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First Year Observer

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Contents

ARTICLES

India's New IP Policy: A Bare Act?

—*Shamnad Basheer and Pankhuri Agarwal*[*]

Abstract *Amidst much fanfare, the Indian government unleashed an Intellectual Property Rights ("IPR") policy around two years ago. This paper aims at the first ever comprehensive assessment of this policy, its purported rationale and implications. It argues that the policy is a shoddily drafted and poorly conceptualised document, which is resting on empirically unproven intellectual property ("IP") assumptions. It is more faith-based than fact-based and endorses a fairly formalistic view of IP, taking it to be an end in itself.*

The paper goes on to demonstrate through the Carol Bacchi frame of "*What's the problem represented to be*" ("*WPR*") that the very rationale for the policy itself is unclear.

I. Introduction

In Hans Christian Anderson's classic, "The Emperors' New Clothes", a vain emperor is promised the finest of robes by two treacherous tailors. They convince the emperor that the material is so fine that it can barely be seen. Thereafter, the emperor struts around naked, believing that he'd been donned with finest of robes. Whilst all of the adult kingdom and the royal retinue play along, a little child yells: but the emperor is naked!

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One couldn't have found a more fitting frame for India's new Intellectual Property Rights Policy,[1] announced around two years ago.[2] It is a policy that is long on seductive slogans and short on substance; containing nothing more than a mouth of multitudinous platitudes and trite solutions. Paradoxical perhaps, given that the policy itself exhorts Indians to be "creative" and "inventive".

To be fair, the policy does contain some laudable suggestions, though few and far between. But, even those that merit consideration are short on specific details.

II. History of the IP Policy

The history of the policy itself is embroiled in some controversy for the government had initially constituted a committee of academics to help frame the policy. This "first" think tank, comprising one of the authors of this paper and two other IP academics, Yogesh Pai and Prabuddh Ganguly, was constituted by the Department of Industrial Policy and Promotion ("*DIPP*") vide a letter dated July 24, 2014 for preparation of a base document for a National IPR Policy.[3]

The think tank submitted a baseline draft[4] of the policy ("*First Think Tank Draft*") to the DIPP on October 21, 2014.[5] However, rather than responding to this policy or acknowledging its receipt, the DIPP announced on the very next day (i.e. October 22, 2014) the constitution of a new six

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1 National Intellectual Property Rights Policy, May 12, 2016, *available at* http://dipp.nic.in/English/Schemes/Intellectual_Property_Rights/National_IPR_Policy_08.08.2016.pdf (last visited on February 14, 2017).

2 *Cabinet Approves National Intellectual Property Rights Policy*, Press Information Bureau, May 13, 2016, *available at* http://pib.nic.in/newsite/erelease.aspx?relid=145338 (last visited on February 14, 2017).

3 Government of India, Meeting Notice, July 24, 2014, *available at* http://spicyip.com/wp-content/uploads/2014/11/letter-constituting-committee.pdf (last visited on February 13, 2017).

4 Shamnad Basheer & Yogesh Pai, *Indian Intellectual Property Policy: A Baseline Draft*, *available at* https://spicyip.com/wp-content/uploads/2014/11/National-IP-Policy-final-1E.pdf (last visited on February 13, 2017).

5 Swaraj Paul Barooah, *The Draft IP Policy That's MIA, & More on the Think Tank*, SpicyIP, *available at* https://spicyip.com/2014/12/the-draft-ip-policy-thats-mia-more-on-the-think-tank.html (last visited on February 13, 2017).

member think tank[6] tasked with the very same mandate; namely, the evolution of an IP policy.[7]

The second think tank then came up with another draft IP policy document; one that was made public by the DIPP on December 24, 2014.[8] Pursuant to a number of critical comments from academics, civil society organizations etc.,[9] the policy draft was revised and resubmitted to the DIPP. The final version was then approved by the Union Cabinet on May 12, 2016.

III. Broad Features of the Policy

The policy sets forth seven objectives, as below:

i) IPR Awareness: Outreach and Promotion

ii) Generation of IPRs

iii) Legal and Legislative Framework

iv) Administration and Management

v) Commercialization of IPR

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[6] This committee was chaired by a former Chairman of the Intellectual Property Appellate Board (IPAB), Prabha Sridevan. Other members of the committee included: Ms. Prathiba Singh, a Senior Advocate of the Delhi High Court, Ms. Punita Bhargava, an advocate at Inventure IP, Dr. Unnat Pandit of Cadila Pharmaceuticals, Mr. Rajeev Srinivasan, Director of Asian School of Business and Mr. Narendra Sabharwal, retired DDG of WIPO.

[7] Government of India, Press Release, October 22, 2014, *available at* http://dipp.nic.in/English/acts_rules/Press_Release/ipr_PressRelease_24October2014.pdf (last visited on February 13, 2017); *See also* Letter to the DIPP (October 24, 2014), *available at* https://spicyip.com/wp-content/uploads/2014/12/ipr-think-tank.pdf (last visited on February 13, 2017); Letter to the Prime Minister, *available at* https://spicyip.com/wp-content/uploads/2014/11/Dear-Prime-Minister-Modi.pdf (last visited on February 13, 2017).

[8] National IPR Policy (First Draft), *available at* http://dipp.nic.in/English/Schemes/Intellectual_Property_Rights/IPR_Policy_24December2014.pdf (last visited on February 13, 2017).

[9] Raghul Sudheesh, *Academics Submits Critical Comments to DIPP on Draft National IPR Policy by IP Think Tank*, SpicyIP (February 9, 2015), *available at* https://spicyip.com/2015/02/guest-post-academics-submits-critical-comments-to-dipp-on-draft-national-ipr-policy-by-ip-think-tank.html (last visited on February 13, 2017); Anubha Sinha, *Academia and Civil Society Submit Critical Comments to DIPP on Draft National IPR Policy [Part I]*, SpicyIP (February 16, 2015), *available at* https://spicyip.com/2015/02/academics-and-civil-society-submits-critical-comments-to-dipp-on-draft-national-ipr-policy-by-ip-think-tank-part-i.html (last visited on February 13, 2017); Anubha Sinha, *Academia and Civil Society Submit Comments to DIPP on Draft National IPR Policy [Part II]*, SpicyIP (February 28, 2015), *available at* https://spicyip.com/2015/02/academia-and-civil-society-submit-comments-to-dipp-on-draft-national-ipr-policy-part-ii.html (last visited on February 13, 2017); Swaraj Paul Barooah, *More Submissions on the Draft IP Policy*, SpicyIP (March 9, 2015), *available at* https://spicyip.com/2015/03/more-submissions-on-the-draft-ip-policy.html (last visited on February 13, 2017).

vi) Enforcement and Adjudication

vii) Human Capital Development.

The policy then goes on to suggest ways to achieve those objectives, including the below:

A. IPR Awareness: Outreach and Promotion

The policy exhorts a nation-wide 'Creative India, Innovative India' campaign. In particular, it recommends the introduction of IPRs in schools and other educational institutions and the institution of awards for those that create new IP.

B. Generation of IPRs

The policy exhorts the acquisition of IPRs by public funded research institutions, and suggests that such IP registrations be used as a key performance indicator at such institutions, linking it with the researchers' funding and promotion. The policy also recommends the setting up of IPR facilitation centres, and the creation of incentives for IPR filings by Micro, Small & Medium Enterprises ("*MSMEs*"), grass-root innovators and start-ups.

C. Legal and Legislative Framework

The policy recommends the institution of a stronger and more effective legal IPR framework. In particular, it recommends the criminalization of cinema piracy and the creation of a legal framework for addressing the issue of licensing of standard-essential patents ("*SEPs*") on fair, reasonable and non-discriminatory ("*FRAND*") terms. It also suggests that statutory protection be accorded to newer categories such as traditional knowledge and trade secrets.

D. Administration and Management

The policy recommends modernizing of IP offices, increasing manpower, providing training to IPR officials, fixing timelines for disposal of applications, and instituting a Cell for IPR Promotion and Management ("*CIPAM*") under the aegis of DIPP for facilitating the promotion, creation and commercialization of IP assets.

E. Commercialization of IPR

In order to encourage the commercialization of IPRs, the policy proposes the establishment of facilitative mechanisms for MSMEs, academic institutions and individual inventors, connecting owners with investors for financing, conducting sensitization on licensing arrangements, and creating a public platform that allows owners to connect with potential buyers, funders and users.

F. Enforcement and Adjudication

In order to strengthen IP enforcement and adjudication, the policy recommends building respect for IPRs among the general public. It also suggests sensitization of IP owners on protection and enforcement measures, building capacity of enforcement agencies, undertaking anti-piracy and anti-counterfeiting measures, conducting regular IP workshops for judges and multi-disciplinary courses for other stakeholders, setting up specialized commercial courts of adjudication of IP disputes, exploring alternate dispute resolution mechanisms, etc.

G. Human Capital Development

Lastly, the policy aims at enhancing human and institutional capacity for policy research, training, teaching and skill building in IP. In order to attain this objective, it advocates measures such as introducing IP teaching in educational institutions and skill development centres, developing distance learning and online IP courses for users, strengthening IP chairs in higher education institutes, empowering the Rajiv Gandhi National Institute of Intellectual Property Management, Nagpur for providing training to IPR administrators and other stakeholders, etc.

IV. Problems with the Policy

As noted earlier, the policy makes all the right noises and is long on its list of recommendations, but short of any real inventive solution or insightful measure as befits a national level IP policy of this stature. Most of its suggested solutions are rather trite at best, and regressive at worst. While the problems with the IP policy are many, we highlight the most egregious ones below:

A. Conflation of IP and Innovation

The greatest flaw of the policy lies in blindly exhorting a rapid "generation of IPRs".[10] This reflects the policy's one-sided view of IP as an end in itself, rather than as a means to an end, namely creativity and innovation.

Indeed, the first think tank (that had been disbanded) cautioned thus:

> "*Intellectual property laws are meant to foster innovation and creativity. To this extent, they are not an "end", but merely a means to an end. As such, they require careful calibration, balancing out the interests of the innovator/creator on the one hand, and the public on the other... In short, a holistic approach will be adopted so as to situate intellectual property in its proper context, and not as an end in itself.*"

The second think tank (whose policy was finally adopted by the government)[11] however leans in favour of a rather formalistic and reductionist view of IP, failing to situate it within the larger context of the innovation ecosystem, refusing to acknowledge that while IP could accelerate innovation in certain technology sectors, it could block innovation in others.[12]

This is a truth touted not only by those labeled as left-liberal ideologues, but also by powerful industry giants facing the brunt of a promiscuous patent regime — renowned giants such as Tesla's Elon Musk who castigated the present patent situation thus:

> "*When I started out with my first company, Zip2, I thought patents were a good thing and worked hard to obtain them. And maybe they were good long ago, but too often these days they serve merely to stifle progress, entrench the positions of giant corporations and enrich those in the legal profession, rather than the actual inventors.*"[13]

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[10] *Supra* note 1, at 7-9.

[11] For the sake of convenience, the earlier disbanded think tank is referred to throughout as "*First Think Tank*" and the new think tank whose policy was finally adopted by the government is referred to as the "*Second Think Tank*".

[12] *See* Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anticommons in Biomedical Research,* 280 (5364) Science 698-701 (1998); Jeremy de Beer, *Evidence-Based Intellectual Property Policymaking: An Integrated Review of Methods and Conclusions*, 19 Journal of World Intellectual Property 150, 169 (2016) ("*Having more IP outputs may increase a country's ranking but, as both theory and evidence clearly show, more IP does not mean more innovation and could, in fact, lead to less.*").

[13] Elon Musk, *All Our Patent Are Belong to You*, Tesla (June 24, 2017), *available at* https://www.tesla.com/en_AU/blog/all-our-patent-are-belong-you (last visited on February 13, 2017) ("*Tesla Motors was created to accelerate the advent of sustainable transport. If*

In fact, the entire edifice of the present IP policy is built on the highly tenuous claim that more IP means more innovation. The policy assumes that innovation and creativity can be fostered only through increased IP protection, and fails to acknowledge the more significant role played by non-IP factors such as education, infrastructure, culture, financing, etc. as identified by the first think tank.[14]

The policy sounds almost militant when it exhorts Indians to convert all conceivable knowledge to IP. It notes that commercialising knowledge has historically been an anathema to the Indian culture. However, now that we are in the knowledge economy, the time has come to break with this past tradition and convert all knowledge into IP assets and "zealously protected IPRs".[15]

Apart from the obvious pitfalls in the above suggestion to monetise knowledge indiscriminately, the policy conveniently glosses over a historical fact: that specialized knowledge (particularly knowledge pertaining to religion, medicine etc.) was severely protected along class lines in ancient India,[16] and those that transgressed this were severely punished including having their ears filled with molten lead.[17] A strong form of trade secrecy, if ever there was one!

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we clear a path to the creation of compelling electric vehicles, but then lay intellectual property landmines behind us to inhibit others, we are acting in a manner contrary to that goal. Tesla will not initiate patent lawsuits against anyone who, in good faith, wants to use our technology…").

[14] *First Think Tank Draft*, Part III ("*Further, intellectual property will not be considered in isolation but in relation to other elements of an innovation ecosystem, namely financing, venture capital, education, infrastructure etc. In short, a holistic approach will be adopted so as to situate intellectual property in its proper context, and not as an end in itself.*").

[15] *Supra* note 1, at 5.

[16] S.N. Sadasivan, A Social History of India 286-87 (2000); Dorothy M. Figueria, Aryans, Jews, Brahmins: Theorizing Authority Through Myths of Identity 149 (State University of New York Press, Albany, 2002) ("*Moreover, Brahmins conspired to keep the shudras in ignorance by denying them access to true knowledge and controlling them with "unholy" law treatises.*").

[17] Shrirama, *Untouchability and Stratification in Indian Civilization*, *in* Dalits in Modern India: Vision and Values 67 (S.M. Micheal ed., 2007); Abraham Eraly, The First Spring: The Golden Age of India 308 (2011); Dr. B.R. Ambedkar, Who were the Shudras (2014); Dr. B.R. Ambedkar, 1 Annihilation of caste (2014); Mark W. Muesse, The Hindu Traditions: A Concise Tradition 43 (2011) ("*Only the Brahmins, by virtue of their training and purity, were competent enough to recite the Vedas effectively without grave danger. An old Hindu law even stated that if a Shudra – that is, a low-caste person – was to hear the Vedas, his ears should be filled with molten lead.*").

This ill-conceived assumption that higher levels of IP protection result in more innovation results in a number of problematic assertions in the text of the policy, as highlighted below:

i. Public Funded Research and IP

The policy recommends that all publicly funded scientists and researchers take steps to protect their inventions as IP assets, even before publishing them in reputed science journals. It even suggests that their promotions and funding prospects be predicated on how quickly and frequently they convert their ideas into IP assets.[18] There are multiple problems with this recommendation, as highlighted below:

i) The policy assumes that scientists fail to register their putative IP out of ignorance. However, history tells us that a number of visionary scientists consciously eschewed IP protection. Illustratively, Benjamin Franklin once famously said: "*...as we enjoy great advantages from the inventions of others, we should be glad of an opportunity to serve others by any invention of ours, and this we should do freely and generously.*"[19] Closer home, legendary scientist J.C. Bose was averse to profiteering from patents and caustically remarked: "*The spirit of our national culture demands that we should for ever be free from the desecration of utilising knowledge for personal gain.*"[20]

ii) The policy fails to appreciate that rather than a one size fits all model, a plurality of approaches makes for a more optimal policy. Some scientists may wish to patent their wares and enjoy the consequent exclusivity, while others may wish to promote a culture of open access, where new scientific discoveries are free of IP entanglements. There is no gainsaying the fact that IP registration, for the mere sake of registration, is non-sensical. A realization that has now dawned on India's largest public sector patentee CSIR, which issued a directive

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[18] *Supra* note 1, at 6, 8.

[19] The Autobiography of Benjamin Franklin 178 (2008) ("*Governor Thomas was so pleased with the construction of this stove, as described in it, that he offered to give me a patent for the sole vending of them for a term of years; but I declined it from a principle which has ever weighed with me on such occasions, viz., That, as we enjoy great advantages from the inventions of others, we should be glad of an opportunity to serve others by any invention of ours, and this we should do freely and generously.*"); Hal Marcovitz, Benjamin Franklin 62, 69 (2006).

[20] Sir Jagadis Chunder Bose, The Life and Times of Sir Jagadis Chunder Bose (Prabhat Prakashan). *See also* Shamnad Basheer, *JC Bose, Wireless Technology and Patents*, SpicyIP (July 7, 2007), *available at* https://spicyip.com/2007/07/jc-bose-wireless-technology-and-patents.html (last visited on February 14, 2017).

that patenting will have to be more circumspect.[21] In this context, it bears noting that, on an empirical cost-benefit analysis, most U.S. universities have a negative balance sheet, when one compares the costs of IP registrations and licensing, as against the revenues through IP royalties![22]

iii) An undue focus on IP registration as a key performance indicator is likely to skew research priorities at scientific establishments, moving research away from basic into more applied streams that are more patentable and palatable to industry collaborators.[23]

iv) Lastly, profiteering from publicly funded patents means that the tax payer pays twice. First, by funding the public research through their tax contributions. And later, through an IP tax on the consumer good/service generated from the publicly funded R&D.[24]

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[21] Rahul Bajaj, *CSIR Admonishes Laboratories for Promiscuous Patenting; Urges Them to Follow More Circumspect Approach*, SpicyIP (October 21, 2017), *available at* https://spicyip.com/2016/10/csir-admonishes-laboratories-for-promiscuous-patenting-urges-them-to-follow-more-circumspect-approach.html (last visited on February 16, 2017).

[22] Walter Valdivia, Center for Technology Innovation at Brookings, *University Start-Ups: Critical for Improving Technology Transfer* 6-11 (November, 2013), *available at* https://www.brookings.edu/wp-content/uploads/2016/06/Valdivia_Tech-Transfer_v29_No-Embargo.pdf (last visited February 16, 2017) ("*Using information of TTO* [Technology Transfer Offices] *expenses, I calculated a rough estimate of net operating income (NOI) and found that of the 155 universities reporting to the AUTM survey, 130 did not generate enough licensing income in 2012 to cover the wages of their technology transfer staff and the legal costs for the patents they file.*"); *See also* Jacob P. Koshy, *CSIR Considers Freedom for its Scientists to Float Own Ventures*, Live Mint (March 20, 2008), *available at* http://www.livemint.com/Politics/T0EvLdxZRw4Rb1wPfkCQcK/CSIR-considers-freedom-for-its-scientists-to-float-own-ventu.html (last visited on February 16, 2017) ("*Though a prolific patentee, CSIR doesn't generate much revenue from its patents. In 2004-05, the latest period for which data is available, CSIR filed 50 patents and generated Rs 4 crore in royalties and licensing. However, it also spent Rs 10 crore in filing for the new patents and in maintaining existing ones.*"); Shamnad Basheer & Shouvik Guha, *Outsourcing Bayh-Dole to India, Lost in Transplantation*, 23(2) Columbia Journal of Asian Law 281-82 (2010).

[23] *See also* Basheer & Guha, *id.,* at 307 ("*An incentive mechanism can succeed only if there are objective and transparent criteria for measuring the performance of scientists. These criteria should not be limited to the number of patents or other forms of IP registered. To achieve a more holistic evaluation, the criteria should also include other factors demonstrating that the scientist or institution has contributed to knowledge transfer—for example the number of peer-reviewed articles written by the scientist.*").

[24] *See* S. Scotchmer, *Standing on the Shoulders of Giants: Cumulative Research and the Patent Law*, 5(1) Journal of Economic Perspectives 29, 40 (1991) ("*Permitting patents on government sponsored research rewards successful innovators twice, once through government funding and again through patents.*").

The policy could have done better by encouraging a plurality of approaches for appropriating the value of publicly funded research, and vested more autonomy in the hands of scientists and researchers in this regard.[25]

ii. Patent Trolls

India's IP policy favours a rather one-sided perspective on IP, aimed mainly at capturing its "financial value".[26] While IP is meant to appropriate the value of new technical knowledge and generate some income, a uni-dimensional focus on this aspect, at the cost of all else may lead to skewed regimes, where entities that answer to the term of patent trolls may hijack the innovation ecosystem and leave it worse off. Trolls are those that hoard their patents solely to extract excessive rents from legitimate third party inventors who incidentally tread on these patents, whilst developing one or more innovative products.[27] Aggressive patent assertion by trolls impairs the innovation ecosystem and creates market inefficiencies.[28] A classic example of a patent troll in India is that of S. Ramkumar who deployed his dual SIM patent[29] to extort excessive sums of money from leading telecom companies such as Samsung, Mirc Electronics and Spice Mobile.[30] He sought and obtained ex-parte injunctions to restrain them from manufacturing, importing and selling dual SIM handsets.[31] This was despite the fact that the claimed tech-

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[25] See Basheer & Guha, *supra* note 22, at 295-308.

[26] *Supra* note 1, at 14.

[27] D. McCurdy, *Patent Trolls Erode the Foundation of the US Patent System,* Science Progress (January 12, 2009); G.N. Magliocca, *Blackberries and Barnyards: Patent Trolls and the Perils of Innovation*, 82 Notre Dame L. Rev. 1809, 1810 (2007).

[28] *See* C. Cotropia et al., *Unpacking Patent Assertion Entities (PAEs)*, 99 Minn. L. Rev. 649 (2014) ('There are numerous theories on the role of PAEs in the patent system. As mentioned in the introduction, many people (including President Obama's economic team) contend that PAEs "*significantly retard innovation in the United States and result in economic 'dead weight loss' in the form of reduced innovation, income, and jobs for the American economy*". They assert that PAEs hold up legitimate innovators by demanding undeserved rents').

[29] Patent Application (Ref. 161/MAS/2002) filed on March 4, 2002, titled 'Mobile phone with a plurality of sim cards allocated to different communication networks' ('Dual SIM switching technology'). The patent converted to a grant (Patent No. IN214388) on February 11, 2008. *See* C.H. Unnikrishnan, *Dual SIM Dispute Highlights Flaws in India's Patent Process*, Mint (July 20, 2009, *available at* http://www.livemint.com/Companies/64vk1wINDEaDtxkjlKpuJK/Dual-SIM-dispute-highlights-flaws-in-India8217s-patent-pr.html (last visited on August 24, 2016); Shamnad Basheer, *Customs Seizures in India: Patently Unconstitutional?*, SpicyIP (March 13, 2009), *available at* http://spicyip.com/2009/03/customs-seizures-in-india-patently.html (last visited on August 24, 2016).

