Retrieved May 31, 2024 from https://www.mckinsey.com/capabilities/sustainability/our-insights/solving-the-climate-finance-equation-for-developing-countries

Achieving the goals of the Paris Agreement will require fundamental changes in energy and land-use systems worldwide, and developing countries are a key part of this transformation. Poised as they are for significant economic and population expansion, without support for decarbonization and green growth developing countries will likely increase their share of emissions over the coming decades.

4. PATENTS KEEP GREEN TECHNOLOGIES FROM GETTING TO DEVELOPING COUNTRIES.

Alice Yoon, (JD Candidate), BOSTON COLLEGE INTELLECTUAL PROPERTY & TECHNOLOGY FORUM, 2023, p. 13.

The global COVID-19 pandemic serves as an example for the potential harm caused by the patent system. For example, Moderna's COVID-19 vaccine was almost exclusively supplied to wealthy nations in pursuit of maximizing profit. COVID-19 was arguably a more time-sensitive global crisis than the more slowly developing impacts of climate change. Rather than driving research and development for a COVID vaccine, extended IP protections actively limited and delayed global access to life-saving preventative care. As such, simply relying on IP rights for private action in a response to a global issue is shown to be counterintuitive to the goal of solving the global crisis.

Caoimhe Ring, (Ph.D. Candidate, Intellectual Property Law, U. Oxford), HARVARD JOURNAL OF LAW & TECHNOLOGY, Fall 2021, p. 391.

Patent hold-up for green technology could imperil the developing nations most vulnerable to the impacts of climate change, which can have weak homegrown IP regimes and can be reliant on access to technologies from the Global North. It can also stall sequential advances.