[30] Shamnad Basheer, *Ramkumar vs Cell Importers: India's Biggest IP Case Yet?*, SpicyIP (August 9, 2009), *available at* http://spicyip.com/2009/08/ramkumar-vs-cell-importers-indias.html (last visited on August 24, 2016).

[31] Ex parte injunctions were obtained, for instance, against Samsung and Spice. S. Dama, *Interrogating Interim Injunctions: Ramkumar's Dual-SIM Patent*, SpicyIP (June 23,

nology was already known at the time of the patent application, and the application merely claimed the new technical features without disclosing them adequately.

By the time the patent was finally revoked by the IPAB on June 1, 2012, a number of technology companies had paid out huge sums of money to him.[32] Ramkumar's sole aim of registering the patent was to extort money from technology majors who happened to deploy the patent in one or more of their products.

A progressive IP policy might have taken account of trolls and proposed remedial measures to guard against their growing influence.

iii. IP Teaching and Respect

The policy advocates that IP be taught in schools and colleges.[33] Leading one to ask: wouldn't a course designed to make children more creative be better for fostering creativity than bogging them down with an additional course on intellectual property? Even if schools lack the resources to impart specific courses on creativity, they could at least ensure that they don't stand in the way of what might otherwise have been a natural flowering of creativity in children.[34] A truth tellingly captured by Mark Twain's sentiment: "*I have never let my schooling interfere with my education*", and one that is now being controversially tested by Peter Thiel (PayPal's legendary founder) who pays college students to drop out of college and run risky ventures.[35]

2015), *available at* http://spicyip.com/2015/06/interrogating-interim-injunctions-ramkumars-dual-sim-patent.html (last visited on August 24, 2016).

[32] Prashant Reddy, *IPAB Revokes Patents Belonging to Debutant Indian "Patent Trolls"*, SpicyIP (July 5, 2012), *available at* http://spicyip.com/2012/07/ipab-revokes-patents-belonging-to.html (last visited on August 24, 2016). *See* R. Sivaraman, *Intellectual Property Board Revokes Patent for Dual SIM Phones*, The Hindu (June 10, 2012).

[33] *Supra* note 1, at 6, 8, 9 18; *See* Amiti Sen, *Catching Them Young: DIPP Reaches Out to School Kids to Spread Awareness on Intellectual Property*, Business Line (January 3, 2017), *available at* http://www.thehindubusinessline.com/news/education/catching-them-young-dipp-reaches-out-to-school-kids-to-spread-awareness-on-intellectual-property/article9457516.ece (last visited on February 14, 2017) ("*The idea is to make children curious about IP and also teach them to respect it. We are starting with Delhi and will spread the initiative throughout the country eventually," an official in the DIPP told BusinessLine.*").

[34] *See* Shamnad Basheer, *Break In India*, Seminar (November, 2016), *available at* http://www.india-seminar.com/2016/687/687_shamnad_basheer.htm (last visited on February 14, 2017) (citing an example of a class 11 student whose answer on the 'dark ages' was marked low, since he critiqued the standard theory that there was no advancement of science or arts during the dark ages).

[35] *About*, The Thiel Fellowship, *available at* http://thielfellowship.org/about/ (last visited on February 14, 2017).

A strenuous course on a legal regime whose alleged impact on innovation and creativity is highly contested is hardly the right recipe for a blossoming of creativity in schools.

Interestingly, the policy speaks about creating "respect" for IP as one of the steps for strengthening 'Enforcement and Adjudication'.[36] Why "respect"? Given that intellectual property has had a chequered history (with many viewing it as an inequitable tool of economic exploitation),[37] "respect" is hardly the appropriate term.

In order to create this respect for IP, the policy, among other things, recommends "*educating the general public, especially the youth and students, on ills of counterfeit and pirated products*".[38] It also speaks about undertaking studies to assess the extent and reasons for piracy as well as the measures for combating it.[39]

The policy also proposes a long list of measures for spreading awareness of the benefit of IPRs,[40] but none for making people aware of the various public interest exceptions inbuilt in the IP laws in order to ensure that the very purpose of creating these private rights is not defeated.

B. Other Problems with the Policy

Other problems with the policy are highlighted below:

i. Excessive Enforcement of IP and Criminalisation

The policy suggests a host of steps for strengthening of enforcement mechanisms for greater protection of IPRs,[41] but none for balancing the enforcement, especially, criminal enforcement, that often compromises the civil liberties of defendants. The need for the latter was emphasized upon in the *First Think Tank Draft* in the light of the rather excessive grant of *ex parte*

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[36] *Supra* note 1, at 5; *See also* Sen, *supra* note 33.

[37] M. Perelman, *Introduction: How Intellectual Property Rights Enrich the Few While Undermining Liberty, Science and Society* in Steal This Idea: The Corporate Confiscation of Creativity (2002), *available at* http://www.leftbusinessobserver.com/MPonIP.pdf (last visited August 9, 2017) ("*Besides the damage that intellectual property rights impose on the scientific process, intellectual property rights concentrate wealth in the hands of the few.*"). *See also* Peter Drahos (with John Braithwaite), Information Feudalism (2002), *available at* https://www.anu.edu.au/fellows/pdrahos/books/Information%20Feudalism.pdf (last visited on August 16, 2017).

[38] *Supra* note 1, at 16.

[39] *Id*., at 17.

[40] *Id*., at 5, 6.

[41] *Supra* note 1, at 17.

injunctions in patent cases. Unfortunately, the present policy fails to pay any heed to this need for balance.[42]

Most problematically, the policy proposes an amendment of the Cinematography Act, 1952 to criminalize unauthorized copying of movies.[43] Undoubtedly, Bollywood requires some protection from the pirates, but criminalizing what is essentially a civil wrong (much like defamation) is tantamount to killing an ant with an elephant gun,[44] not to mention the potential for abuse at the hands of our police.[45]

Also, many a time piracy is one of the best ways to ensure access to notoriously priced IP goods.[46] Importantly, a certain level of piracy has in the past proven to be beneficial to the IP owner in that it encourages adoption of the IP good by the consumer at a cheaper pirated cost, and later at a higher IP price when the consumer can so afford.[47]

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[42] *First Think Tank Draft*, Part IV.13 ("*Currently, India has unilaterally ratcheted up its IP enforcement standards in many areas well beyond the minimum obligations under the TRIPS Agreement, often at the cost of the civil liberties of defendants. The rapid proliferation of ex parte injunctions in patent cases is a case in point. The Government will review such trends (after appropriate data collection in this regard) and explore the idea of legislation that would help balance IP enforcement against civil liberties, particularly criminal enforcement.*").

[43] *Supra* note 1, at 10.

[44] Spadika Jayaraj, *On Girish Karnad and the Criminalisation of Copyright Infringement*, SpicyIP (September 24, 2017), *available at* https://spicyip.com/2014/09/on-girish-karnad-and-the-criminalisation-of-copyright-infringement.html; Balaji Subramaniam, *Subramanian Swamy and the Constitutionality of Copyright Criminalisation – Part II*, SpicyIP (June 18, 2016), *available at* https://spicyip.com/2016/06/subramanian-swamy-and-the-constitutionality-of-copyright-criminalisation-part-ii.html.

[45] *See e.g.* Sai Vinod, *Kerala Loses its Sense of Proportionality, Takes Extreme Steps to Fight Online Piracy*, SpicyIP (November 2, 2012), *available at* https://spicyip.com/2012/11/kerala-loses-its-sense-of.html.

[46] *See* Prashant Reddy, *Bollywood and Online Piracy*, SpicyIP (January 26, 2008), *available at* https://spicyip.com/2008/01/bollywood-and-online-piracy.html; Shamnad Basheer, *Moser Baer's Pricing Strategy: The New Anti-Piracy Model?*, SpicyIP (December 24, 2007), *available at* https://spicyip.com/2007/12/moser-baers-pricing-strategy-new-anti.html; Mrinalini Kochupillai, *Living in Glass Houses… (Cont.)*, SpicyIP (September 30, 2017), *available at* https://spicyip.com/2007/09/living-in-glass-houses-cont_13.html.

[47] Charles Piller, *How Piracy Opens Doors for Windows*, Los Angeles Times (April 9, 2006) ("*The proliferation of pirated copies nevertheless establishes Microsoft products -- particularly Windows and Office -- as the software standard. As economies mature and flourish and people and companies begin buying legitimate versions, they usually buy Microsoft because most others already use it. It's called the network effect.*"); Tim O'Reilly, *14 Years Later, "Piracy is Progressive Taxation" Still Rings True*, LinkedIn (May 3, 2016), *available at* https://www.linkedin.com/pulse/14-years-later-piracy-progressive-taxation-still-rings-tim-o-reilly ("*Estimates of "lost" revenue assume that illicit copies would have been paid for; meanwhile, there is no credit on the other side of the ledger for copies that are sold because of "upgrades" from familiarity bred by illicit copies.*").

The proposition that piracy always reduces incentives to create is not empirically born out. Quite the contrary! Illustratively, notwithstanding the allegedly high rates of design piracy in the fashion industry, the creation of new designs continues to take place at a frenetic pace.[48] Paradoxically, one might argue that piracy fosters more creativity in this industry at least.[49]

Further, the effect of piracy may not be homogenous across every industry.[50] In other words, piracy may not reduce the legitimate sales of all goods in an industry. This was amply demonstrated by a study on the effect of the shutdown of Megaupload, a website that facilitated pirated content, on the box office revenues.[51] The study concluded that the shutdown benefitted only those movies that premiered in a relatively large number of theaters and not those which had smaller audiences.

Similarly, a recent study on the impact of piracy in the comic books industry in Japan concluded that:

> "*piracy decreased the legitimate sales of ongoing comics but stimulated legitimate sales of completed comics…displacement effect was dominant for ongoing content, and advertisement effect was dominant for completed content. Since completed comics series have already ended, and publishers no longer do any promotion for them, consumers almost forget completed comics. We can interpret that piracy reminds consumers of past comics and stimulates sales*".[52]

The policy, however, does not take any of the above nuances into consideration. Rather, it proceeds on the simplistic assumption that piracy

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[48] Kal Raustiala & Christopher Sprigman, *The Piracy Paradox: Innovation And Intellectual Property In Fashion Design*, 92(8) Virginia Law Review (2006).

[49] *Id.*, at 1722 *("We argue that fashion's low-IP regime is paradoxically advantageous for the industry…. If copying were illegal, the fashion cycle would occur very slowly. Instead, the absence of protection for creative designs and the regime of free design appropriation speeds diffusion and induces more rapid obsolescence of fashion designs. Designers in turn respond to this obsolescence with new designs. In short, piracy paradoxically benefits designers by inducing more rapid turnover and additional sales.*").

[50] Tatsuo Tanaka, *The Effects of Internet Book Piracy: The Case of Japanese Comics,* Keio-Discussion Paper Series (December 29, 2016), *available at* https://ies.keio.ac.jp/upload/pdf/en/DP2016-027.pdf; David Blackburn, *The Heterogenous Effects of Copying: The Case of Recorded Music*, Working Paper, Harvard University, Cambridge (2007); Sudip Bhattacharjee, Ram Gopal, Kaveepan Lertwachara, James Marsden & Rahul Telang, *The Effect of Digital Sharing Technologies on Music Markets: A Survival Analysis of Albums on Ranking Charts*, 53(9) Management Science 1359-1374 (2007).

[51] Christian Peukert, Jorg Claussen & Tobias Kretschmer, *Piracy and Box Office Movie Revenues: Evidence from Megaupload*, 52 International Journal of Industrial Organization 188-215 (2017).

[52] Tanaka, *supra* note 50.

necessarily deters creativity and therefore recommends an ultra muscular mode of IP enforcement.

ii. IPR: Whither Balance?

The policy tends to treat IP as a "marketable financial asset" and an "economic tool",[53] and recommends a strict enforcement of IP rights. While it does mention the importance of "*balanc[ing] the rights of the public in a manner conducive to social and economic welfare and to prevent misuse or abuse of IP rights*",[54] it fails to include any specific proposal or recommendation that might help effectuate this balance.

By way of contrast, the *First Think Tank Draft* had noted the importance of IPR duties and various measures such as compulsory licensing and price control to effectuate a better balance between private IP rights and the larger public interest.[55] It had also suggested that IP exceptions be seen not just as exceptions, but as user rights;[56] a concept propounded by Prof. David Vaver[57] and endorsed by Canadian courts some years ago.[58] More recently, the notion of user rights was implicitly adopted by the Delhi High Court

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[53] *Supra* note 1, at 3.

[54] *Supra* note 1, at 16.

[55] *First Think Tank Draft*, Part III.5.

[56] *Id.* ("*Further the various exceptions and limitations in favour of the public, enabling them to access protected content for select purposes will be treated not as bare minimum exceptions to be interpreted narrowly, but as key expositions of valuable public policy concerns articulated through the statute that must be given meaningful construction in order to aid the growth of a valuable public domain.*").

[57] David Vaver, *Copyright and the Internet: From Owner Rights and User Duties to User Rights and Owner Duties*, 57 Cas. W. Res. L. Rev. 731 (2007) ("*The WIPO treaties persist in the rhetoric that what users may do in relation to protected items are exceptions to or limitations on the control rights of owners. This style of language certainly suits copyright owners but its effects are pernicious. It treats what owners can do as rights (with all that word connotes), and what everyone else can do as indulgences, aberrations from some preordained norm, activities to be narrowly construed and not extended. The metaphor language of balance cannot sensibly work from such a starting point: how can rights be balanced against exceptions? The scales already start weighted on one side.*").

[58] *See* CCH Canadian Ltd. v. Law Society of Upper Canada, 2004 SCC OnLine Can SC 13 : 2004 SCC 13 ("*The fair dealing exception is perhaps more properly understood as an integral part of the Copyright Act than simply a defence. Any act falling within the fair dealing exception will not be an infringement of copyright. The fair dealing exception, like other exceptions in the Copyright Act, is a user's right. In order to maintain the proper balance between the rights of a copyright owner and users' interests, it must not be interpreted restrictively. As Professor Vaver, supra, has explained, at p. 171: "User rights are not just loopholes. Both owner rights and user rights should therefore be given the fair and balanced reading that befits remedial legislation.*""); Society of Composers, Authors and Music Publishers of Canada v. Bell Canada, 2012 SCC OnLine Can SC 36 : 2012 SCC 36; Alberta (Education) v. Canadian Copyright Licensing Agency (Access Copyright), 2012 SCC 37.

in the Delhi University photocopy case,[59] wherein the court refused to construe the educational exception under Section 52(1)(i) of the Copyright Act narrowly: rather it treated the traditionally viewed defence as a "right" and interpreted it purposively to cover the creation and distribution of course packs (compilation of photocopies of the relevant portions of different books prescribed in the syllabus) by universities.[60]

iii. Whither Transparency?

The policy fails to make any mention of the need to foster transparency in the intellectual property and innovation ecosystem. As noted earlier, the law not only grants rights, but also imposes certain duties on IPR holders in order that they might serve the interests of the public.[61] For instance, the Patents Act, 1970 mandates all patentees to regularly submit data pertaining to the working of their patented inventions in India.[62] This information is critical to understanding how patents have been used to serve the larger public interest and could, *inter-alia*, be used to trigger compulsory licences[63] or even patent revocations.[64] However, as a writ petition filed by one of the authors of this piece demonstrates, patentees routinely fail to submit this data; and the government hardly enforces this statutory mandate against errant patentees.[65] The think tank could have taken note of these lapses and recommended a stronger enforcement mechanism with respect to these important IP duties too: one that would have helped foster greater transparency within the innovation ecosystem.

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[59] University of Oxford v. Rameshwari Photocopy Services, 2016 SCC OnLine Del 6229. *See* Shamnad Basheer, *Publishers vs Pupils: Delhi High Court has Struck a Blow for the Right to Copy Copyrighted Material*, Scroll.In (December 13, 2016), *available at* https://scroll.in/article/823996/publishers-vs-pupils-delhi-high-court-has-struck-a-blow-for-the-right-to-copy-copyrighted-material (last visited on November 25, 2017).

[60] University of Oxford v. Rameshwari Photocopy Services, 2016 SCC OnLine Del 5128, ¶¶41 & 72 ("*…the rights of persons mentioned in Section 52 are to be interpreted following the same rules as the rights of a copyright owner and are not to be read narrowly or strictly or so as not to reduce the ambit of Section 51, as is the rule of interpretation of statutes in relation to provisos or exceptions*.")

[61] *See* David Vaver, *Intellectual Property: 'Bargain' or Not?*, 89 U. of Detroit Mercy L. Rev. 381, 388 (2012).

[62] The Patents Act, 1970, section 146(2).

[63] *Id*., section 84(c).

[64] *Id*., section 85.

[65] Written Submissions on behalf of the Petitioner, Shamnad Basheer v. Union of India, 2018 SCC OnLine Del 6841, ¶¶22-25, *available at* http://spicyip.com/wp-content/uploads/2015/05/FORM-27-WP-1R-copy.pdf (last visited on February 15, 2017).

iv. Shoddy Drafting and Research

The policy also suffers from extremely shoddy drafting and research, as evident from the following:

i) The policy speaks of the need for commercial IP courts,[66] when only a few months prior to the unleashing of the policy, the government had steered a legislation creating specialized "commercial courts" to success.[67] Further, the policy speaks about housing all of the IP agencies within DIPP,[68] when again, this was done a month prior to the release of this present policy.[69] The government should at least have been up to date on its own initiatives, when formulating the IP policy.

ii) The policy exhorts multinational corporations (MNCs) to have IP policies.[70] One wonders why the government is going out of its way to do so, when MNCs are known to be very savvy IP players in the market. It is the MSMEs and individual inventors who require encouragement and guidance to help access a regime that is terribly expensive and unduly complex.

iii) The policy mentions 'open innovation' and 'open source based research' in the section titled "Generation of IPRs".[71] Clause 2.10 states thus: "*Encourage R&D including open source based research such as Open Source Drug Discovery (OSDD) by the Council of Science and Industrial Research (CSIR) for new inventions for prevention, diagnosis and treatment of diseases, especially those that are life threatening and those that have high incidence in India*."

iv) The policy speaks about "drug regulation",[72] when this is hardly an IP issue. A conflation of these two issues at the international level saw a recent push to include even trademark violations ("counterfeiting") as a potential drug quality issue (where drugs that violate trademarks earn the moniker of "spuriousness"), a prospect that could have hurt

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66 *Supra* note 1, at 17.

67 The Commercial Courts, Commercial Division and Commercial Appellate Division of High Courts Act, 2015, *available at* http://www.indiacode.nic.in/acts-in-pdf/2016/201604.pdf (last visited on November 1, 2017).

68 *Supra* note 1, at 2.

69 Government of India, Order, May 30, 2016, *available at* http://copyright.gov.in/Documents/NOTIFICATION%20AND%20ORDER%20REPORTING%20TO%20TRANSFER%20OF%20WORK%20RELATING%20TO%20COPYRIGHT%20.pdf (last visited August 9, 2017).

70 *Supra* note 1, at 6.

71 *Supra* note 1, at 8.

72 *Id*., at 16.

the interests of the Indian generic industry.[73] India should be careful to not give into this treacherous trap, carefully foisted by multinational pharmaceutical drug majors and their supporters.

The policy proposes periodic review and revision of existing Patent Office guidelines for reflecting 'legislative provisions', instead of reflecting 'judicial decisions'.[74] This can be seen in Clause 4.126.13 which states as follows: "*Existing guidelines published by the Patent Office shall be reviewed periodically and revised to reflect legislative provisions.*"

V. A Few Commendable Proposals

To be fair, the policy does contain some commendable recommendations. We highlight the main ones below and draw attention to some of their shortcomings, where relevant:

1. The policy encourages openness in innovation, specifically noting the desirability of the free and open source paradigm in domains such as software and even pharmaceuticals.[75]

Unfortunately, the inclusion of these proposals in the section on "IPR generation" renders the commitment towards openness a bit suspect. While open source strategies do not necessarily preclude the registration of IPRs, such registrations are not with a view towards securing heavy-handed IP enforcement, in order to control the market for the innovative good and guard its exclusivity zealously. Rather, they are to ensure "openness", such that no third party is able to appropriate large chunks of the inventive concept and build on it, without in turn openly sharing such improvements/derivatives.[76]

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[73] *See* Shamnad Basheer, *The "Spuriousness" of Indian Law: Delinking IP from Drug Regulation*, SpicyIP (September 25, 2009), *available at* https://spicyip.com/2009/09/spuriousness-of-indian-law-delinking-ip.html (last visited August 9, 2017).

[74] *Supra* note 1, at 13.

[75] *See* Clause 2.10 of the policy which states: "*Encourage R&D including open source based research such as Open Source Drug Discovery (OSDD) by the Council of Science and Industrial Research (CSIR) for new inventions for prevention, diagnosis and treatment of diseases, especially those that are life threatening and those that have high incidence in India.*" *Id.*, at 8, 15.

[76] *See* Sonia Baldia, *The Transaction Cost Problem in International Intellectual Property Exchange and Innovation Markets*, 34 Nw. J. Int'l L. & Bus. 1 (2013), *available at* http://scholarlycommons.law.northwestern.edu/njilb/vol34/iss1/1 ("*The overarching purpose of open access schemes is not to simply relinquish the work or invention into the public domain but rather to either preempt the work from being privatized by others or leverage the exclusive IP rights (namely, copyrights and patents) to guarantee and maintain public accessibility of works and inventions.*"); Sara Boettiger & Dan L. Burk, *Open Source*

2. The policy stresses on the importance of preventing the misappropriation of traditional knowledge. While this is a standard theme in most bio-piracy debates, the policy takes the laudable step of proposing that the Traditional Knowledge Digital Library (TKDL)[77] be opened up and made available to institutions other than foreign patent offices.[78] In particular, the policy notes the need to open this up to public research institutions for further R&D and also suggests that it be opened up to the private sector as well, with due safeguards for preventing any misappropriation.[79]

Patenting, 1 Journal of International Biotechnology Law (2004) ("*As in open source software development, abandonment of the invention to the public domain would not necessarily make the invention publicly available. Technology made freely available might be "captured" in proprietary embodiments and so effectively removed from the public domain. Much as copyright has been deployed to maintain the accessibility of open source software, patents might be deployed to maintain the accessibility of biological discoveries…. The purpose of open source licensing is not to generally prohibit use of the licensed innovation, but rather to encourage its use under specified conditions.*"), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=645182 (last visited August 12, 2017).

77 The Traditional Knowledge Digital Library (TKDL) was established by the Department of AYUSH in collaboration with CSIR in the year 2001 for comprehensively documenting ancient Indian traditional medicinal knowledge, in order to ensure against their misappropriation by unscrupulous patentees. By capturing this ancient medicinal knowledge (contained in several ancient texts pertaining to traditional Indian medicinal systems i.e. Ayurveda, Siddha, Unani and Yoga) in five international languages, the TKDL has made prior art searches at the patent office more effective, and significantly reduced the prospects of wrongful patent grants. *See* Mangala Hirwade, *Protecting Traditional Knowledge Digitally: A Case Study of TKDL,* 2010, In National Workshop on Digitization Initiatives & Applications in Indian Context, DNC, Nagpur, (January 3, 2010), *available at* http://eprints.rclis.org/14020/1/TKDL_paper.pdf (last visited on May 30, 2017); *About TKDL,* Traditional Law and Digital Library, *available at* http://tkdl.res.in/tkdl/LangDefault/Common/Abouttkdl.asp?GL=Eng (last visited on August 14, 2017); *Traditional Knowledge Digital Library (TKDL),* Ministry of AYUSH, *available at* http://www.ayush.gov.in/sites/default/files/tkdl.pdf (last visited on August 14, 2017); V.K. Gupta, *Protecting Indian Traditional Knowledge from Biopiracy*, WIPO, *available at* http://www.wipo.int/export/sites/www/meetings/en/2011/wipo_tkdl_del_11/pdf/tkdl_gupta.pdf (last visited on August 14, 2017).

78 Till date, the access to TKDL has been available only to twelve patent offices, namely European Patent Office, United State Patent & Trademark Office, Japan Patent Office, United Kingdom Patent Office, Canadian Intellectual Property Office, German Patent Office, Intellectual Property Australia, Indian Patent Office, Chile Patent Office, Intellectual Property Corporation of Malaysia, Rospatent (Russia) and Peru Patent Office. *Measures Taken by Government to Protect Ancient and Traditional Knowledge of Indigenous Medicinal Systems*, Press Information Bureau (July 18, 2017), *available at* http://pib.nic.in/newsite/erelcontent.aspx?relid=168552 (last visited on November 25, 2016).

79 *Supra* note 1, at 7, 8 ("*The ambit of Traditional Knowledge Digital Library (TKDL) should also be expanded, while the possibility of using it for further R&D shall be explored. The steps to be taken towards attaining this objective are outlined below: … 2.20. Public research institutions should be allowed access to TKDL for further R&D, while the possibility of using TKDL for further R&D by private sector may also be explored, provided necessary safeguards are in place to prevent misappropriation*").

3. The policy deserves appreciation for recognising the need to provide special support to MSMEs, start-ups, grassroot innovators, individual inventors in developing, and protecting as well as commercializing IP. Unfortunately however, the mechanisms to be undertaken for the same are not clearly spelt out.[80]

4. The policy needs to be commended for taking note of our "informal" (rural) workforce and the need to ensure that they too have access to our IP regime.[81] Unfortunately, far from understanding the drivers of creativity and the modes of appropriation/sharing in this "shadow" economy,[82] the policy proceeds on the implicit assumption that the superimposition of a formal IP regime will leave it better off.[83]

5. The policy, speaks of "expedited examination", but does not spell out as to how we might achieve this.[84] It merely states that steps shall be taken to "*explore the possibility of expedited examination of patent applications to promote manufacturing in India*." Unfortunately, it does not elaborate on how this objective is to be attained.

6. The policy proposes the creation of a 'Cell for IPR Promotion and Management' ("*CIPAM*") under the charge of DIPP for facilitation of promotion, creation and commercialization of IP assets.[85] This cell was in fact set up soon after the launch of the policy and was tasked with the formulation and implementation of a strategy for achievement of each of the seven objectives of the policy.[86] Thus far, CIPAM has done the following:[87]

    i) Conducted IPR awareness programmes in schools, along with industry associations.

    ii) Held training programmes on enforcement of IPRs for police officials.[88]

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[80] *Supra* note 1, at 8, 12, 13, 15.

[81] *Id*., at 12, 15.

[82] To get a sense of the prolific creativity in India's informal/grassroots economy, *see* National Innovation Foundation-India, India Innovates (2013), *available at* http://nif.org.in/dwn_files/india-innovates-2013.pdf (last visited on February 16, 2017).

[83] *See First Think Tank Draft*, Part IV.1, wherein the need for undertaking data driven studies for locating the role of incentives for innovation and creativity in this sector and exploring alternate regimes was emphasized upon.

[84] *Supra* note 1, at 12.

[85] *Id*., at 12, 14.

[86] *CIPAM*, Cell for IPR Promotion and Management (CIPAM), *available at* http://cipam.gov.in/cipam/#1500363604246-b53407ff-4858 (last visited on November 8, 2017).

[87] *Id*.

[88] *Workshop on Enforcement of Intellectual Property Rights for Police Officials in Collaboration With Telangana Police*, Press Information Bureau, Government of India,

iii) Launched an IPR enforcement toolkit for the police.[89] The kit is meant to act as a ready reckoner for police officials in dealing with IP crimes, particularly, counterfeiting and piracy.

iv) Collaborated with national and state judicial academies for convening training programmes for the sensitization of the judiciary on IPR issues.

v) Set up a Task Force on Innovation for helping improve India's ranking in the Global Innovation Index.

The policy notes that this cell will, *inter-alia*, study the feasibility of an IP exchange.[90] However, the policy does not detail out the architecture or attributes of such an exchange. Ideally, the government's focus should be on facilitating the creation of a platform maintained by private players rather than creating and maintaining this itself. Most exchanges the world over are private exchanges, such as: Ocean Tomo, IP Nexus, TechTransferOnline, Tynax, Intellectual Property Exchange, Yet2, etc.[91] Even in India, there exists an IP exchange set up by FISME (Federation of Indian Micro and Small & Medium Enterprises) with the support of the British High Commission.[92]

Ministry of Commerce & Industry (July 12, 2017), *available at* http://pib.nic.in/newsite/PrintRelease.aspx?relid=167358 (last visited on November 30, 2017).

[89] IPR Enforcement Toolkit for Police, Department of Industrial Policy and Promotion, Ministry of Commerce, Government of India, *available at* http://dipp.nic.in/sites/default/files/IPR_EnforcementToolkit_06January2017_0.pdf (last visited on November 30, 2017).

[90] *Id*., at 14 ("*5.1.2 Undertake a study to examine the feasibility of an IPR exchange*"). *See also* clause 5.11.2 which states: "*Facilitating investments in IP driven industries and services through the proposed IP Exchange for bringing investors/ funding agencies and IP owners/users together*", *id*., at 15. This exchange has been in-principle approved by the Ministry of Science and Technology but is yet to become operational. *See* Jyotika Sood & Priyanka Mittal, *Indian May Get Intellectual Property Exchange Soon,* LiveMint (July 5, 2017), *available at* http://www.livemint.com/Technology/q5KSoAyOpBqLZQX8AH9VPN/India-may-get-Intellectual-Property-Exchange-soon.html (last visited on November 25, 2017).

[91] Ocean Tomo, http://www.oceantomo.com; Intellectual Property Exchange, https://www.ipexchange.global/; IP Nexus, https://www.ipnexus.com/; Global IP Exchange, http://www.glipx.com/about; Tech Transfer Online, http://www.techtransferonline.com/; yet2.com, http://www.yet2.com/; Tynax, http://www.tynax.com.

[92] This exchange, named 'IPR Exchange', was established by the Federation of Indian Micro and Small & Medium Enterprises ("*FISME*") with the support of the British High Commission in March 2013. It is the first exchange in India that facilitates commercial exchange of IP assets online. *See FISME launches IPR Exchange, A Book on Intellectual Property and Honours Winner*, Federation of Indian Micro and Small & Medium Enterprises (April 4, 2017), *available at* http://www.fisme.org.in/pastevents_details.php?event_id=153 (last visited on November 25, 2017); *About Us*, IPR Exchange, *available at* http://www.iprexchange.in/about_us.php (last visited on November 25, 2017).

7. The policy contains a promising proposal to encourage Corporate Social Responsibility ("*CSR*") funds into open innovation.[93] However, this depends entirely on corporate largesse and interest, and the government cannot mandate this.

8. The policy speaks about alternatives to the current IP regime such as the institution of awards or prizes.[94] Unfortunately, this appears to have been recommended not as alternative to IP, but as an incentive for creation of IP itself.[95]

9. Similarly, the policy contains a commendable proposal for setting up of a national 'Hall of Fame'.[96]

VI. An Uncreative Policy

While the policy boasts commendable proposals as above mentioned, for the most part, the policy is severely flawed and devoid of creative ideas/ suggestions.

Many decades ago, a two-member committee (headed by Justice N.R. Ayyangar) conceptualised a patent policy that formed the blueprint of the present patent regime.[97] By most accounts, this far-sighted policy triggered the remarkable growth of India's pharmaceutical industry, earning it the moniker "pharmacy of the world". It was a policy that was thoroughly researched, empirically validated and elegantly written in a little over a year. Compare and contrast that with the present policy that took more than two years and two separate think tanks to come to fruition. One beset with banality, dogged by dogma, rife with ridiculous assertions, lacking in any credible empirical support, and written in language that, at best, mimics a masterful memo from one bureaucrat to another. Surely we could have done better!

While proudly proclaiming the slogan "Creative India, Innovative India",[98] the policy states that "*[t]here is an abundance of creative and*

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[93] *Supra* note 1, at 8.

[94] *Id*., at 6.

[95] *See* clause 1.4.4 under the IPR Awareness: Outreach and Promotion head that recommends: "*Instituting prizes and awards to encourage 'IP creation' activity in specific sectors*", *supra* note 1, at 6.

[96] *Id*.

[97] Shri Justice Rajagopala Ayyangar, Report on the Revision of the Patents Law (September, 1959), *available at* https://spicyip.com/wp-content/uploads/2013/10/ayyangar_committee_report.pdf (last visited on November 1, 2017).

[98] *Supra* note 1, at 1.

innovative energies flowing in India".[99] It is a sheer pity that none of that abundant creative energy made it to this policy document, rendering it rather dull and dreary.

VII. What's the Problem Represented to Be?

Even apart from the various flaws in the text of the policy, one needs to revisit the rationale: What precisely is the point of this policy? Or to interrogate a bit deeper using Carol Bacchi's frame, "*What's the problem represented to be?*"[100]

This approach, known as the WPR approach, was developed by Bacchi, a professor at the University of Adelaide, and aims to critically scrutinize the implicit representation of the problem in any given policy. Specifically, it posits the following questions:

i) What is the problem represented to be in a specific policy?

ii) What presuppositions or assumptions underlie this representation of the problem?

iii) How has this representation of the problem come about?

iv) What is left unproblematic in this problem representation? Where are the silences? Can the problem be thought about differently?

v) What effects are produced by this representation of the problem?

vi) How/where has this representation of the problem been produced, disseminated and defended? How could it be questioned, disrupted and replaced?

Bacchi's thesis is that governments, and indeed all of us, *give a particular shape* to social 'problems' in the ways in which we speak about them and in the proposals we advance to 'address' them.[101]

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[99] *Id*., at 3.

[100] *See* Carol Bacchi, *Introducing the 'What's the Problem Represented to Be' Approach?*, *in* Engaging with Carol Bacchi: Strategic Interventions and Exchanges 21-24 (Angelique Bletsas & Chris Beasley ed., 2012).

[101] *See* Carol Bacchi, *What's the Problem Represented To Be? An Introduction* (October, 2007), *available at* http://www.flinders.edu.au/medicine/fms/sites/southgate_old/documents/theory%20club/2007-oct/IntroducingWP_Bacchi.pdf) ("*Governments in this understanding are active in the creation of particular ways of understanding issues. I call competing understandings of social issues 'problem representations' and argue that it is crucially important to identify competing problem representations because they constitute a form of political intervention with a range of effects*.").

Applying her frame, one might possibly suggest the following "representations" of the problem, as gleaned from the various statements made by the government.

i) In a statement accompanying the text of the policy, Nirmala Sitharaman, the Minister for Commerce and Industry stated: "*The National Intellectual Property Rights (IPR) Policy, recently approved by the Union Cabinet, is a giant leap by the Government of India to spur creativity and stimulate innovation.*"[102]

ii) Responding to a question raised in the Rajya Sabha earlier this year, Sitharaman stated: "*[The policy] aims to stimulate a dynamic, vibrant and balanced intellectual property rights system in India to foster creativity and innovation and thereby, promote entrepreneurship and enhance socio-economic and cultural development.*"[103]

iii) In a message accompanying the text of the policy, Ramesh Abhishek, Secretary of DIPP stated: "*The National Intellectual Property Rights (IPR) Policy of India is set to establish an ecosystem in the country conducive to innovation and creativity not only in terms of IP awareness and creation, but also commercialization and enforcement.*"[104]

From the above, it would appear that the policy appears to have stemmed out of a sincere belief that India lacks in creativity and innovation; and that a strengthening of IP protection would help enhance the rate and range of creativity and innovation. The assumption therefore (that underpins this implicit representation of the 'problem') is that IPRs necessarily 'enhance' creativity and innovation and also play a strong role in the same. Granted, India is lagging on several technological counts. When compared with its glorious past boasting pioneering innovations from the likes of Sushruta[105] (the father of modern surgery) and Nagarjuna[106] (metallurgy), India has hardly had any noticeable technological marvels in its recent history.

But is it the country's IP regime that is problematic? Or does the malaise lie elsewhere? Could it be cultural, where parents put undue pressure on their children to take up secure salaried jobs, as opposed to risky entrepreneurial

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[102] *Supra* note 1.

[103] Answer to Rajya Sabha Unstarred Question No. 3039, *available at* http://dipp.nic.in/sites/default/files/ru3039.pdf (last visited on August 16, 2017).

[104] *Supra* note 1.

[105] M. Tewari & H.S. Shukla, *Sushruta: 'The Father of Indian Surgery'*, 67(4) Indian J. Surg. (2004), *available at* https://tspace.library.utoronto.ca/bitstream/1807/6342/1/is05075.pdf.

[106] Arun Kumar Biswas, *Primacy of India in Ancient Brass and Zinc Metallurgy*, 28(4) Indian Journal of History of Science 317-18 (1993).

ventures? Such factors are absent from the "problem representation" of the policy, and therein lies its biggest flaw. IP policy making should be driven by facts, and not faith.[107] It must be based on empirical studies and stakeholder surveys and not on intuitions and assumptions; a point stressed by the *First Think Tank Draft* in the following words:

> "*Unfortunately, a number of IP debates and norms turn on rhetoric, emotion and untested assumptions. One needs to move away from such faith based IP towards fact based IP. Future norms for India will be predicated on data driven evidence as far as possible. The government will encourage empirical studies and surveys from a wide variety of stakeholders. Different ministries responsible for specific sectors viz., Ministry of Micro, Small and Medium Enterprises, Ministry of Agriculture, Department of Science and Technology, Department of Biotechnology etc…will be required to generate and share innovation related data and that can inform effective IP policy making.*"[108]

VIII. A Policy or Strategy?

The policy states that: "*The rationale for the National IPR Policy lies in the need to create awareness about the importance of intellectual property rights (IPRs) as a marketable financial asset and economic tool.*"[109] If this be so, then it is a fairly limited mandate; and one does not need to formulate an extensive IP policy for this. A mere strategy document to create more awareness would have sufficed. In fact, some years ago, the government did come up with an IPR strategy document.[110] It is not clear as to whether this policy document was also meant to be a strategy document.

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[107] Shamnad Basheer, *World IP Day: From "Faith" Based IP to "Fact" Based IP*, SpicyIP (April 26, 2008), *available at* https://spicyip.com/2008/04/world-ip-day-from-faith-based-ip-to.html (last visited on February 15, 2017); Mark Lemley, *Faith-Based Intellectual Property*, 62 UCLA L. Rev. 1328 (2015) ("*Part of the faith people place in IP regardless of the evidence seems to come from a faith in the status quo—a feeling that IP must be a good thing because we always did it that way and it worked. The status quo is not a good in and of itself, to be protected no matter what evidence accumulates that it is rotten… Faith-based IP is at its base a religion and not a science because it does not admit the prospect of being proven wrong.*").

[108] *First Think Tank Draft*, Part IV.5.

[109] *Supra* note 1, at 1.

[110] Draft National IPR Strategy, September 6, 2012, *available at* http://dipp.gov.in/English/Discuss_paper/draftNational_IPR_Strategy_26Sep2012.pdf (last visited on February 14, 2017).

Fortunately, this policy document does not have the force of law and means nothing, unless actively translated. Till then, it is, in the Bard's memorable language, nothing more than mere "sound and fury, signifying nothing"![111]

IX. Conclusion

The Indian IP policy will go down in the annals of history as a wasted opportunity: an opportunity where we might have fashioned a progressive policy in a country that has thus far bucked mainstream pressure to conform to a developed country driven IP script. Instead, what we have is a dull and dreary document that contains soporific platitudes at best, and an aggressive one sided ratcheting of IP norms up at worst.

The policy lacks empirical rigour and appears more faith-based than fact-based. It endorses a very formalistic and reductionist view of IP, taking it to be an end in itself. It ignores other factors such as education and cultural aversion to risk, which are likely to play a far greater role in triggering creativity.

To this end, the policy misses the larger macro frame where IP is but one tool in the overall innovation ecosystem; a more holistic approach might have made for a more progressive policy. In the end, one needs to ask: was there a need for such a policy at all? What purpose did it serve? Alas: Carol Bacchi's thoughtful question remains unanswered!

[111] William Shakespeare, Macbeth, Act V Scene V.

IT'S ALL ABOUT PRINCIPLE: HOW PATENT TROLLING, OVER BROAD PATENTS, EVERGREENING, AND PATENT SHELVING REPRESENT A DEPARTURE FROM THE PATENT CLAUSE AND HOW TO RETURN TO THE PRINCIPLE OF THE PATENT CLAUSE

Morgan L. Stringer[*]

ABSTRACT *This article explores differing patent abuses that reflect how current patent law has swung drastically away from the Patent Clause of the U.S. Constitution. The purpose of the Patent Clause is to ensure that inventors are given a limited monopoly in order to encourage innovation, or to "progress the useful arts and sciences." There are many forms of patent abuse, but this article will explore patent trolls, overbroad patents, evergreening, and patent shelving as forms of patent abuse that reflect a departure from the Constitutional principle of progress in patent law. Each of these patent abuses hinders progress, so according to the Patent Clause, Congress has the power to correct these abuses and must return to this Constitutional principle of progress. In addition, the Court must answer inconsistent or unanswered questions, where Congress has failed to do so. All of these patent abuses are related to one another, so solving one of these patent abuses will help prevent another patent abuse discussed. Furthermore, this article also proposes various solutions to decrease and prevent patent trolling, overbroad patents, evergreening, and patent shelving.*

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I. Introduction

Patent law goes as far back in the United States as the very founding. The Constitution states that Congress has the power, "to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."[1] Allowing authors and inventors to maintain an exclusive right enables them to reap the rewards of a monopoly in exchange for revealing the "manner of making and using the invention" for the public good.[2] In addition, the Patent Clause states that "upon the expiration of the patent the public be left free to use the invention."[3] The purpose of patent law is clear. In order to promote science and the useful arts, Congress has the power to grant a limited exclusive monopoly to the author or inventor, in exchange for the public being able to later benefit. However, several abuses of the patent system have emerged. A doctrine intended to improve society through scientific and artistic advancement has now warped to become a way for corporations and individuals to maximize profit and maintain monopolies in a way that is antithetical to progress.

Four major ways for patent holders to abuse patents have emerged that this article will discuss: patent trolling, overbroad patents, evergreening, and patent shelving. It is vital to discuss these four patent abuses in conjunction with one another because together these abuses represent a shift in patent law away from the U.S. Patent Clause. In addition, curbing each of these abuses individually has an impact on another patent abuse that is discussed.

Part I of this article will discuss the origins of patent law and examples of how it has changed and developed. In addition, this part will also document the history of the various types of patent abuse discussed in this article. Part II of this article will discuss four types of patent abuses: (1) patent trolling, (2) overbroad patents, (3) evergreening, and (4) patent shelving. Part II will also discuss why and how these patent abuses must be corrected and how these abuses relate to one another. Often one of these patent abuses ending will help curb patent abuse present in another area. Additionally, these four patent abuses discussed in conjunction reveal the larger issue of patent law straying from the Patent Clause of the Constitution.

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1 U.S.C.A. Const. Art. I § 8, cl. 8.

2 Scott Paper Co. v. Marcalus Mfg. Co., 1945 SCC OnLine US SC 152 : 90 L Ed 47 : 326 US 249, 252 (1945 (citing Special Equipment Co. v. Coe, 1945 SCC OnLine US SC 62 : 89 L Ed 1006 : 324 US 370, 377 (1945)).

3 *Id.*

II. Background

A. History of Patent Law and its Purpose

In 1624, English Parliament passed the Statute of Monopolies, which allowed inventors to have limited monopolies of 14 years, limiting the Crown's ability to grant more extensive monopolies.[4] The statute only allowed for a monopoly over "manners of new manufacture."[5] These monopolies were not granted if the invention was "mischievous to the state," or "generally inconvenient."[6] One example of "mischievous to the state" would be if it raised the prices of commodities.[7] The founders used the spirit of the English law in their own adaptation of patent law, which is reflected in the Patent Clause of the U.S. Constitution. The Patent Clause does not restrict patents based on mischievousness, nor does it limit patents to manners of new manufacture, like the English law, but it does include that a limited monopoly should be enjoyed by inventors, to encourage people to invent and once the limited monopoly ends, then that creation may be enjoyed by the public, who can then innovate and improve upon that invention. The ideas of progress and scientific achievement were very important to the founders, as they were influenced by the ideals of the Enlightenment. In fact, the founding fathers opposed perpetual monopolies. Thomas Jefferson stated that a complete monopoly would "embarrass society with monopolies for every utensil existing, and in all details of life."[8]

Passed in 1790, the US Patent Act granted a 14-year monopoly to "useful, important, and new" inventions.[9] This statute also set up a commission which would grant patents. This commission consisted of the Secretary of State, the Secretary of War, and the Attorney General. At least two of the commission members had to find an invention to be "sufficiently useful and important," in order for a patent to be granted. However, this process was slow, as the members of the commission were not able to meet together as often as desired. In 1793, Thomas Jefferson, then Secretary of State, amended the Patent Act to grant patents for "any new and useful art, machine, manufacture, or composition of matter, and any new and useful improvement on

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4 Ladas & Perry, Education Center, "A Brief History of the Patent Law of the United States." http://ladas.com/a-brief-history-of-the-patent-law-of-the-united-states-2/.
5 Ladas & Perry, *supra* note 4.
6 Ladas & Perry, *supra* note 4.
7 Ladas & Perry, *supra* note 4.
8 Ladas & Perry, *supra* note 4.
9 Pamela Collins, "A Brief History of U.S. Patent Law," Head, Johnson, & Kachigan, P.C. May 18, 2012. http://www.hjklaw.com/blogs/archive/entry/a_brief_history_of_us_patent_law.

any art, machine, manufacture, or composition of matter."[10] The law also provided that the inventor should give a petition for patent to the Secretary of State. This effectively eliminated a commission for patent approval.[11]

The Patent Act of 1836 created a Patent Office within the Department of State, and created the office of Patent Commissioner, who would be appointed by the president. The statute also contained a provision for patent extensions. The extension would be for an additional seven years added on to the initial 14-year patent term, so it was possible to obtain a patent for 21 years. A patentee had to apply to the Commissioner of the Patent Office for an extension, then a hearing would take place before the Secretary of State, Patent Commissioner, and Solicitor of the Treasury. At the hearing, this committee would hear evidence for and against the patent extension. The Patent Act of 1836 provided that an extension could be granted if "without neglect or fault on his part, having failed to obtain, from the use and sale of his invention, a reasonable remuneration for the time, ingenuity, and expense bestowed upon the same."[12] In 1861, the extension was eliminated entirely and a term of 17 years was put into place.[13]

The Patent Act of 1952 continued the Patent Office, although previously, the Patent Office was moved to the Department of Commerce. The Patent Act of 1952 added an additional requirement to patentability: non-obviousness.[14] Furthermore, patentees had to provide a specification, which included a written description of the patent, and drawings and models or specimens, if needed.[15] The patent term was also later changed to 20 years, which is the current patent term.[16] In 2011, the Leahy-Smith America Invents Act changed the patent system to where the patent is given to the first to file the patent, rather than the first to invent.[17] This applies to any patents filed after March 16, 2013, but all other patents fall under the prior system of first to invent.[18]

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[10] Ladas & Perry, *supra* note 4.
[11] 1 Stat. 318, 2 Cong. Ch. 11, 1 Stat. 318, 2 Cong. Ch. 11.
[12] *Id.* at Sec. 18.
[13] 12 Stat. 246, 249, 16.
[14] 82 P.L. 593, 66 Stat. 792, 82 Cong. Ch. 950, Sec. 103.
[15] *Id.*, at Sec. 112, 113, 114.
[16] *Id.*
[17] 112 P.L. 29, 125 Stat. 284, Sec. 3.
[18] *Id.*

B. Origins of Patent Law Abuse

i. Patent Trolls

Patent trolls are said to be as old as patent law in the United States itself. Some claim that Eli Whitney was a patent troll because when Whitney's first attempts to manufacture and sell the cotton gin failed, Whitney turned to suing the plantation owners who used Whitney's cotton gin to make money from his invention.[19] In 1879, patent attorney George Selden claimed a patent for the automobile, but he did not "choose to issue the patent" until 1895. After the issuance of the automobile patent, Selden sued almost every automobile manufacturer, and he was able to obtain licenses and money from those licenses.[20] However, when Selden sued Henry Ford his success came to an end. Ford fought Selden's suit, and he won on appeal, where the court determined that neither Ford nor any other automobile manufacturer owed Selden anything.[21]

Patent trolls increased drastically after the 1970s and 80s. Jerome Lemelson, an independent inventor, was able to enforce his patents against other various entities, especially his patent on the barcode reader.[22] However in a case that came to court involving this manner, the plaintiff in that case was not Lemelson, himself, but rather Symbol and Cognex,[23] who manufactured and sold bar code scanners and related products. In 1998, their customers received letters from Lemelson alleging that they were infringing on Lemelson's patents.[24] The plaintiffs would have to indemnify these customers if it was found that the customers had infringed on these patents.[25] so Symbol and Cognex sued on the customers' behalf. This case hinged on whether the prosecution of laches was available to bar Lemelson's claim of infringement.[26] Here, the Court held it was an available defense and the case was remanded.[27] However, in his total claims, Lemelson was awarded

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[19] Ryan Hauer, *Another Attempt at Patent Reform: S.1013 The Patent Abuse Reduction Act of 2013,* 24 DePaul J. Art Tech. & Intell. Prop. L. 367, 370.

[20] Hauer, *supra,* note 19, at 370-71.

[21] Hauer, *supra* note 19, at 371.

[22] Robin M. Davis, *Failed Attempts to Dwarf the Patent Trolls: Permanent Injunctions in Patent Infringement Cases Under the Proposed Patent Reform Act of 2005 and eBay* v. *Mercexhange,* 17 Cornell J.L & Pub. Pol'y 431, 432. (Generally citing Symbol Technologies Inc. v. Lemelson Medical, Education & Research Foundation LP, 277 F 3d 1361 (Fed Cir 2002)).

[23] The trial court consolidated the separate cases of each plaintiff into one.

[24] Symbol Technologies Inc. v. Lemelson Medical, Education & Research Foundation LP, 277 F 3d 1361, 1363 (Fed Cir 2002).

[25] *Id.*

[26] *Id.*

[27] *Id.*, at 1363-68.

over $1.5 billion in licensing fees.[28] This reward encouraged patent trolls to send demand letters for patents. The term patent troll was first used when Peter Detkin, Intel's Assistant General Counsel used the term "patent troll" to describe a "litigious-minded IP-holding company."[29] Detkin stated that a patent troll was "somebody who tries to make a lot of money off of a patent that they are not practicing and in most cases never practiced."[30]

In modern times, patent trolls often own large shell companies.[31] The largest patent trolls can own thousands of shell companies, which hold thousands of patents.[32] It can be difficult in litigation to reveal the identities of these shell companies, or even to obtain damages from them because courts are "hesitant to pierce the corporate veil."[33]

ii. Overbroad Patents

The broader the claim, the more protection the inventor has under the law. However, inventors realized they could further their monopolies by drafting overbroad patents, or claims that go beyond what the inventor has actually invented.

In 1922, Christian Nelson obtained a patent for the Eskimo Pie, an ice cream bar. The patent's claims described, "a core consisting of a block or brick of ice cream, of general rectangular configuration, that is sealed within a shell of edible material which may be like that employed in coating chocolate candies although preferably modified to harden at a lower temperature."[34] This patent shows that Nelson received a monopoly on chocolate covered ice cream. In fact, an internal report of Eskimo Pie's office states that they celebrated the broadness of the patent because they not only patented their invention, but every single variation of their invention as well.[35] Eskimo Pies then used its patent to sue competitors, but the patent was later invalidated for its broadness.[36]

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[28] Davis, *supra* note 22. (Citing Teresa Riordan, "The Lemelson Foundation, named for a Prolific Inventor, aims to Reward Inventions that Help Poor Countries Develop," *N.Y. Times*, Apr. 26, 2004 at C4).

[29] Davis, *supra* note 22. (Citing Raymond P. Niro & Paul K. Vickrey, *The Patent Troll Myth*, 7 Sedona Conf. J. 153, 153 (2006)).

[30] Hauer, *supra* note 19, at 369.

[31] Hauer, *supra* note 19, at 371.

[32] Hauer *supra* note 19, at 371.

[33] Hauer, *supra* note 19, at 371-72.

[34] Charles Duan, "Ice Cream Patent Headache," *Slate,* Oct. 20, 2015, http://www.slate.com/articles/technology/future_tense/2015/10/what_the_history_of_eskimo_pies_says_about_software_patents_today.html.

[35] Duan, *supra* note 34.

[36] Duan, *supra* note 34, (citing *Eskimo Pie Corpn.* v. *Levous*, 24 F 2d 599, 600 (DNJ 1928).

In modern times, overbroad patents are increasingly seen in the technology sector. This is due to changing terminology, which can be imprecise, and the tendency of the claims to describe a function, which leads to general construction of claims.[37] Overbroad patents, once granted, can be used against competitors, who actually have invented what is claimed in the initial patent, unlike the initial patent holder.

iii. Evergreening

The origins of evergreening and even overbroad patent claims can be seen in the first surge of patent litigation that occurred between the mid-1840s to the mid-1880s. This litigation widely fell under the Patent Act of 1836.[38] Since 1793, the patent law operated more as a "registration regime," wherein inventors would register patents, and the issue of the patent novelty or validity was left for the courts to decide. This led to widespread calls for change, and Congress responded with the Patent Act of 1836. This act created a staff of professional patent examiners within the Patent Office. Much of the litigation that arose in the mid-1840s resulted from inventions that fell under previous law or patents that were granted "term extensions."

Term extensions could be granted "legislatively, by Congressional private act, or administratively, under the 1836 Patent Act, by a board of senior federal officeholders consisting of the Secretary of State, the Solicitor of the Treasury, and the Commissioner of Patents."[39] Beginning in 1848, the Commissioner of Patents alone had the power to grant extensions.[40] The Commissioner of Patents granted extensions to certain patentees who had "without neglect or fault on his part…failed to obtain, from the use and sale of his invention, a reasonable remuneration for the time, ingenuity, and expense bestowed upon the same."[41] These term extensions were "elastic" and lobbying efforts helped inventors gain extensions for the most innovative patents of the day.[42]

One example of such a patent that was given a term extension and heavily litigated was Thomas Blanchard's turning lathe, which enabled the user to make irregular wood forms, like gun-stocks, in ten minutes, which

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[37] David J. Kappos, *Investing in America's Future Through Innovation: How the Debate Over the Smart Phone Wars (Re)Raises Issues at the Foundation of Long-Term Incentive Systems*, 16 Stan. Tech. L. Rev. 485, 495.
[38] Christopher Beauchamp, *The First Patent Litigation Explosion,* 125 Yale L.J. 848, 858.
[39] Beauchamp, *supra* note 38, at 860 (citing § 18 5 Stat. at 124.)
[40] Beauchamp, *supra* note 38, f. n. 36.
[41] Beauchamp, *supra* note 38, 860 (citing § 18, 5 Stat. at 125).
[42] Beauchamp, *supra* note 38.

required less manual labor.[43] His patent was granted in 1819, but was not widely enforced, so in 1834, Blanchard received a private act from Congress which extended his patent another 14 years.[44] Blanchard, with the extension in his hand, then used his extended monopoly to sue dozens of other woodworkers.[45]

Charles Goodyear also used patent extensions and litigation. After he patented his rubber vulcanization method in 1844,[46] Goodyear granted licenses to rubber goods manufacturers. Goodyear also gained a "reissue amendment to the patent that broadened its scope."[47] Goodyear then sued both licensed and unlicensed manufacturers, bringing over 200 suits between the 1840s and 1850s.[48] After winning the "Great India-Rubber Case," Goodyear was granted a patent extension for another seven years because "no inventor probably had ever been so harassed, so trampled upon, so plundered by that sordid and licentious infringers known as 'pirates.'"[49]

Some of the most contentious litigation in the 1850s was caused by the "Sewing Machine Wars," because it was very difficult to manufacture a quality sewing machine without infringing on one of the many patents contained within a sewing machine.[50] Eventually the leading manufacturers created a "patent pool" called the "Sewing Machine Combination."[51] Lawsuits between the members of this pool decreased drastically; however, the suits against non-members remained in place.[52] Elias Howe, who held many of the initial patents, also was able to extend his patents for another seven years, in which he earned $2 million by the time his patent finally expired.[53]

While these term extensions and patent reissues do not occur so explicitly in modern law, one can see how these reissues and extensions were used to perpetuate monopolies, rather than strike a balance between inventor rights and innovation. In fact, I argue that these term extensions became the precursor of evergreening. Additionally, the sewing machine debacle is an example of how overbroad patents can limit innovation. In modern times, evergreening is seen more in the pharmaceutical industry.

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43 Beauchamp, *supra* note 38.
44 Beauchamp, *supra*, note 38, at, 860-61.
45 Beauchamp, *supra,* note 38, at 861.
46 Beauchamp, *supra*, note 38, at 864.
47 Beauchamp, *supra* note 38, at 865.
48 Beauchamp, *supra*, note 38, at 865.
49 Beauchamp, *supra,* note 38, at 865 (citing Charles Goodyear, 101 N. Am. Rev. 65, 98 (1865) (citing in re Goodyear Patent, 1858 Dec. Comm'r Pat. 9).
50 Beauchamp, *supra,* note 38, at 865.
51 Beauchamp, *supra,* note 38,at 865-66.
52 Beauchamp, *supra,* note 38, at 866.
53 Beauchamp, *supra,* note 38, at 866.

iv. Patent Shelving

There are times when patents are not utilized or commercialized when a patent is simply not profitable, but at other times patentees will purposefully "shelf" a patent for strategic reasons.[54] One example of this was when Russian caviar manufacturer the Romanoff Caviar Company created artificial caviar, but it never marketed the artificial caviar because it did not want to compete with its real caviar in the U.S. market.[55] In the United States, Xerox obtained a series of patents in order to preserve its market in "plain paper photocopier technology," but then Xerox never used or licensed those patents. In a lawsuit over this issue, the court ruled there was no antitrust violation because this was a lawful use of Xerox's patent rights.[56]

In an even more egregious example of patent shelving, Liggett & Myers Company believed they discovered a way to remove many of the harmful carcinogens in cigarettes.[57] However, the patent was never marketed and research halted. This was because revealing that a safer cigarette was discovered would also admit that cigarettes were dangerous.[58] Phillip Morris threatened to sue Liggett if Liggett "violated the industry agreement not to disclose negative information on smoking and health."[59]

Patent shelving also occurs in the pharmaceutical industry. A scientist developed a "protein-binding factor," which allowed EPO (erythropoietin) to remain in the body, rather than being excreted, which increased the EPO uptake by a ten- to fifty-fold factor. EPO assists in the creation of "oxygen-carrying" red blood cells and is effective in treating anemic people, including pre-mature infants. The pharmaceutical company, Amgen, held many of the patents related to EPO technology. Since this medication was so effective, people would need less EPO, so Amgen was not interested in marketing the product due to concerns about profits. However, since Amgen held so many other vital components to EPO technology, no other pharmaceutical company could use the technology either.[60] Therefore, a lifesaving technology benefitted no one in the public, yet the patent law protected a corporation in maintaining profits, while ensuring no one else could develop that technology.

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[54] Kurt M. Saunders, *Patent Nonuse and the Role of Public Interest as a Deterrent to Technology Suppression*, 15 Harv. J. Law & Tec. 389, 391-92.
[55] Saunders, *supra* note 54, at 392-93.
[56] Saunders, *supra* note 54, at 393.
[57] Saunders, *supra* note 54, at 393.
[58] Saunders, *supra* note 54, at 393-94.
[59] Saunders, *supra* note 54, at 394.
[60] Saunders, *supra* note 54, at 394.

This history of patent law and its abuses reflect how patent law has shifted away from progress and public benefit in more favour of patent holders and encouraging monopolies. This shift away from the idea of limited monopolies in exchange for progress and public benefit has given rise to abuses in the patent system. These abuses must be addressed in order to begin the shift back to the Constitutional principle of progress. Also, addressing these abuses will hinder other forms of abuses once we begin a shift back to progress.

III. Patent Abuses and Solutions

A. Patent Trolls

The first example of patent abuse that reveals a move away from the Patent Clause of the U.S. Constitution is "patent trolling." The purpose of the Patent Clause is to encourage innovation, so if patent trolling is a "'tax on innovation" and a "detriment to progress" then an argument can be made for reform to protect the Constitution's goal of promoting progress in science and useful arts."[61] Patent trolls, or "patent assertion entities," focus on aggressive litigation. For example, they threaten "to sue thousands of companies at once, without specific evidence of infringement against any of them; creating shell companies that make it difficult for defendants to know who is suing them; and asserting that their patents cover inventions not imagined at the time they were granted."[62] Patent trolls are the very anti-thesis of patent law's original purpose because they hinder innovation.[63]

i. Defining Patent Trolls

First, there is the daunting task of defining a patent troll. One must practice caution in defining patent trolls to avoid broad generalizations, which would result in legitimate entities inclusion in the definition. Patent troll is a pejorative term, but the use of the term is still permitted in court.[64] This article

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[61] Thomas H. Kramer, *Proposed Legislative Solutions to the Non-Practicing Entity Patent Assertion Problem: The Risks for Biotechnology and Pharmaceuticals,* 39 Del. J. Corp. L. 467, 473.

[62] Grace Heinecke, *Pay the Troll Toll: The Patent Model System is Fundamentally at Odds with the Patent System's Goals of Innovation and Competition*, 84 Fordham L. Rev. 1153. (quoting Exec. Office of the President, Patent Assertion and U.S. Innovation (2013)) https://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf.)

[63] *See* generally, Heinecke, *supra* note 62.

[64] Kramer, *supra* note 61, 472, FN 23 (citing James Beeson & Michael J. Meurer, *The Direct Costs from NPE Disputes*, 99 Cornell L. Rev. 387, 420).

will not explore what term of art should be precisely used for patent trolls, but the term patent troll will be used throughout this article.

The White House uses the term "patent assertion entities" rather than the term, patent trolls,[65] but the terms are synonymous. The White House does not give a bright line definition of patent trolls, but rather, lists out factors that are typical behavior of patent trolls. Patent trolls should not have a bright-line definition, but rather be determined by a set of factors as they are in the White House Report.

a. The White House Factors

The White House outlines seven business characteristics of patent trolls. These characteristics in combination with other exigent factors should be used to determine if an entity is a patent troll.

> "(1) They do not practice their patents; that is, they do not research or develop any technology or products related to their patents; (2) They do not help with 'technology transfer' (the process of translating the patent language into a usable product or process); (3) They often wait until after industry participants have made irreversible investments before asserting their claims; (4) They acquire patents solely for the purpose of extracting payments from alleged infringers; (5) Their strategies for litigation take advantage of their non-practicing status, which makes them invulnerable to counter-claims of patent infringement; (6) They acquire patents whose claim boundaries are unclear, and then (with little specific evidence of infringement) ask many companies at once for moderate license fees, assuming that some will settle instead of risking a costly and uncertain trial; (7) They may hide their identity by creating numerous shell companies and requiring those who settle to sign non-disclosure agreements, making it difficult for defendants to form common defensive strategies (for example, by sharing legal fees rather than settling individually)."[66]

These factors strike a balance between adequately defining patent troll while avoiding overbroad drafting. For example, universities often licence their patents to other entities, and do not actually utilize the patents they created themselves. However, it would be absurd to characterize all universities who do this as patent trolls because this is a legitimate practice. This is why in addressing the issues of patent trolls, it is vital to avoid broad, sweeping

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[65] "Patent Assertion and U.S. Innovation," Exec. Off. Of the Pres., June 2013, https://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf.

[66] "Patent Assertion and U.S. Innovation," *Supra*, note 65.

language. On the other hand, patent trolls must be adequately defined to address the issues that they cause. The White House Factors should serve as a guideline for defining patent trolls by Congress. Additionally, these factors should serve as a guideline for the courts when determining if a suit is, in fact, a frivolous suit brought by a patent troll. Furthermore, these factors can also serve as guidelines for assessing if an entity or individual is a patent troll for the purposes of levying damages against them.

b. Patent Troll Prevention Act (Arizona Statute)

One statute that addresses the issue patent trolls is the Patent Troll Prevention Act, which was passed by the Arizona legislature. This statute outlines factors that the court may consider in determining if an entity has made a bad faith patent infringement assertion or a good faith patent assertion. This statute is similar in the approach suggested in this article. The court should utilize factor tests in order to determine if an entity is in fact a patent troll to prevent overbroad bright line rules, while addressing the issue of patent trolls effectively.

One of the factors for considering an entity as a patent troll is (1) if the demand letter does not contain all of the following: "(a) the patent number issued by the USPTO or foreign agency, (b) name and address of the patent owner or assignee, if any, (c) facts relating to the specific areas in which the target's product, service, or technology infringes the patent or is covered by the claims of the patent, (d) an explanation of why the person making the assertion has standing, if the assignment system of the USPTO does not identify the person asserting the patent infringement as the owner."[67] The statute outlines other factors as well. (2) If the patent troll's "target requested the information mentioned before, and the other party failed to give that information in a reasonable time," then the other party may be considered a patent troll.[68] Other factors include: (3) if the person making the demand did not previously compare the complaints in the patent to the target's own product, (4) the demand requires a licensing payment "within an unreasonably short period of time, (5) the person knew or should have known that the assertion was without merit, (6) the assertion of patent infringement contains false, misleading or deceptive information, (7) the person or a subsidiary or an affiliate of the person has previously filed or threatened to file one or more lawsuits based on the same or substantially equivalent assertion of patent infringement and a court found the person's assertion

[67] 2016 Ariz. HB 2386
[68] *Id.*

of patent infringement to be without merit.[69] The statute also allows courts to consider other factors, the court deems relevant, as well.[70] This statute, like the White House factors, clearly takes measures to identify patent trolls without making an overbroad bright line rule. The Arizona statute should serve as a guideline for Congress to adopt similar federal standards. This set of factors prevents legitimate companies and inventors from being swept up by an overly broad definition of patent trolls. This factor test should also be used to empower the judiciary to determine what entities are patent trolls on a case-by-case basis, rather than an overly broad statutory standard.

ii. Patent Trolls and Their Impact on Innovation

Now the question turns to if in fact patent trolls harm innovation.[71] Direct "out-of-pocket" expenses for defendant firms total $29 billion, "in aggregate, patent litigation destroys over $60 billion in firm wealth each year."[72] Research also shows that entities targeted by patent trolls reduced innovation compared to entities that were not targeted.[73] Surveys found that entities significantly decreased in their ability to innovate due to patent trolls.[74] Frequent patent trolls also caused a decline in venture capitalism investments.[75] It is clear that patent trolling has, in fact, inhibited innovation, and as the purpose of patent law is to promote innovation there must be change.

There is an argument that patent trolls actually add to the economy by creating a secondary market. One feature of this secondary market is the rise of corporations emerged which help people buy and sell patents.[76] Patent auctions are also increasing. Previously, this type of auction would only happen with bankrupt sellers auctioning off patents. Recently, a wide variety of patent sellers and purchasers buy and sell patents in this way.[77] Thereby, it is argued, that this creates more innovation because this gives inventors the ability to make a profit by selling their patents. As a result, inventors will be encouraged to invent from this incentive because of the inventor's ability to make a profit from the invention quickly. However, these auctions also present an opportunity for patent trolls to purchase patents, which will then

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[69] *Id.*
[70] *Id.*
[71] *See* U.S.C.A. Const. Art. I § 8, cl. 8.
[72] James Bessen, "The Evidence is in: Patent Trolls Do Hurt Innovation." *Harvard Business Review*, https://hbr.org/2014/07/the-evidence-is-in-patent-trolls-do-hurt-innovation.
[73] Bessen, *supra* note 72.
[74] Bessen, *supra* note 72.
[75] Bessen, *supra* note 72.
[76] Don Clark, "Inventors See Promise in Large-Scale Public Patent Auctions,", *The Wall Street Journal* Mar. 9, 2006. http://www.wsj.com/articles/SB114187357457393357.
[77] Clark, *supra* note 76.

inhibit innovation. There is a way in which patentees can sell and other entities can purchase patents while encouraging innovation. The key to solving that issue is by ensuring that those patents are actually utilized. This article will explain how to solve the issue of patent trolls obtaining these patents, yet doing nothing with them, can be solved through compulsory licensing in the patent shelving section.

It is also proposed that patent trolls actually encourage inventors to use their patents, since they usually target patents that are not in use; however, this argument is weak. It is clear that there are other ways to encourage inventors to utilize or license their patents legitimately without the looming threat of patent trolls. Additionally, the negative impact that patent trolls have on innovation and development heavily outweighs the mere possibilities that they create a secondary market or encourage innovation in a circular way.

iii. Solutions to the Patent Troll Problem

The Constitution permits Congress to change patent law to promote innovation, so a legislative response to patent trolling is warranted. One of the reasons that patent trolling is so prevalent is because people keep "feeding the trolls," in other words, legitimate entities are more likely to pay a patent troll's demands, rather than go through expensive litigation. The first way this could be solved is through the patent process itself. More resources must be given to the USPTO in order to prevent patent trolls from obtaining patents in the first place. In addition, since the Patent Clause gives Congress the power to enforce laws in order to encourage progress in the useful arts and sciences, then Congress should use the White House Factors as a guide for defining patent trolls, then pass a law that is similar to the Arizona statute, in which federal courts will then have guidelines by which to determine whether or not an entity or individual is a patent troll.

The determination of an entity being a patent troll or not should be a question of law and not fact. One reason that entities settle with patent trolls is because patent verdicts are unpredictable, which makes litigating against patent trolls risky.[78] This causes many entities to believe it is safer and easier to simply "pay the troll." A legal standard used to determine if an entity is a patent troll would be more consistent and precedent could build which would make this litigation much more predictable. More predictable

[78] Ashley Chuang, *Fixing the Failures of Software Patent Protection: Deterring Patent Trolling by Applying Industry-Specific Patentability Standards*, 16 S. Cal. Interdis. L.J. 215, 229.

outcomes would decrease the risk in litigating patent trolls. Patent trolls would no longer be able to take advantage of this unpredictability to force entities into paying them.

The punishments for patent trolls should also be more severe. Entities are hesitant to fight patent trolls because the cost of litigation often outweighs the benefits.[79] Judges should be encouraged to award punitive damages more often in cases of egregious and clear patent trolling. The use of possible punitive damages will also encourage targets of patent trolls to countersue rather than pay the patent trolls' demands, since there is a financial incentive. This would reduce the amount of settlements, upon which patent trolls rely, and in turn, reduce patent trolling.

In addition, judges should also be encouraged to award attorney's fees to help offset the cost of fighting a patent troll. Currently the awarding of attorney's fees in a patent infringement suit is governed by 35 U.S.C. § 285 which provides that attorney's fees are awarded if the case is exceptional.[80] It is understandable that judges are hesitant to find a case exceptional, since there are little other guidelines. Under the Patent Abuse Reduction Act, this statute is slightly amended to shift the costs to an affiliated party of the non-prevailing party, which would be a way to get into the pockets of the shell company that often is the entity truly behind the patent troll.[81] This statute has not led to increased cost shifting because there is little outlining in how the procedure for shifting costs should be done.[82] The proper way to solve this is instead of simply stating that judges can shift the costs, is to outline when that may be appropriate. The proper solution to this would once again be the factor tests that are outlined in the Arizona statute and the White House's defining factors of a patent troll. By using those tests it will be clear when an entity is indeed a patent troll and if those factors are convincing, then damages for attorney's fees should be imposed and encouraged. Using these factors in future cases will also allow courts to build precedent for when to award theses damages.

B. Overbroad Patents

Overbroad patents are another issue that must be reformed to return to the constitutional principle of innovation. Software patents are often overbroad because the patent will give the inventor patent rights that "go beyond the

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[79] Chuang, *supra* note 78.
[80] Hauer, *supra*, note 19, at 375.
[81] Hauer, *supra,* note 19, at 396.
[82] Hauer, *supra,* note 19, at 396.

technology that an inventor has actually invented and disclosed."[83] Then the inventor will threaten litigation against other inventors whose inventions may happen to fall under such broad construction claims. In this way, inventors use patent law as a sword to cut down competitors and innovation, instead of as a shield to protect their legitimate interests, as patent law intended.

Overbroad patents are often taken advantage of by patent trolls as well, who are then able to assert patent infringement against their targets for a patent that goes beyond what was even created.[84] Preventing overbroad patents would also help solve the previously mentioned patent trolling issue. Congress has not taken many effective recent measures in combatting overbroad patens. However, the judiciary has addressed overbroadness in claim construction. The courts should develop more concise and clear rulings on claim construction and answer questions regarding this issue that were previously left unanswered.

i. Claim Construction and a Solution? Claim Construction and a Solution?: Why the Court Should Have Granted Cert to Hear *Google Inc.* v. *Cioffi* and Should Solve Overbroad Patents in the Future

Overbroad patents are granted because the USPTO is "overworked, understaffed, and underfunded."[85] Overbroad patents are often granted because of the claim construction process. In this process, patent attorneys write claims for a patent as broadly as possible, in order to expand a patent holder's rights and monopoly as broadly as possible.

Google asserted a petition for *cert* in *Google Inc.* v. *Cioffi*. In the petition, Google claimed that the current claim construction process "leads patent lawyers to play games with the Patent Office, and in the event of a lawsuit, to allow patent owners to benefit from ambiguous phrasing they're responsible for in the first place."[86] This petition arose out of *Cioffi* v. *Google Inc.* over Cioffi's patent for anti-malware software. Cioffi claimed that Google Chrome infringes on its "web browser process."[87] The district court ruled in favor of Google, but the appeals court held that Chrome's method of finding

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[83] Collins, *supra* note 9, 1400.
[84] Chuang, *supra* note 78, at 227.
[85] Chuang, *supra* note 78, at f.n. 15.
[86] Jeff John Roberts, *Fortune,* "Google Asks Supreme Court to Hear Chrome Case Over Patent History" Aug. 25. 2016. http://fortune.com/2016/08/25/google-supreme-court-chrome/.
[87] Roberts, *supra* note 86.

malware infringed Cioffi's patent.[88] Earlier the Patent Office rejected Cioffi's claim because the Office stated that the process they described, which was a secondary computer process outside the browser itself, was already invented. So, Cioffi tweaked the language.[89] However, there is no clear definition for "web browser process." The Appeals Court held that there was no "clear and unmistakable statement" which supported Google's case, so the court reversed in favor of Cioffi.[90] Google argued in its petition that the "clear and unmistakable standard" is too high, and this uncertainty in software patents benefits patent trolls.[91] "Overbroad patent claims are a plague, especially in the vital and growing high-tech sector. All of this plays into the hands of entities that buy patents and then use litigation or the threat of litigation to extract settlements from alleged infringers."[92]

Google's petition asked the Supreme Court to address the questions once and for all: should courts examine prosecution history to determine an ambiguous term's meaning, and when a patented claim is amended should that amended language then be strictly construed against the applicant, or should the court continue to use the "clearly and unambiguously disavows" standard?[93] The Court denied *cert* to Google,[94] but the Court should have granted *cert* to examine prosecution history in context to determine ambiguous terms. Technology advances quickly, and in that timeframe, the Court should not reward those innovators who are best able to play with language and semantics, rather the Court should enforce a "say what you mean and mean what you say" standard. The Supreme Court should decide to hear cases involving claim construction in the future, in order to prevent overbroad claim construction.

ii. A Silver Lining for a Claim Construction Solution: *Columbia University* v. *Symantec Corpn.*

It appears that The Federal Circuit adopted the standard that Google proposed in its petition, in the case, *Columbia University* v. *Symantec Corpn.* In this case, the term in the claim at issue is "byte sequence feature."[95] Columbia's claim construction, which was the subject of litigation,

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88 Roberts, *supra* note 86.
89 Roberts, *supra* note 86.
90 Roberts, *supra* note 86.
91 Roberts, *supra* note 86.
92 Roberts, *supra* note 86.
93 Dennis Crouch, *PatentlyO* "Strictly Construing Amended Claims Against the Patentee," Feb. 4, 2016, http://patentlyo.com/patent/2016/02/strictly-construing-patentee.html.
94 Google Inc. v. Cioffi, No. 16-200, 2017 WL 69713 (US Jan 9, 2017).
95 Columbia University v. Symantec Corpn., (Fed Cir 2015), http://www.cafc.uscourts.gov/sites/default/files/opinions-orders/15-1146.Opinion.1-29-2016.1.PDF, 2.

referred to language Columbia used in two previous different patents, but that language seems to contradict one another. The court cited to *Phillips* in which the court held that the "specification made is always highly relevant."[96] The court also stated in this case that the patentee cannot rely on its own confusing language in order to support a patent. The court states, "the claims are nonsensical in the way a claim to extracting orange juice from apples would be, and thus are indefinite."[97] Therefore, Columbia's patent claims are invalid. The Court sent a clear statement that patentees crafting language ambiguously and overly broad should not be permitted. The Court especially frowned upon patentees who then relied on the ambiguous and overly broad claim constructions to claim a patent beyond what the inventor actually invented. Other courts should follow the logic of the Federal Circuit in order to assert that an entity cannot rely on its own confusing language to broaden a patent, in other words, "mean what you say and say what you mean." Rulings of this kind would ensure that patent trolls and overbroad patent abuses are limited. Confusing litigation over confusing terms would also decrease because patentees could no longer play semantic games with the courts.

Additionally, Microsoft has called for the Court to abolish the "plain and ordinary" meaning standard.[98] "Plain and ordinary" meaning has been interpreted by courts to mean something outside the context of the patent.[99] Claim construction should be interpreted in the full context of the patent, and the Court should clarify this point, rather than an overly broad, "plain and ordinary" meaning standard.[100] This means that, like Google's claims, patent holders will be held to the language they use in their patent, and the context of the patent will determine the patent's claims, rather than an ambiguous "plain meaning standard."

The Court should have granted *cert* to *Google Inc.* v. *Cioffi*, but when another opportunity to hear a similar case arises, the Court should rule on it. For now, courts should adopt the standard of *Columbia University* v. *Symantec Corpn.,* to curb overbroad claims by abolishing the "plain and ordinary" meaning standard. In the future, the Court should adopt a "say what you mean and mean what you say" standard, in which the Court interprets claim construction strictly and in the context of the patent.

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[96] *Id.*, at 10 (quoting Phillips v. AWH Corpn., 415 F 3d 1303, 1315 (Fed Cir 2005) (en banc).
[97] *Id.*, at 13.
[98] "Brief of Microsoft Corporation and Professors Vincent Chiappetta and Lee A. Hollaar as *Amici Curiae* in Support of Neither Party," for *Cuozzo Speed Tech.* v. *Lee*, No. 15-446. Hereinafter, "Brief of Microsoft Corporation."
[99] "Brief of Microsoft Corporation."
[100] "Brief of Microsoft Corporation."

iii. Kill Two Birds with One Stone: Answering the Questions in *Bilski*

The Court should also comment on, if not hold, a more specific ruling for software patents in future cases. There is a proposition that patent law requires a "software-specific patch."[101] A solution is to "root a protectable invention in the algorithms that an inventor actually employs to achieve a claimed function, and they can limit the scope of functional software claims to particular algorithms for achieving the claimed functions." This approach is the best way to solve the issue of overbroad patents.

The very nature of software, in that it is functional and expands rapidly, means that patents in this area must be scrutinized for overbroadness. As software technology advances and develops exponentially, a patent for 20 years is a very serious and could create a powerful monopoly. This article will not address whether software patents in themselves should be limited less than 20 years. With that consideration, if an overbroad patent is granted, it will mean that no development of what is claimed can be done for 20 years other than that of the patent holder; therefore, to keep innovation moving forward software needs its own patch, and overbroad patents must be reined in.

In *Bilski* v. *Kappos*, the Supreme Court held that a "machine-or-transformation" test, is not the sole test to determine the patentability of a business practice algorithm, but the Court failed to discuss the standards under which other algorithms or software patents should be held to.[102] The "machine or transformation" test requires a restriction to one machine or device or "transform[ation] from one form to another."[103] The Court in *Bilski* held that the machine-or-transformation test was a "useful and important clue, an investigative tool, for determining whether some claimed inventions are [patentable processes]. The machine-or-transformation test is not the sole test for determining whether an invention is a patentable "process."[104] The Court left open many questions with this case, and these questions must be resolved to prevent overbroad patents and improve innovation. This standard should be clearer regarding algorithms and software. The way in which to do this would be to provide the "patch" for software patents in patent law. Software patents should be treated differently than other patents. The standard should be the specific tasks, unique to that particular software, that is claimed are patented, and nothing more. The claim construction in

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[101] Collins, *supra* note 9, at 1405.
[102] Jeremy R. Hager, *God in the Machine: Encryption Algorithms and the Abstract Exception to Patentability*, 16 Marq. Intell. Prop. L. Rev.483, 502-503.
[103] Hager, *supra* note 102.
[104] Bilski v. Kappos, 2010 SCC OnLine US SC 89 : 177 L Ed 2d 792 : 561 US 593, 604 (2010).

software patents should also be interpreted more narrowly, since software develops from previous software. This would be a proper judicial solution to the issues that Congress has failed to address. Congress also has the power to abolish software patents entirely, but that issue is beyond the scope of this article.

The judiciary solution would help streamline the software patent process, reduce confusing terms, reduce litigation, reduce patent trolling, and reduce overbroad patents. In this way, the courts will be able to solve software patent issues more efficiently under this new system, since the law on software would be more clear. Also, this will increase other developers' ability to innovate without fearing lawsuits due to infringing on an overbroad patent.

Additionally, the USPTO should have its own division that deals specifically with software patents. The USPTO should be divided per industry, in order to organize and improve the patent process overall. This will obviously require more investment in the USPTO, but innovation would then go forward.

Limiting the use of overbroad patents would also help to limit patent trolls. Patent trolls often buy overbroad patents in order to sue as many entities as possible. By not granting these overbroad patents in the first place, then the issue of patent trolling is also partially resolved. Additionally, limiting overbroad patents will help to solve the next patent abuse discussed, evergreening.

C. Evergreening

Evergreening is another issue that must be solved by returning to the Patent Clause. Evergreening occurs when a patent holder modifies a patent while under patent protection, so they can then apply for an extension of the patent, thereby extending the monopoly granted to the patent holder by the initial patent.[105] Often these modifications are arbitrary[106], so the patent holder is able to extend their monopoly, while not making any truly innovative modifications to the patent. Extending that monopoly is harmful to innovation.

Evergreening is especially problematic and prevalent in the pharmaceutical industry, so this article will mainly focus on evergreening in that context. Evergreening, in the context of the pharmaceutical industry, "occurs when a

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[105] Brian R. Bouggy, *Follow-On Biologics Legislation: Striking a Balance Between Innovation and Affordability*, 7 Ind. Health L. Rev. 367, 380.

[106] Bouggy, *supra* note 105, at 381.

drug manufacturer makes small improvements to an old medicine, allowing it to renew its patent and to extend the time it will enjoy monopoly control rights."[107]

A few examples of small modifications for drugs to obtain evergreen status include changing the milligram strength of medication, changing the medication's form (such as from a pill to a capsule), changing the delivery method (such as from injection to inhalation), expanding the medicine's application to more conditions, using time-release mechanisms, and adding sugar molecules to the formula.[108] These small modifications are not innovative, so these changes should not lead to an extension of a patent. The whole purpose of patent law is to give an inventor a monopoly over the patent for a limited time in exchange for eventually allowing the public to use that patent. Innovation occurs when people develop off of their predecessor's ideas.[109] If that monopoly is simply perpetuated over and over, then it will be impossible for innovation to occur, which is antithetical to the Patent Clause. The Constitution calls for Congress to act to encourage innovation, so this issue calls for a legislative solution.

In 2003, Congress enacted legislation to curb evergreening by allowing no more than one 30-month stay per product.[110] In addition, Congress passed the Patent Reform Act of 2007, which only allows a patent holder to file two continuation or continuation-in-part applications and one request for continued examination.[111] However, continuations still make up a large percentage of the patent applications received by the USPTO. The USPTO estimates that about one third of the patent applications they receive are continuation patents.[112] It is also estimated that without continuation patents, the USPTO would be able to operate more efficiently.[113] Therefore, further actions should be taken in order to decrease continuations, so the USPTO will operate more efficiently. A more efficient USPTO will progress the useful arts and science by ensuring that patents are granted in a timely and proper manner. It is evident that the Patent Reform Act of 2007 has not been effective in curbing continuation patents. Further actions must be taken by Congress to prevent evergreening.

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[107] Zoee Lynn Turrill, *Finding the Patent Balance: The Novaris Glivec Case and the TRIPS Compliance of India's Section 3(d) Efficacy Standard,* 44 Geo. J. Int'l L. 1555, 1557.
[108] Bouggy, *supra* note 105, at 380.
[109] Bouggy, *supra* note 105, at 380.
[110] Mark A. Lemley & Kimberly A. Moore, *Ending Abuse of Abuse Continuations,* 84 B.U.L. Rev. 63, 82.
[111] Hedwig A. Murphy, *Limiting Continuations: A Pharmaceutical Based Perspective,* 6 Rutgers J.L. & Pub. Pol'y 856, 861.
[112] Turrill, *supra* note 107
[113] Turrill, *supra*, note 107, at 861-62.

i. It's Not Easy Being Green: India's Section 3(d)

India addressed the issue of evergreening through section 3(d). India's section 3(d) law does not allow the granting of patents if the claim is a "mere discovery of a new form of a known substance which does not result in the enhancement of the known efficacy."[114] India's Supreme Court held that "under the scheme of a patent, a monopoly is granted to a private individual in exchange of the invention being made public so that, under the end of the patent term, the invention may belong to the people at large who may be benefited by it."[115] The Supreme Court of India further stated that "[p]rotecting inventions that are already generally known to a skilled person does not induce inventors to undertake commercially relevant research."[116] India's principle of patent law is the same as it is in the United States. A monopoly is given in exchange for the limited nature of the monopoly, so innovation will be encouraged, and then others can develop on that innovation, thus progress in the useful arts and sciences will be made. Therefore, a statute such as the one in India would provide a valid framework for preventing evergreening. And that statute, with modifications, would be constitutional, since the principles of our patent laws: innovation and progress are nearly identical.

Monopolies negatively impact consumers; however, a balance must also be struck to encourage innovation.[117] The Constitution does allow a limited monopoly to inventors in exchange for the innovation their invention fosters. Balance is key in solving this issue. Groups such as Doctors Without Borders are concerned that a lower for patentability would cause a market for generics to disappear.[118] This would perpetuate a pharmaceutical company's monopoly and drug costs for consumers would remain high. Furthermore, a patent would prevent other pharmaceutical companies from creating new medications for a longer period of time. Conversely, there is a valid concern that drug manufacturers will choose not to sell drugs in nations with higher patentability standards, thus, the drug costs will also remain high in that scenario.[119] Therefore, a careful balance must be struck. A limited monopoly must be granted to encourage pharmaceutical companies to develop, market, and sell their products in the United States. A limit to continuation patents and patents that are truly not innovative based on prior art should also

[114] Turrill, *supra* note 107. (quoting The Patents (Amendment) Act, No. 15 of 2005, § 3(d), India Code (2005)).
[115] Turrill, *supra* note 107, at 1568 (quoting Novartis AG v. Union of India, (2013) 6 SCC 1, at p. 172, available at http://judis.nic.in/supremecourt/chejudis.asp).
[116] Turrill, *supra* note 107.
[117] Turrill, *supra* note 107.
[118] Turrill, *supra* note 107, at 1568.
[119] Turrill, *supra* note 107, at 1570-71.

be imposed. This would ensure that the monopolies granted stayed limited, a competitive market flourishes, and others are able to innovate based on the patented medication within a reasonable time. I advocate that a measure similar to § 3(d) would benefit the United States, although with modification to strike a balance between creating incentives to invent through granting limited monopolies and fostering innovation.

ii. How the United States Can Use Section 3(d) as a Framework for a Statute to Prevent Evergreening

The United States should enforce a measure such as § 3(d), but enforcement of the statute should only occur after the pharmaceutical company begins to enjoy the initial patent. An efficacy standard from this statute would not bar all continuations in entirety. Rather, issuing continuances on patents would be rarely granted, and the standard for issuing continuances would be strict. There should be a "clear and convincing" standard that the product is truly innovative for approving any continuance, and those continuances should not extend nearly as long as a patent itself. This would prevent pharmaceutical companies from filing frivolous claims, but the claims would not be barred completely. In this way, the pharmaceutical company would not be able to perpetuate a monopoly; however, they would still be encouraged to innovate and continue research on medications.

The "improvement" justifying a continuation must be scrutinized, particularly under the no obviousness standard. A drug earning a continuation based on being offered in a capsule rather than a tablet, or even by a milligram change are obvious changes, so continuations should not be granted in those scenarios. If a continuation is granted, then it should just be based on the specific improvement. In other words, people should be allowed to freely develop on the original patent, so long as they do not infringe on the original patent holder's improvement. In particular, pharmaceutical continuations should still be permitted rather than barred. This is because pharmaceuticals are highly complex, the product takes a long time to develop, and time and expenses for experimentation are high.[120] The regulatory review that a new drug must undergo can take up to 14 years. This time period effectively "eats up" much of the patent time period, which is 20 years.[121]

Pharmaceutical companies argue that limiting continuations would actually impede on innovation.[122] This is because without proper patent

[120] Murphy, *supra* note 111, at 862.
[121] Murphy, *supra* note, 111, at 868.
[122] Murphy, *supra* note 111, at 885.

protection, they claim that there would be no incentive to develop drugs because the research costs would outweigh the profits earned by a limited monopoly.[123] However, if FDA reform happened to where the process of regulatory review were streamlined to shorten the review period for new drugs, then the monopoly enjoyed by the pharmaceutical company would not be "eaten up" as much. This article will not explore ways to reform the FDA, but it is a viable option to balance both safety and efficiency performed by regulatory review in the future. Additionally, there would still be benefits to developing new and innovative drugs, not all of them financial. Also, the purpose of the Patent Clause is to create innovation, not to perpetuate monopolies and protect industries, so the industry's incentives are not the patent clause's priority, but balance must be struck for public policy reasons.

The backup in the Patent Office caused by continuation patents are hindering innovation. It is evident that the Patent Reform Act of 2007 has not effectively hindered pharmaceutical companies from filing continuations, nor has it helped entirely in streamlining the process of patent approval. Also, the remedy proposed in this article does not hinder continuations completely, the standard is simply raised in order to return from the unconstitutional practice of granting perpetual monopolies and return to the constitutional practice of granting limited monopolies to benefit society. This solution will help return the principles of the Patent Clause, but it will also benefit consumers. Limiting evergreening will ensure that pharmaceutical companies cannot maintain a perpetual monopoly, so competition will be able to enter the marketplace. This competition will cause prices to drop and consumers will be able to afford the medication they need.

Limiting evergreening will also help to curb overbroad patents. Evergreening allows an entity to maintain a monopoly, so that patent holder can keep other competitors out of their particular market for longer. By curbing evergreening, the monopoly will not be as broad, which will encourage innovation, rather than limit it.

D. Patent Shelving

Another form of patent abuse this article will discuss is "patent shelving." Patent shelving occurs when a company obtains or creates "a patent to prevent its development and marketing."[124] All a company must do is buy the patent,[125] or choose to not utilize a patent of its own creation. Patent shelving

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[123] Murphy, *supra* note 111, at 885.

[124] Charles Allen Black, *The Cure for Deadly Patent Practices: Preventing Technology Suppression and Patent Shelving in the Life Sciences*, 14 Alb. L.J. Sci. & Tech. 397, 422.

[125] Black, *supra* note 124.

ensures that the patent holding entity maintains a patent, but never utilizes it; rather, the patent is used to prevent other potential competitors from innovating or utilizing similar inventions. Patent shelving can increase profits due to control of the market, but this can lead to deadly consequences in industries such as the pharmaceutical companies because companies are intentionally not marketing potentially life-saving technology.[126] Patent shelving also can occur to ensure an industry holds its power or prevent radical changes in that industry.[127] This action is an obvious hindrance to innovation. The very concept of patent shelving should not be seen as an innovative business practice, but rather a violation of the spirit of patent law. Science and the useful arts cannot progress if inventions are obtained solely to preserve a monopoly or stronghold in a market.

Sometimes patents simply have no value, so those patents' lack of utilization is not the concern. Those patents do raise a question of if those patents should have been granted based on utility in the first place though. However, there are other valid reasons to not utilize a patent, such as profitability and marketing. Solutions to patent shelving should be made mindfully of those valid concerns, while still preventing entities from manipulating and controlling the market.

The Supreme Court held that patentees are not required to "use or commercialize their patents."[128] However, the public would benefit greatly if patentees were at least required to make a good faith effort to utilize, commercialize, or license the patent in order for the public to benefit. Patent shelving is clearly opposed to the principle of the Patent Clause because patent shelving is used simply to bar competitors from competing in the marketplace. Protections against this behavior should be enforced, since patent shelving is not conducive to innovation, but rather hinders it.

Additionally, many researchers obtain government funding and grants to perform research and eventually develop patents. There is especially an interest in utilizing those patents for public use, rather than allowing government funds to help someone maintain a monopoly or get rid of competition with zero benefit to the public.[129]

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[126] Black, *supra* note 124, at 425

[127] Neil S. Tyler, *Patent Nonuse and Technology Suppression: The Use of Compulsory Licensing to Promote Progress,* 162 U. Pa. L. Rev. 251, 458.

[128] Tyler, *supra* note 127, at 453 (citing Continental Paper Bag Co. v. Eastern Paper Bag Co., 1908 SCC OnLine US SC 137 : 52 L Ed 1122 : 210 US 405, 429 (1908).

[129] *See* Saunders, *supra* note 54, at 396.

i. The Precedent for Shelving Patent Shelving and How We Got Away from the Constitution

It appears as if precedent shows that there is an absolute right to not utilize a patent.[130] Yet there is judicial precedent for patent holders to make a good faith effort to utilize their patents in some way. In fact, federal courts initially "attempted to precondition an infringement remedy on the patentee's use of the patent."[131] In *Hoe* v. *Knap*, the court declined to enjoin a patent infringer of a printing press patent. The court held, "…under a patent which gives the patentee a monopoly, he is bound to either use the patent himself or allow others to use it on reasonable or equitable terms."[132] In another case, the court held that "[a] patent for invention which the patentee refuses to make available himself, and refuses to allow others to make useful, is not within the spirit of the provision of the constitution which assigns as a reason for securing exclusive rights to authors and inventors to desire 'to promote the progress of science and useful arts…'"[133] It is clear that the courts in these cases clearly understood that patents were to be granted in exchange for progress. However, later rulings reflected a shift in the law. In *Continental Paper Bag*, the Court held that not using a patent, yet refusing to license a patent was fully within the rights of a patentee.[134] This marks a dramatic shift away from the spirit of the Patent Clause. The Patent Clause does not ensure that inventors have an exclusive right solely because they invented a thing; rather the right of a patent is granted for the progress of the useful arts and sciences. It is evident that the purpose of patent law has been lost in recent times, it must be corrected.

ii. Compulsory Licensing

Many World Trade Organization members have compulsory licensing laws to prevent this patent abuse.[135] Compulsory licensing occurs "when a government allows someone else to produce the patented product or process without the consent of the patent owner."[136] Article 5 of the Paris Convention states that a compulsory license cannot be issued for less than four years

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130 Black, *supra* note 124, at 436
131 Saunders, *supra* note 54, at 398
132 Saunders, *supra* note 54, at 398-99 (quoting Hoe v. Knap, 27 F 204, 212 (ND Ill 1886)).
133 Saunders, *supra* note 54, at 399, (quoting Ewart Mfg. Co. v. Baldwin Bicycle-Chain Co., 91 F 262, 265 (D Mass 1898)).
134 Tyler, *supra* note 127, at 399-400, (citing Continental Paper Bag Co. v. Eastern Paper Bag Co., 1908 SCC OnLine US SC 137 : 52 L Ed 1122 : 210 US 405, 429 (1908)).
135 Tyler, *supra* note 127, at 460.
136 World Trade Organization, "Compulsory Licensing of Pharmaceuticals and TRIPS," https://www.wto.org/english/tratop_e/trips_e/public_health_faq_e.htm

after the patent application is filed or three years after the patent is issued.[137] In addition, the compulsory licence is not mandated if the patentee has a legitimate excuse such as legal, economic, or technical reasons why the patentee has chosen not to utilize the patent.[138] The United States attempted to enact this in the Hart Bill in 1973, which would implement compulsory licensing for "patents related to public health, safety, energy, or protection of the environment."[139] This bill also would not have compulsory licensing unless three years after the patent was issued or four years after filing.[140] However, powerful lobbying defeated this bill.[141]

A form of the Hart Bill should be passed and patents related to technology should be added to the list as well, since technology is such a quickly developing and increasingly vital sector of modern society. In this legislation, compulsory licensing should be very limited in order to strike a balance between the patentee's rights and the public benefit. The patentee should be allowed to give legitimate economic, legal, or technical excuses for not being required to attempt to licence. In addition, industries that are more complicated such as pharmaceuticals should be given a time period longer than 3 or 4 years. Instead, pharmaceutical industries should be given 5 to 7 years to make a good faith effort to develop or commercialize their patent.

This supposed "absolute right" to not use a patent clashes with the principles of the Patent Clauses. The purpose of a patent is to encourage innovation, not to hinder others from innovating, so compulsory licenses would be in line with the Constitution. The precedent that there is an absolute right to not use a patent should be overturned by the Court, and legislation for compulsory licences should be enacted, so as to return to the principle of innovation in the Patent Clause.

There is also an argument that large corporations may be able to litigate compulsory licences for a lengthy period of time and competitors may decide to not take advantage of the compulsory licence in an attempt to control and manipulate the market.[142] However, a situation where no corporation licenses the product purely for anti-competitive purposes, could be solved by anti-trust provisions. But, it may be difficult to prove that corporations

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[137] Tyler, *supra* note 127, at 460, (citing Paris Convention for the Protection of Industrial Property, at art. 5(A)(4), March 20, 1883).
[138] Tyler, *supra,* note 127, at 460.
[139] Tyler, *supra* note 127, at 463, (citing S. 814, 94th Cong. § 7 (1975) and Joseph A. Yosick, *Compulsory Patent Licensing for Efficient Use of Inventions,* 2001 U. Ill. L. Rev. 1275, 1278).
[140] Tyler, *supra* note 127, at 463.
[141] Tyler, *supra* note 127, at 463.
[142] Black, *supra* note 124, at 434.

are purposely refusing to market a patent made available by a compulsory license so they can control the market; however, it is unlikely that all competitors would conspire together to shelve a product if it was truly innovative and beneficial. The incentive for potential profits without having to pay for the initial development would likely outweigh a corporation's interest in participating in those anti-competitive measures.

Ceasing patent shelving will also help to prevent patents from being unused. Often, patent trolls will buy up unused patents. By ensuring that unused patents are very limited through compulsory licensing, then patent trolls will be unable to purchase unused patents for litigious purposes. Thereby, preventing patent shelving will also prevent patent trolling, while also encouraging innovation and progress.

IV. Conclusion

Patent trolling, overbroad patents, evergreening, and patent shelving are all patent abuses that reveal one problem: Patent law has abandoned the principle of the Patent Clause in the U.S. Constitution. The principle underlying the Patent Clause is simple: progress. An inventor is given a limited monopoly as an encouragement for inventors to invent. These inventions will benefit society, and eventually society is given the rights to that patent, so others may innovate that patent. Patent trolling seems as if it is a minor nuisance, but it is more than that. Patent trolls hinder corporations and individuals from innovating. Rather than broad legislation that may punish genuine businesses and entities, a factor test should be passed by Congress as a way for the judiciary to determine if an entity is a patent troll. Furthermore, the standard for awarding damages such as attorney's fees must be lowered by using that same factor test to determine the egregiousness of the conduct. In this way, the courts can build a precedent for dealing with and punishing patent trolls.

Overbroadness in patents is another abuse, especially prevalent in high technology. The Court should have granted *cert* to Google in order to solve this issue by requiring narrower claim construction in a "say what you mean and mean what you say" standard. *Columbia University* follows that logic, so courts should follow this reasoning. In addition, the Court should use future software patent cases as an opportunity to address the questions left open by *Bilski*. There needs to be a specific software "patch" in patent law, in which software patents are granted patents more appropriate in the context of the technology industry.

Evergreening in an age of increasing drug costs must also be prevented. Evergreening can be prevented by using India's Section 3(d) law as a framework for a United States statute. This statute should be modified in order to not ban continuations completely, so pharmaceutical companies will still research and develop their drugs, but also stop the abuse of the continuation patent in order to preserve monopolies, rather than create progress.

Patent shelving can be prevented by compulsory licensing and the Court returning to the law that a monopoly is granted, but only in exchange for progress and innovation. Compulsory licensing simply requires that a patentee make a good faith effort to utilize their patent, so the public may benefit within a certain time period within certain patents involving health, technology, and environmental industries. When a compulsory licence is granted other corporations can then utilize that patent which will improve innovation while also improving lives. Legitimate economic, legal, and technical excuses would still be allowed as to not require compulsory licensing. However, entities should not be allowed to deprive the public of a patent's use to perpetuate a monopoly, when the whole reason that monopoly is granted is in the name of progress.

Discussing these patent abuses together does not just reveal a shift in patent law away from the patent law, but discussing these patent abuses together and solving these abuses individually will assist in curbing other forms of patent abuses as well. Limiting patent shelving and overbroad patents will help curb patent trolling, and limiting evergreening will help curb overbroad patents. So, it is important that patent abuses are discussed in conjunction with one another. Only when we address various types of patent abuses as a whole and examine how they are connected, can one truly realize the issues with patent law and how to best solve these issues.

All of these patent abuses point to a swing in the pendulum from progress to using patent law to protect corporate interests. Balance must be restored. There is Constitutional basis under the Patent Clause for these issues to be addressed and resolved. The United States must return to the principle of progress as mandated in the Patent Clause in order to balance the economic interests of inventors and progress.

TRAI Tariff Orders – Effect on Broadcasting Sector

Ameet B. Naik[*]

"*Broadcasting is really too important to be left to the broadcasters.*"[1]

Abstract *Tony Benn, the veteran British Labour politician, as the then Minister of Technology in 1968, made the statement in the context of journalism. However, in the current Indian current scenario, the quote measures true with respect to the entire broadcasting sector, with Telecom Regulatory Authority of India (TRAI) scampering to regulate the third largest broadcasting market in the world.*[2] *The article deals with the impact of the TRAI Tariff Orders passed from time to time to regulate the broadcasting sector. The author acknowledges TRAI's competence to fixing tariff, as has been judicially held,*[3] *but questions the extent to which the said power can be exercised, while taking into consideration the apparent conflict of the general statute establishing TRAI with the special enactment of Copyright Act, 1957, and also the apparent inconsistencies in delegated legislation of TRAI. The article is divided into three parts: first, the TRAI Act, 1997 and its Scheme, second, TRAI Tariff Orders, and third, the impact of the Tariff Order on the Broadcasting Sector and its conflict with the Copyright Act, 1957.*

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1 John Herbert, Journalism in the Digital Age: Theory and Practice for Broadcast, Print and Online Media, (CRC Press, 1999).

2 Girish Kumar R., Relfi Paul, *Rights of Broadcasting Organizations: Do We Need Legal Reform?*, (2009) 2 Indian Journal of Intellectual Property Rights, 87.

3 Star India (P) Ltd. v. Telecom Regulatory Authority of India, 2007 SCC OnLine Del 951.

I. TRAI vis-à-vis Broadcasting

A. The Telecom Regulatory Authority Act, 1997 (TRAI Act)

The TRAI Act was enacted in 1997. At the time of the enactment of the TRAI Act, Broadcasting Bill was pending in the Parliament. Definitively, pre-supposing the Bill to become a legislation, the TRAI Act specifically excluded Broadcasting Services from the ambit of 'Telecommunications Service' in the definition in S. 2(k). S. 2(k) reads as:

> "*"telecommunication service" means service of any description (including electronic mail, voice mail, data services, audio tex services, video tex services, radio paging and cellular mobile telephone services) which is made available to users by means of any transmission or reception of signs, signals, writing, images and sounds or intelligence of any nature, by wire, radio, visual or other electromagnetic means but shall not include broadcasting services*."

However, as the Broadcasting Bill failed to achieve the Parliamentary consensus for becoming an Act, it lapsed and died a natural death.

In 2000, when amendments to the TRAI Act were being contemplated, ironically to the original legislative intent and premise, a proviso was inserted to S. 2(k) vesting power in the Central Government to notify services to be a part of 'Telecommunication Service'. The Proviso expressly stated inclusion of 'broadcasting services' at the discretion of Central Government. The Proviso aimed at negating the effect of exclusion of broadcasting services from the ambit of 'Telecommunication Service' provided that the Central Government notify such exclusion.

> "*The following proviso was added to definition of 'telecommunication service' under Section 2(k) of the TRAI Act. [Provided that the Central Government may notify other service to be telecommunication service including broadcasting services.]*"

The Central Government, employing the power so vested, released Notification S.O. 44(E) and Order S.O. 45(E), dated January 9, 2004. By this, the scope of 'Telecommunication Service' was expanded, bringing broadcasting services within its ambit. This specific exclusion and subsequent inclusion has also been noted by the Delhi High Court.[4]

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[4] Star India (P) Ltd. v. Telecom Regulatory Authority of India, 2007 SCC OnLine Del 951.

Thus, the ambit of TRAI's regulation was widened. Alongside the ambit of regulation, even its scope as stated in the perambulatory paragraph was increased from mere 'regulation of telecommunication services and matter connected therewith or incidental thereto' to provide to 'adjudication of dispute', 'disposal of appeal', 'protection of the interests of service providers and consumers' and to 'promote and ensure orderly growth of the telecom sector'.

Resultantly, in the current day, TRAI exercises a broad jurisdiction, which is not only to fix tariff but also to lay down the terms and conditions for providing services.[5] This is shadowed by the judicial opinion that TRAI cannot make recommendations overlooking the basic constitutional postulates and established principles and thereby deny people from participating in the distribution of national wealth.[6]

B. Extent of TRAI Regulation

While the extent of TRAI's broadcasting regime is limited by the Copyright Act,[7] TRAI's functions can be classified as recommendatory[8] or regulatory.[9] However, the recommendations have to be given due weightage by the Central Government, for TRAI is deemed to be an expert body.[10]

The Regulations of TRAI are issued in one of these forms: Regulations for Interconnection, Quality of Service or Infrastructure Sharing, and Tariff Orders.

- Interconnection Regulations broadly cover agreements between service providers i.e. Broadcasters, MSO/DTH operator and Local Cable Operator.
- Quality of Service Regulations broadly cover aspects relating to:
    - Connection, disconnection, transfer and shifting of cable and satellite services;
    - Handling and redressing consumer complaints;

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5 Hotel & Restaurant Assn. v. Star India (P) Ltd., (2006) 13 SCC 753.

6 Centre for Public Interest Litigation v. Union of India, (2012) 3 SCC 1.

7 The Federation of Indian Chambers of Commerce and Industry (FICCI) contends to the extent that the same should be recognized by TRAI to avoid inconsistencies. *See* Federation of Indian Chambers of Commerce and Industry, *National Intellectual Property Rights and Policy – Industry Concerns and Suggestions*, *available at* http://ficci.in/SEdocument/20340/FICCI-Suggestions-on-Proposed-IPR-Policy-Nov-2014.pdf (last visited on March 20, 2018).

8 TRAI Act, S. 11(1)(a).

9 TRAI Act, Ss. 11(1)(b), (c) and (d).

10 Union of India v. Assn. of Unified Telecom Service Providers of India, (2011) 10 SCC 543.

- Consumer billing procedure;
- STB related issues and handling complaints; and
- Technical parameters to be adhered by the service providers.

- Tariff orders prescribe the wholesale tariff, retail tariff and revenue share amongst the service providers.

II. TRAI Tariff Orders

While attempting to assess the impact of TRAI's Tariff Orders, it is essential to first understand the basic features of the Tariff Orders. Till date there have been 7 Tariff Orders with multiple amendments.

A. First Tariff Order, 2004

The First Tariff Order (*The Telecommunication (Broadcasting and Cable) Services Tariff Order 2004)* was a two-point regulation merely fixing charges payable, which were to be as per rate as prevalent on December 26, 2003 and defining the territorial scope of application of regulation to extend "*throughout the territory of India as also those originating in India or outside India and terminating in India*". Thus, while it was short and sweet, it had created a string of complications by being silent on how to calculate the prevalent rate.

Further issues arose on the interpretation of 'charges' post the first amendment, as a result of the press release subsequent to it.[11] The main issue was that the press release contradicted the tariff fixed by the First Tariff Order, because it provided for the tariff in certain instances to be "*not more than those applicable on December 26 2003*",[12] which implies that the tariff could be less than that prevalent on December 26, 2003. This was taken to court for interpretation in *IndusInd Media and Communications Ltd.* v. *Telecom Regulatory Authority of India*,[13] though dismissed, supplying supremacy to the Tariff Order, it was held that the press release did not vitiate the original intent and did not create any conflict. Soon after this judgment, TRAI clarified that charges to be "*exclusive of taxes*".

Impact: First Tariff Order was the first time that the Broadcasting Sector, which was till then an unorganised sector, was subjected to price regulation.

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[11] Press Release No. 13 of 2004 dated February 19, 2004 issued by TRAI.
[12] Press Release No. 13 of 2004 dated February 19, 2004 issued by TRAI.
[13] 2004 SCC OnLine TDSAT 23 : 2004 TDSAT 6.

B. Second Tariff Order, 2004

The Second Tariff Order (*The Telecommunication (Broadcasting and Cable) Services (Second) Tariff Order 2004)*, repealed the First Tariff Order. It was more or less a carry forward of the First Tariff Order, though with few additions like provisos for new pay channels or FTA converted to pay channel and choice to MSO for reducing ceiling charges. This Tariff Order is also relevant for having setup a reporting mechanism, though limited but providing for reporting requirement in case of new pay channel or FTA converted to pay channel and the manner of reporting. Further, clarity was provided regarding application throughout the territory of India, which by implication included even those services originating outside India but terminating in India. At first, the additions seemed laudable for the clarity provided, but the provision to reduce ceiling charges by reducing the number of channels shown became a bone of contention as this alternative had practical impediments, such as absence of addressability. Resultantly, *vide* First Amendment to the Second Tariff Order, Broadcaster was included to be given a choice of reducing ceiling charge by the same means.

Towards the end of 2004, a need to account for inflating was felt. Thus, the Second Tariff Order was amended for the second time to provide for tariff to be "*prevalent as on December 26 2003 plus 7%*". This was soon amended in 2005 by the Third Amendment to provide for rate "*prevalent as on 26.12.2003 as enhanced by 7% permitted w.e.f. 1.1.2005 plus 4% on such enhanced charges w.e.f. 1.1.2006 shall be the ceiling with respect to both free-to-air and pay channels*". The increased inflation was challenged in *Grahak Hitvardhini Sarvajanik Sanstha* v. *Telecom Regulatory Authority of India*,[14] before the Telecom Disputes Settlement and Appellate Tribunal (TDSAT). While there was an interim order staying the Tariff Order, it was lifted conclusively.

As the regulatory jurisprudence progressed, TRAI, *vide* the Fourth Amendment, made a distinction between Ordinary Cable Subscriber and Commercial Cable Subscriber, i.e. cable operator, and provided a specific provision for ceiling charges payable by Commercial Cable Subscriber. *Vide* the Fifth Amendment, certain amount of autonomy was provided to the Broadcasters/MSO to decide the payment flow, dependant on the terms of the agreement.[15] Soon, *vide* the Seventh Amendment, Clause 3-A was deleted and there was a further distinction between Ordinary Cable Subscriber, Commercial Cable Subscriber and hotels with rating of three star and above

[14] 2006 SCC OnLine TDSAT 435.
[15] TRAI Act, S. 3-A.

or heritage hotels (as described in the guidelines for classification of hotels issued by Department of Tourism, Government of India) or any other hotel, motel, inn, and such other commercial establishment, providing board and lodging and having 50 or more rooms, with the latter category being excluded from Commercial Cable Subscriber.

However, the burning question remained that in the absence of the mention of rates of similar channels as on December 26, 2003, what was the yardstick for fixing rate of new pay channels or FTA which had converted to pay channels post First Tariff Order and how the tariff was to be fixed for these channels. Even the explanatory memorandums had failed to clarify the same. This has caused nuisance because of the surge capacity of such channels and the vertical integration of the various stakeholders of the Broadcasting sector. As a result, Clause 3-B was inserted *vide* the Sixth Amendment which provided for factors decisively affecting the rate of ceiling charge, based on factors like genre and language, range of price to the individual channel and channel in bouquet of similar genre. This also came under judicial review in *Neo Sports Broadcasting* v. *Telecom Regulatory Authority of India*,[16] which contended difference between a cricket-centric channel and general sports channels for the purpose of bundling and calculating stand-alone rate. TDSAT had dismissed the plea, by applying the broader classification of genre and sports channel.

In 2007, TRAI, *vide* the Eighth Amendment, replaced the Tariff Order as amended on December 26, 2003 with December 1, 2007. This Amendment is one of the most significant amendments because of the major changes and clarifications brought about in terms of the manner of offering of channels by the Broadcasters,[17] reporting requirement and exhaustive list of information to be reported like names, genre and language of all FTA or Pay channels offered by the Broadcaster, list of all bouquets offered, revenue share arrangement, target audience, status of pay channels throughout the country as in whether paid throughout the country, advertisement revenue and lastly any other information relevant to free to air channels, pay channels, *a la carte* rates and bouquet. This Amendment also enforced the power of authority to intervene[18] and provided for issue of receipt and bill,[19] maintenance of records by Broadcaster, MSO and cable operator[20] and non-applicability to

[16] Neo Sports Broadcasting (P) Ltd. v. Telecom Regulatory Authority of India, (2007) 3 Comp LJ 524.
[17] TRAI Act, S. 3-C.
[18] TRAI Act, S. 4A.
[19] TRAI Act, S. 4B.
[20] TRAI Act, S. 4C.

addressable system.[21] It also bifurcated the manner of reporting into two parts – Part I and Part II. Part I was for charges payable by a subscriber to Cable operator or MSO transmitting and re-transmitting both FTA and Pay channels, and Part II was for charges payable by a subscriber to Cable operator or MSO transmitting and re-transmitting both FTA and Pay channels in Non-CAS Areas.

Vide the Ninth Amendment in 2009, TRAI supplied clarification as to the manner of reporting in case of charges payable by a subscriber to Cable operator or MSO transmitting and re-transmitting both FTA and Pay channels. The Tenth Amendment in 2014 introduced a further category of Authorised Agency or intermediary in the chain of supply. It also amended the manner of determining the rate of bouquet of channels specified. The Eleventh Amendment also provided for ceiling charge escalation and increased inflation accounting from 4% to 15%. The Twelfth Amendment provides the flow of payment between ordinary cable subscribers to cable operators or MSO, cable Operators to MSO or Broadcasters and MSO to Broadcasters, for FTA and Pay as well as in bouquet. Owing to the uproar against the exorbitant rate of 15% inflation, it was brought down to 11%, *vide* the Fourteenth Amendment. The Fifteenth Amendment changed the ceiling to the rate prevalent as on March 31, 2014.

Impact: This Tariff Order has been the most amended one, a total of 15 times. While there have been stifling issues in terms of fixation of ceiling charges of new pay channels and FTA converted to pay channel, and the vagueness of similar channels, solutions have been provided for most and clarity has been ensured. Also, the changes in dates for prevalent rates go on to show how TRAI has attempted to keep the ceiling charge updated as per the growing economy while also accounting for the inflation.

C. Third Tariff Order, 2006

The Third Tariff Order (*The Telecommunication (Broadcasting and Cable) Services (Third)* (CAS Areas) *Tariff Order 2006*) repealed the Second Tariff Order as to the applicability of the CAS areas and the charges payable by MSOs to Broadcasters and Cable Operators to MSOs in the CAS areas was concerned. Charges payable by MSOs to Broadcasters and Cable operators to MSOs in non-CAS areas was still determined by the Second Tariff Order.

Third Tariff Order was essentially to regulate carriage for both, digital and analogue ways of transmitting signals in the CAS areas. It divided the

[21] TRAI Act, S. 4B.

tariff into tariff ceiling for 'basic service tier' in CAS Areas, tariff for supply of set top boxes in CAS Areas and ceiling on maximum retail prices for pay channels in CAS Areas.

Tariff ceiling for 'basic service tier' in CAS Areas was fixed at Rs.77, with the obligation on the Cable Operator to offer at least 30 FTA channels in the bouquet. Tariff for supply of set top boxes in CAS Areas accounted for standard and alternative tariff packages, recognising the entry barrier of additional expenditure of STB, thus factoring in installation of set top box, activation charges, smart card/viewing card and repair maintenance or any other charges (for five years). It further put a ceiling in respect of maximum retail prices of Rs. 5 per pay channel per month payable by a subscriber to MSO/CO. Ceiling on maximum retail prices for pay channels in CAS Areas was applicable on both existing pay as well as new pay channels.

The First Amendment in the Third Tariff Order was contemporary to the Seventh Amendment in the Second Tariff Order providing for exclusion of a list of hotels from Commercial Cable Subscriber. The Tariff Order was challenged due to the petty rate of Rs.5 per pay channel per month being fixed as ceiling in respect of MRP. In *Set Discovery (P) Ltd.* v. *Telecom Regulatory Authority of India*,[22] it was held that such a low rate was resulting in destroying the business model by rendering it unviable. As a result, TRAI increased the rate from Rs. 5 to Rs. 50.35.

D. Fourth Tariff Order, 2006

The Fourth Tariff Order (*The Telecommunication (Broadcasting and Cable) Services (Fourth)* (Addressable Systems) *Tariff Order 2006*), as the name suggests, was the first Tariff Order focussing exclusively on addressable system. It also made the definition of 'addressable systems' more inclusive and exhaustive as compared to the Third Tariff Order, to provide regulation for Direct to Home (DTH), Internet Protocol TV (IPTV), Head-end In The Sky (HITS) and digital addressable cable services. This was more or less attributed to the various rounds of litigation1 with DTH players pleading for a level playing field to fix tariff, essentially for CAS and DTH to be treated at par. It ended with Court holding that DTH operators be provided channels at 50% of the rate in non-CAS areas until tariff regulation.

It also diversified tariff into three heads – Wholesale Tariff, Retail Tariff and those offering of Customer Premises Equipment. It also had a string of

[22] Appeal No. 10 (C) of 2006, decided on 27-2-2007 (TDSAT).

reporting requirements to be complied with and power of authority to intervene being vested.

The First Amendment to the Fourth Tariff Order provided for revenue share between MSO and LCO in case of no mutual agreement, for bouquet as well as stand-alone channels. The Second Amendment fixed that tariff of *a la carte* pay channel cannot exceed two times the *a la carte* rate of the channel and three times the ascribed value of the pay channel. The Third Amendment, in consonance with the Tenth Amendment to the Second Tariff Order, recognised 'authorised agent or intermediary'.

There was also a shift in the regulatory mechanism of TRAI when it shifted to mandating agreements for tariff fixing between the various stakeholders. For instance: *vide* the Fourth Amendment it was mandatory for the Commercial subscriber to enter into an agreement for charging customer or any person for broadcasting within premises, *vide* the Fifth amendment TRAI mandated a tripartite agreement between distributors of TV and commercial subscriber and the same had to be filed with the Authority within 30 days of the Amendment. This created a lot of conflict, boiling down to the contention that an agreement is not limited to tariff, but once it is mandated by TRAI, whether TRAI is going beyond its boundaries to regulate broadcasting sector. *Vide* the Sixth Amendment, Reference Interconnect Offer (RIO) was provided. It is essentially an offer document setting out matters relating to the price, and terms and conditions, under which a carrier will permit the interconnection of another carrier to its network.

E. Fifth Tariff Order, 2013

The Fifth Tariff Order (*The Telecommunication (Broadcasting and Cable) Services (Fifth)* (Digital Addressable Cable TV Systems) *Tariff Order 2013*), regulated the tariff for supply and installation of Set Top Box (STB). It was applicable alongside the Fourth Tariff Order. Its application was limited to MSOs. This was an attempt to make the transition from analogue affordable and eliminate the 'entry barrier' of technology and cost as contemplated. TRAI, however, did not limit itself to just the tariff here. It also stipulated a condition that the STB should conform to the Indian Standard as stipulated by the Bureau of Indian Standard.

F. Sixth Tariff Order, 2013

The Sixth Tariff Order (*The Telecommunication (Broadcasting and Cable) Services (Sixth*) (The Direct to Home Services) *Tariff Order 2013*) regulated tariff for supply and installation of customer premises equipment, which

was essentially equipment which enabled reception of broadcasting service through addressable system, including STB and dish antenna. However, television receiver set, computer or any such equipment was excluded. This was applicable to the DTH operators.

G. Seventh Tariff Order, 2015

The Seventh Tariff Order (*The Telecommunication (Broadcasting and Cable) Services (Seventh)* (The Direct to Home Services) *Tariff Order 2015*) focused on DTH services. It consolidated the tariff for supply and installation of the Customer Premises Equipment, providing even for repair and maintenance of the customer premises equipment as well as refund on surrender of connections. It was more exhaustive in comparison to its predecessor.

H. Eighth Tariff Order, Regulation Draft

Of the four Draft Regulations and Tariff Order, the relevant one is *Consultation on the Draft Telecommunication (Broadcasting and Cable Services) (Eighth) (Addressable Systems) Tariff Order, 2016*.

The key points of the Draft Tariff Order are as follows:

- Rs. 130 as monthly rental for 100 standard definition channels on set top box from April 2017.
- Subject to the availability of capacity on network, each distributor shall offer additional capacity to a subscriber in the slabs of 25 SD channels, beyond initial 100 channels capacity at cost not exceeding Rs. 20 (excl. taxes/such slab/STB/month).
- General Cap on Maximum Retail Prices for pay channels, based on genre.
- Price forbearance. A bouquet of channels should not be priced less than 85% of sum of *ala carte* pricing.
- Broadcasters will provide minimum 20% distribution fee to distributors for collection and remittance of pay channel revenue.
- No bundling or bouquet of FTA, only Pay channels.

Star India Pvt Ltd and Vijay TV have challenged this Draft Tariff Order in the Madras High Court. They contended that the recent Tariff Order is in conflict with the exclusive rights of Broadcasters under the Copyright Act, 1957. The important questions that will be dealt with by the Madras High Court in the aforesaid litigation are whether TRAI has the authority and

power to regulate the prices of channels and whether such fixation of prices is in violation of the rights of the Broadcasters under the Copyright Act, 1957. The Madras High Court had initially directed TRAI to maintain status quo on the Tariff Order and had thereby restrained TRAI from notifying the recent Tariff Order. However, subsequently in January 2017, the Supreme Court had allowed TRAI to go ahead with the consultation process of the Draft Tariff Order, but said that TRAI cannot notify these without referring them to the apex court.[23] The Supreme Court further *vide* its Order dated March 3, 2017 allowed TRAI to notify the recent Tariff Order and gave liberty to Star India to challenge the same before the Madras High Court and further directed the Madras High Court to continue the hearing of the case filed by Star India and dispose of the case within two months.[24] TRAI has accordingly notified the recent Tariff Order with certain modifications and published a Notification being F. No. 1-2/2017-B&CS dated March 3, 2017 thereby notifying the Eight Tariff Order as The Telecommunication (Broadcasting And Cable) Services (Eighth) (Addressable Systems) Tariff (Amendment) Order, 2017 ("**Tariff Order**").

III. Impact of the Tariff Order on Broadcasting Sector and its conflict with Copyright Act, 1957

The Tariff Order which prescribes for fixation of price of the channels seems to be the most important bone of contention for the Broadcasters since cheaper *a la carte* options would restrict the subscribers from subscribing to bouquets and would also lead to subscription of lesser number of channels. The Tariff Order also seeks to leave a huge impact on the Broadcasters in terms of fixation of tariff by the Broadcasters thereby limiting the right of the Broadcaster to commercially exploit their special right (i.e., the Broadcast Reproduction Right) governed under Chapter VIII of the Copyright Act, 1957.

In this background, it is critical to analyse the conflict between the Tariff Order and the provisions of the Copyright Act, 1957.

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[23] Apurva Vishwanath, Harveen Ahluwalia, *SC Asks TRAI not to Notify Order, Madras HC Case to Continue*, *Livemint* (January 17, 2017), *available at*http://www.livemint.com/Consumer/wtD3ig5zV3I8nDZsiI76mO/SC-allows-Trai-to-finalize-draft-tariff-order-for-broadcast.html?utm_source=scroll&utm_medium=referral&utm_campaign=scroll (last visited on March 20, 2018).

[24] FE Bureau, *TRAI gets SC nod to Notify Tariff for TV Channels*, *Financial Express* (March 4, 2017), *available at*http://www.financialexpress.com/india-news/trai-gets-supreme-court-nod-to-notify-tariff-order-for-tv-channels/574209/ (last visited on March 20, 2018).

Copyright Act, 1957:

The Copyright Act, 1957 ("**Copyright Act**") came into force on January 21, 1958. S. 37 of the Copyright Act, as it was originally enacted in 1957, recognized rights of broadcasting authorities as Broadcast Reproduction Right ("**BRR**"). BRR provided for protection of programmes broadcast by means of radio-diffusion by the Government or other broadcasting authority. The emergence of BRR did not dilute the copyright protection mandated by the Copyright Act in favour of the works recognized under the Copyright Act. In fact, S. 38 of the Copyright Act, as originally enacted, specifically clarified that the exploitation of any broadcast was subject to the prior permission of the owner of the work embodied in any programme. Similarly, S. 39 of the Copyright Act, as originally enacted, clarified that the BRR would not affect the separate copyright subsisting in any literary, musical or dramatic work broadcast by the broadcasting authority or in any record embodying such work. S. 30 of the Copyright Act dealt with the licenses by owners of copyright.

The Copyright Act was further extensively amended in 2012 *vide* the Copyright (Amendment) Act, 2012 ("**the 2012 Amendment**") which came into force on June 21, 2012. A significant amendment to the Copyright Act was the complete overhaul of Chapter VII of the Copyright Act which pertains to Copyright Societies. A new provision namely S. 33A was also inserted in Chapter VII which allows for recourse by way of an Appeal against the Tariff Scheme formulated by a Copyright Society. The 2012 Amendment also amended S. 39A of the Copyright Act which stipulates the application of certain provisions of the Copyright Act, with necessary adaptations and modifications, to the BRR.

S. 39A of the 2012 Amendment makes provisions of Ss. 18, 19, 30, 30A, 33, 33A, 34, 35, 36, 53, 55, 58, 63, 64, 65, 65A, 65B and 66 applicable to BRR. On a reading of S. 39A with some of the relevant sections of the Copyright Act it can be seen that it encompasses the following provisions in the context of BRR:

- The owner of BRR has the exclusive right to assign BRR in the manner set out in S. 18;
- The mode of assignment is as set out in S. 19;
- S. 30 grants right to owner of BRR right to grant any interest in the BRR by license;
- A society of Broadcasters can be registered in pursuance of S. 33 of the Copyright Act which can issue/grant licences with respect of BRR;

- Under S. 33A, the BRR society has to publish tariff scheme, if any. An aggrieved person has right to approach Copyright Board with respect to any grievances regarding tariff scheme so published;
- Broadcasting organization/society is vested with powers of administration of the BRR of the owners/its members as per S. 34 and the control of such society remains with BRR owners as set out in S. 35;
- The broadcasting organization/society is required to submit to the Registrar of Copyrights the returns as mentioned in S. 36;
- Under S. 55, the civil remedies as available for infringement of copyright are also available for infringement of BRR;
- Under S. 63, the offences of infringement are made applicable to infringement of BRR.

Thus, a broadcasting organization is entitled to grant license of its special right being the BRR. The 2012 Amendment expanded the ambit of regulation of licensing of BRR by broadcasting organizations. The 2012 Amendment contemplated the formation of a society of broadcasting organizations for licensing of BRR in addition to voluntary licensing by broadcasting organizations individually under S. 30 which was already applicable to BRR. Such societies are permitted to publish their tariff in such manner as may be prescribed. Any person aggrieved by the tariff scheme can appeal to the Copyright Board and the Board may after holding such enquiry, as it considers necessary, make appropriate orders to remove any unreasonable element, anomaly or inconsistency therein. The Copyright Board is even empowered to fix an interim tariff, pending the appeal before it. As per the Finance Act, 2017, the Copyright Board has been taken over by the Intellectual Property Appellate Board (IPAB).[25]

IV. Conclusion

It can therefore be argued by the Broadcasters that the scheme of the Copyright Act in context of BRR, sets out a complete mechanism for grant, assignment, licensing, regulating and monitoring BRR and the same cannot be governed by TRAI. It is also a well settled law that between a special law and a general law, it is the special law which shall prevail. The general law

[25] *Finance Bill Gets Presidential Assent, Takes Effect From Today*, *Livemint* (April 1, 2017), *available at* http://www.livemint.com/Politics/WGvl6ZVIkioggKsaSCvt2I/Finance-Bill-gets-presidential-assent-takes-effect-from-tod.html (last visited on March 20, 2018).

cannot defeat the special law on a subject.[26] Furthermore, the Tariff Order is in the form of a delegated legislation and the Supreme Court has previously held that a delegated piece of legislation is invalid "*if it is inconsistent with the substantive provisions of another statute if it seeks to amend or affect the operation of another statute*."[27]

Therefore, if the Madras High Court comes to a finding that the Tariff Order or any part thereof is directly in conflict with provisions of the Copyright Act, then such part of the Tariff Order may be read down by the Court. However, the same remains to be seen as and when the matter is decided by the Madras High Court.

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[26] Jain Ink Mfg. Co. v. LIC, (1980) 4 SCC 435.

[27] *Halsbury's Laws*, (4th edn., Vol. 44) ¶¶ 965, 1001; State of U.P. v. Hindustan Aluminium Corpn., (1979) 3 SCC 229 : AIR 1979 SC 1459.

ZERO RATING AS THE DEMON AND THE SAVIOUR: RETHINKING NET NEUTRALITY AND FREEDOM OF EXPRESSION FOR THE GLOBAL SOUTH

Smarika Kumar[*]

ABSTRACT *Zero-rated mobile applications like Internet.org have been characterised both as a supposed exterminator of the digital divide and as a violation of net neutrality in developing countries like India. This serves to illustrate how net neutrality and bridging digital divide have been posited as goals in contradiction to each other. How this seeming contradiction is relevant to developing a more nuanced understanding of the freedom of speech and expression and of net neutrality is the subject of the present paper. Accordingly, the paper is divided into three broad sections: I begin by analysing how far different conceptions of freedom of speech and expression respond to private forms of clamping of speech. To do this, I invoke Jack Balkin's theory of democratic culture and contextualise it against the jurisprudence on freedom of expression in contexts of private discrimination in India. I then illustrate how a negative interpretation of net neutrality is able to successfully address some of these forms of private discrimination. Thereafter, the second section begins by*

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tracing the forms of private discrimination, which negative net neutrality is unable to address by delineating the different kinds of (lack of) internet access. It then maps these factors hindering internet access against two important aspects of freedom of speech and expression, viz. the principle of media diversity and the goal of expanding citizens' access to media infrastructure, some aspects of which can be termed structural media access. In the third section of this paper, I argue that the delinking of the principles of media diversity and structural media access in law and policy debates hinders an inclusive response to all forms of private discrimination. Thereafter, through an examination of TRAI's policy engagement with these issues, I argue that these principles need to be relinked for the development of a concept of net neutrality which comprehensively addresses the concerns of freedom of speech and expression for citizens in the global south.

I. INTRODUCTION

The proliferation of zero-rated internet services has initiated concern regarding net neutrality debate in the developing world. Usually offered in the form of mobile internet apps, zero-rated internet refers to digital services which offer content to users free of mobile data costs. Facebook's Internet.org (later, rebranded as "Free Basics"[1]), which has been offered in certain developing countries[2] including in India[3], has been one of the most discussed examples of such services. According to Facebook CEO, Mark Zuckerberg, Internet.org will contribute to diminishing the digital divide by allowing people to access the internet at lower cost.[4]

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[1] Srinivasan Ramani, *Facebook rebrands internet.org platform as "Free Basics by Facebook,"*The Hindu, 25 September 2015, available at <http://www.thehindu.com/sci-tech/technology/internet/facebook-rebrands-internetorg-platform-as-free-basics-by-facebook/article7686680.ece>, *last accessed 03 January 2017.*

[2] Internet.org by Facebook, *Where We Have Launched, Facebook, available at* <https://info.internet.org/en/story/where-weve-launched/>*, last accessed 03 January 2017.*

[3] Facebook, Internet.org App Now Available In India, 10 February 2015, available at <http://newsroom.fb.com/news/2015/02/internet-org-app-now-available-in-india/>, last accessed 03 January 2017. This was also followed by zero-rating app offer by Airtel in India, *see* Firstpost on 21 April 2015, available at <http://tech.firstpost.com/news-analysis/timeline-airtel-zero-to-internet-org-what-fuelled-the-ongoing-net-neutrality-debate-in-india-264130.html>, *last accessed 03 January 2017.*

[4] Jonathan Barnes, *Inside Facebook's Ambitious Goal To Bridge The Digital Divide With Drones,* 31 March 2014, *available at*<http://www.forbes.com/sites/ptc/2014/03/31/inside-facebooks-ambitious-goal-to-bridge-the-digital-divide-with-drones/#7e6cb161e430>, *last accessed* 03 January 2017.

But contrary to its misleading name, Internet.org does not provide free access to the *entire* internet. In fact, it cherry picks internet content services which Facebook deems useful for the financially-lacking users of Internet.org. Content on Internet.org has been limited, among others, to certain websites providing information about weather, news, dictionaries, medical assistance, sports updates, and of course, Facebook. Consequently, Internet.org has been accused of attempting to create a "poor person's internet,"[5] by leaving out large portions of the internet out of its offer of Internet.org as well as of distorting market competition against local internet content platforms and individual content creators like bloggers which are not part of the Internet.org scheme.[6] Another point of criticism has been that since Internet.org can be accessed only through a "qualifying" mobile operator[7], it also distorts competition in the telecommunications market.[8] And since it does not treat all internet traffic equally, but rather works by prioritising certain content over others, it is argued to be in violation of net neutrality, which may be broadly understood as a principle of non-discrimination between different kinds and sources of internet content by private owners of internet media infrastructure.[9]

In this manner, like other zero-rated services, Internet.org has been characterised both as a supposed exterminator of the digital divide and as a violator of net neutrality. But what do these characterisations mean for the

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[5] Cory Doctorow, *'Poor Internet for Poor People': India's Activists Fight Facebook Connection Plan*, 15 January 2016, *available at* <https://www.theguardian.com/world/2016/jan/15/india-net-neutrality-activists-facebook-free-basics>, *last accessed* 03 January 2017.

[6] It should be noted that Facebook claims that any content provider can join Internet.org, but it still means that Facebook is exercising a gatekeeping function upon the users of Internet.org by *choosing* which content application is made available, rather than making all internet content available. *See infra* note 18 for elaboration on this criticism.

[7] The description for Facebook Free Basics on Google Play states, "*With Free Basics, you can connect to Facebook and other websites for free using a SIM card from* a qualifying mobile operator. *Stay in touch with friends and family, search for jobs, check out news and sports updates, and get health information – all without data charges*." (emphasis added), *available at*<https://play.google.com/store/apps/details?id=org.internet&hl=de>, last accessed 03 January 2017.

[8] Nikhil Pahwa, *What Mark Zuckerberg Didn't Say About Internet.org*, 10 October 2014, *available at* <http://www.medianama.com/2014/10/223-zuckerberg-india-internet-org/>, *last accessed 03 January 2017*; The Economist, *Why Facebook's "free internet" effort is in trouble in India*, 06 January 2016, *available at*<http://www.economist.com/blogs/economist-explains/2016/01/economist-explains-3>, last accessed 03 January 2017; Mathew Ingram, *Is Facebook's Internet.org project a charitable effort or a customer acquisition strategy?*, Fortune Magazine, 20 May 2015, available at <http://fortune.com/2015/05/20/facebook-internet-org/> , *last accessed* 03 January 2017.

[9] This generic understanding of net neutrality is based on the work of Tim Wu, who coined the term. See, Tim Wu, Network Neutrality FAQ, available at <http://www.timwu.org/network_neutrality.html>, *last accessed* 13 February 2018.

freedom of expression on the internet? The broad aim of this paper is to address this question by unravelling the implications of the net neutrality debate on the freedom of speech and expression on the internet. The contextual focus on zero-rated internet services in this regard is of special relevance for developing countries like India which have seen a significant rise in such services.

One might ask why it is important to contextualise the net neutrality debate against the idea of freedom of expression, especially since the issue of net neutrality stems from techno-commercial concerns of the private sphere.[10] On the other hand, as one of the fundamental rights for democracy, freedom of expression qualifies soundly as a public issue, and seems to have little direct relationship with the private technical/economic sphere of net neutrality. However in reality, the debates of net neutrality and those of freedom of expression online are actually deeply intertwined. A legal governance mechanism embodying net neutrality principles has consequences for the original architecture of the internet,[11] which is widely (if questionably) assumed to be more decentralised, and therefore have more democratic potential than the media preceding it.[12] It is argued that a legal design embodying net neutrality is essential to prevent a compromise of this architecture.[13] Such a compromise can occur through arbitrary discrimination by the owners of "private conduits of public expression"[14] on the internet,[15] which can seriously erode citizens' right to freedom of speech and expression in the digital sphere.[16] These private conduits- the material networks through which information on the internet flows (viz. cable internet networks, dedicated

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[10] V. Sridhar and Rohit Prasad, *How Complex is Net Neutrality?,* OUP BLOG http://blog.oup.com/2015/05/how-complex-is-net-neutrality/ (last updated May 8, 2015).

[11] Barbara Van Schewick, *Internet Architecture and Innovation,* 355-375 (2010).

[12] Lawrence Lessig, *The Architecture of Innovation*, 51 Duke L. J. 1783 (2002); *See* also generally, Barbara Van Schewick, *Internet Architecture and Innovation (2010),*Jonathan Zittrain, *The Future of the Internet* (2008),LAWRENCE LESSIG, *Code Version: 2.0* (2006).

[13] Barbara van Schewick, *Towards An Economic Framework for Network Neutrality Regulation,* 5 Journal of Telecommunications and High Technology Law, 338-340 (2007); Parminder Jeet Singh, *Net Neutrality Is Basically Internet Egalitarianism,* Economic and Political Weekly, *Vol. 5, Issue no. 19* (09 May 2015); *supra* note 4 , 96-97, 387-388.

[14] Dawn Nunziato, *Virtual Freedom: Net Neutrality and Freedom of Speech in the Internet Age,* 1-23 (2009).

[15] Nikhil Pahwa, *Airtel Wants To Ruin The Internet By Bringing In A Digital VIP Culture,* Scroll.in, 7 April 2015, *available at*<https://scroll.in/article/718820/airtel-wants-to-ruin-the-internet-by-bringing-in-a-digital-vip-culture> (*last accessed* 3 January 2017); Sean Hollister, *Netflix Accuses Comcast of Charging Twice for the Same Internet Content,* The Verge, April 24, 2014, *available at*<http://www.theverge.com/2014/4/24/5650406/netflix-accuses-comcast-of-double-dipping-with-isp-toll> (*last accessed* 3 January 2017).

[16] Dawn Nunziato *Supra* note 14, 2-23.

leased lines, optic fibre networks, mobile spectrum networks or satellite internet)- constitute the infrastructure for the internet media.[17] It is the huge gatekeeping power which private actors exercise over this internet media infrastructure[18] that has led to concerns about the limitation of freedom of speech and expression on the internet, and its subsequent adverse impact for democracy.[19]

All this hints that the boundaries between the public right to free expression and the private sphere of commercial negotiations and net neutrality are blurry.[20] One cannot really hope to understand net neutrality, either descriptively or normatively, without delving into what free expression online really means or should mean, and vice-versa. Engaging with one provides the missing link to comprehensively engaging with the other. This is what the present paper hopes to do. It asks how far freedom of expression on the internet is protected through our understandings of net neutrality. What implications do such understandings of net neutrality have for media diversity and digital divide? Relatedly, how can we reimagine net neutrality, especially in the global south context of India, such that it really protects and enhances the democratically-cherished idea of freedom of expression?

To approach these questions, I refrain from laying down the definitions of either "net neutrality" or "freedom of expression"at the beginning, since both are terms with evolving meanings that also vary according to the philosophical lens used to understand them.[21] The paper rather approaches these terms by mapping their diverse socio-legal understandings in the context of citizens' interests to lay down a theoretical framework for a freedom of expression-oriented conception of net neutrality.[22] The hope is that such

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[17] Throughout this paper, I use the terms "media/internet infrastructure" and "infrastructure for media/internet" interchangeably to mean the material or physical infrastructure which makes media/internet possible.

[18] Parminder Jeet Singh, *Net Neutrality Is Basically Internet Egalitarianism,* Economic and Political Weekly, Vol. 50, Issue no. 19(09 May 2015); Pranesh Prakash, *Regulatory Perspectives on Net Neutrality*, The Centre for Internet and Society, 08 July 2015, *available at*<http://cis-india.org/internet-governance/blog/regulatory-perspectives-on-net-neutrality> (*last accessed* 03 January 2017).

[19] Anita Gurumurthy, *Net Neutrality at a Crossroads: Why India's Policy Process has Important Lessons for the US,* OpenDemocracy, 30 November 2017, available at <https://www.opendemocracy.net/anita-gurumurthy/net-neutrality-crossroads-heres-why-india-s-policy-process-has-important-lessons-fo> (*last accessed* 13 February 2018).

[20] Christopher T. Marsden, *Net Neutrality: Towards A Co-Regulatory Solution,* 1-2 (2010).

[21] *See*, Gautam Bhatia, *Offend, Shock, or Disturb*3-24(2016), for a discussion on how the legal understanding of freedom of speech and expression depends on the legal theory used to conceptualise it.

[22] In using this methodological approach, I draw on the work of STS scholars like Shoshana Zuboff who understands technical concepts (in her case, big data) as a social process rather than an autonomous technological effect. See, Shoshana Zuboff, Big Other: Surveillance

mapping will allow a deeper and more nuanced understanding of these concepts and consequently, more responsive governance centred on the citizen.

To do this, the paper is divided into three major sections: I begin by analysing how far different conceptions of freedom of speech and expression respond to private forms of clamping of speech. To do this, I invoke Jack Balkin's theory of democratic culture and contextualise it against the jurisprudence on freedom of expression in contexts of private discrimination in India. I then illustrate how a negative interpretation of net neutrality is able to successfully address some of these forms of private discrimination. Thereafter, the second section begins by tracing the forms of private discrimination, which negative net neutrality is unable to address by delineating the different kinds of (lack of) internet access. It then maps these factors hindering internet access against two important aspects of freedom of speech and expression, viz. the principle of media diversity and the goal of expanding citizens' access to media infrastructure, some aspects of which can be termed structural media access. In the third section of this paper, I argue that the delinking of the principles of media diversity and structural media access in law and policy debates hinders an inclusive response to all forms of private discrimination. Thereafter, I argue that such delinking hinders the development of a concept of net neutrality which comprehensively addresses the concerns of freedom of speech and expression for citizens in the global south by examining TRAI's policy engagement with these issues.

A couple of points regarding the scope of the present paper need to be underscored in order to pre-empt the misconstruction of its arguments. First, this paper responds to the net neutrality debate in the context of zero-rating practices via the limited framework of freedom of expression. It does not, in any comprehensive way, take into account alternative frameworks like competition and innovation, to name a couple, through which zero-rated internet applications can and need also be analysed for any efficient law- and policy-making to occur. Consequently, the present paper refrains from providing any comprehensive legal policy or governance solutions to the phenomenon of zero-rating in developing countries- it deals with only one aspect of it, viz. the freedom of speech and expression.

The second point is that the present paper limits itself to analysing only mobile-based zero-rating. This is because, first, since the economic, access and experiential ecologies of broadband and mobile data/internet are quite

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Capitalism and the Prospects of an Information Civilisation, J. of Info Tech., 30 75-89 (2015). Like her, I propose understanding net neutrality as a social process, shaped also through legal influence, rather than as something rooted in the inherent architecture of the internet.

different, it is possible that arguments applying within one context would not be valid within another. Second, the ratio of mobile connections (5.6 billion) to fixed line internet connections (572 million) in developing countries is 10:1, which is a significant difference from the developed world ratio of 3:1.[23] This potentially makes mobile-based zero-rating way more relevant for developing countries like India. And third, because mobile internet is emerging as an increasingly popular as a mode of internet access – at the end of December 2015, India had over 331 million internet subscribers in the country, of which about 94% were wireless internet users[24] - it is appropriate that mobile-based zero-rating become the focus of this analysis.

II. NET NEUTRALITY AS A RESPONSE TO PRIVATE DISCRIMINATION OF FREE EXPRESSION

A. Forms of private control of speech and expression

Traditionally, the State has been understood as the most powerful presence in the public sphere, and therefore, usually it is against the State that the freedom of expression has been invoked by law.[25] However, in the past century, there has been an increasing recognition of the vast influence that private entities wield on communication within public spheres around the world.[26]

This has been characterised by two distinct threads: First, cases of private instances of censorship that occur when creators and distributors of expression lose faith in the State enforcement of the rule of law.[27] These cases raise

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[23] International Telecommunications Union, *World Telecommunication/ICT Indicators Database, ITU: Geneva 19*th *edition* (1 July 2015), *available at* <http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>,(*last accessed* on 03 January 2017).

[24] Telecom Regulatory Authority of India, *The Indian Telecom Services Performance Indicators,* September-December 2015; *see* also, Telecom Regulatory Authority of India, *Pre-Consultation Paper on Net Neutrality*, 30 May 2016, 1

[25] *See* for example, *Ranjit D. Udeshi* v. *State of Maharashtra*, AIR 1965 SC 881; *S. Rangarajan v. P. Jagjivan Ram*, (1989) 2 SCC 574 : (1989) 2 SCR 204*, Bobby Art International v. Om Pal Singh Hoon*, (1996) 4 SCC 1; *Shreya Singhal v. Union of India*, (2015) 5 SCC 1 : AIR 2015 SC 1523.

[26] Dawn Nunziato *Supra* note 14*; see* also Laura Stein, *Speech Rights in America: The First Amendment, Democracy and the Media (2006);* Gautam Bhatia *Supra* note 21, 257-280

[27] An example of this phenomenon is the private agreement made by Penguin India with certain religious fundamentalist groups to pulp all copies of The Hindus: An Alternative History, a book by American Indologist, Wendy Doniger, and in the decision of renowned Tamil writer, Perumal Murugan, to stop writing in face of threats of violence from other private citizens. See, Jason Burke, *Outcry as Penguin India pulps 'alternative' history of Hindus, 13 February 2014, available at* <https://www.theguardianotecom/world/2014/

the larger concern of the breakdown of the rule of law and require a broader discussion on State and constitutional legitimacy, which is beyond the scope of the present paper. However, I outline this thread because it is important to distinguish it from a second thread of private censorship cases which relate to the rise of powerful media firms that control the content and distribution channels for the citizen.[28]

This second thread concerns the ability of private entities, in their role as market participants, to censor and distort speech and expression within the public sphere, based on commercial considerations like competition and advertising revenue. In India, this private influence on the public sphere was recognised as problematic by the First Press Commission Report[29] way back in 1954, which noted that the market dominance of certain privately owned newspapers could be detrimental to the freedom of expression of other citizens.[30] Since then, there have been several judicial and policy discussions in the context of different media to address this issue of private power over public speech.[31] The exercise of this power has implications for freedom of expression in two ways:

(i) Direct discrimination: This refers the use of power to distort the free expression of certain citizens over others by preventing them from expressing themselves or communicating to other individuals or the public at large. Typical examples of such discrimination include *censorship* of certain speech or expression by the private entity, usually for directly or indirectly fulfilling commercial ends. It has a direct discriminatory impact through the restriction of expression by certain citizens or entities over others.

(ii) Indirect discrimination: As the nomenclature suggests, indirect discrimination refers to a more indirect interference in freedom of expression of certain citizens over others. An example of this might be

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feb/13/indian-conservatives-penguin-hindus-book>, *last accessed* 03 January 2017. *See* also, Gautam Bhatia, The Fault in Our Speech, 07 July 2016, available at <http://www.thehindu.com/opinion/lead/perumal-murugan-book-controversy-and-madras-high-court/article8816396.ece>, (last accessed 03 January 2017)

[28] Robert W. McChesney and Dan Schiller, *The Political Economy of International Communications,* United Nations Research Institute for Social Development (October 2003), available at <http://www.unrisd.org/UNRISD/website/document.nsf/d2a23ad-2d50cb2a280256eb300385855/c9dcba6c7db78c2ac1256bdf0049a774/$FILE/mcchesne.pdf>, (*last accessed* 7 January 2017).

[29] Government of India, *First Press Commission Report* (1954).

[30] *Sakal Papers (P) Ltd.* v. *Union of India*, AIR 1962 SC 305.

[31] *See* for example, *Bennett Coleman & Co.* v. *Union of India*, (1972) 2 SCC 788 : AIR 1973 SC 106; *Indian Express Newspapers (Bombay) (P) Ltd.* v. *Union of India*, (1985) 1 SCC 641 : AIR 1986 SC 515; *Ministry of Information and Broadcasting, Govt. of India* v. *Cricket Assn. of Bengal*, (1995) 2 SCC 161 : AIR 1995 SC 1236.

> the promotion (and consequent indirect hindrance) to the circulation of certain speech or expression by the concerned private entity, usually for directly or indirectly fulfilling commercial ends. In the digital context, this can mean the promotion of certain kinds of content over others by making them more visible in search results or on social media[32] or the preferential treatment of content from certain sources over others.[33] But it can also include practices of network traffic management.[34] Unlike direct discrimination, it is less clear whether indirect discrimination is harmful or advantageous to citizens.[35]

Private power can thus interfere in freedom of expression by perpetuating discrimination. This issue of the power of private entities to control public speech has come into even starker focus since early 2000s with the widespread use of digital media.[36] One key feature of the internet is its highly decentralised architecture rooted in the end-to-end principle.[37] While this architecture is argued to have huge democratic potential,[38] it also implies that private network owners like Internet Service Providers (ISPs) have the power to control how and what information flows on the networks they own. In other words, network owners can block certain digital expression (negative discrimination), or offer certain content only for a higher or lower price in relation to other content (positive discrimination). This power can and has been exercised by private network owners in the past for commercial ends.[39]

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[32] *See* for example, Emily Bell, *Why Facebook's news feed changes are bad news for democracy,* The Guardian, 21 January 2018, *available at* https://www.theguardianotecom/media/media-blog/2018/jan/21/why-facebook-news-feed-changes-bad-news-democracy, (*last accessed* 14 February 2018).

[33] *See* for example, Kelsey Campbell-Dollaghan, *Netflix Agrees to Pay Comcast for Access to Its Broadband Network,* Gizmodo, 23 February 2014, available at <https://gizmodo.com/report-netflix-agrees-to-pay-comcast-for-access-to-bro-1529115565>, (*last accessed* 14 February 2018).

[34] Edward W. Felten, *Nuts and Bolts of Net Neutrality 6-7 (*2006), *available at* <https://www.cs.princetonoteedu/courses/archive/fall09/cos109/neutrality.pdf>, (*last accessed* 14 February 2018).

[35] Christopher T. Marsden *Supra* note 20, 83-104.

[36] *See* generally, Jonathan Zittrain, *The Future of the Internet* (2008); Lawrence Lessig, *Code Version: 2.0* (2006).

[37] *Supra* note 20, 29.

[38] *See* Jack M. Balkin, *Digital Speech And Democratic Culture: A Theory of Freedom of Expression For The Information Society,* 79 NOTEY.U. L. Rev. 6-9 (2004), arguing that the original internet architecture has a unique democratic potential. This is however a contested argument. *See* Laura DeNardis, *Protocol Politics: The Globalisation of Internet Governance* (2009), and Alexander Galloway, *Protocol: How Control Exists after Decentralisation* (2004), for arguments on how the original internet architecture is complicit in perpetuating undemocratic power over the internet.

[39] *Supra* note 15.

B. The Capitalist Theory of Free Speech and its Obliviousness to Private Discrimination

It may be argued that the exercise of power by private network owners for directly or indirect discriminating speech and expression flowing on their networks is perfectly permissible because these networks constitute their private property. Accordingly, it is the imposition of a net neutrality regulation on such private network owners that will, in fact, lead to a violation of the freedom of expression. Such arguments are based on what American legal scholar, Jack Balkin has termed the "capitalist theory of free speech." According to Balkin, the capitalist theory identifies freedom of speech with the ownership of distribution networks for digital content.[40] In other words, freedom of expression under this theory is thought to be protected when the owners of speech distribution networks are not subject to any restrictions.

Balkin notes that among other areas, the capitalist theory has been influential in the judicial interpretation of digital telecommunications law in the United States.[41] Consequently, telecommunications companies including ISPs and cable broadband providers have successfully argued in American courts that State regulation which curbs their power to discriminate what or how content flows on their networks stands in violation of their freedom of expression as speakers and editors.[42] This judicial trend has also been attributed to a "negative conception"[43] of the First Amendment to the American Constitution.[44] A negative conception refers to the interpretation of freedom of speech and expression as a negative liberty, whereby the only obligation of the State is to not unlawfully interfere in arenas where public speech, expression and exchange of ideas occur. Such conception finds its beginnings in legal formalism.[45] Consequently, the First Amendment has often been interpreted as an obligation by the State to not regulate media firms on grounds that are outside of the considerations of upholding a free market.[46] In the process, the property rights of the media firms are reinforced to the

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[40] Jack M. Balkin, *Digital Speech And Democratic Culture: A Theory of Freedom of Expression For The Information Society*, 79 NOTEY.U. L. Rev. 19 (2004).

[41] *See,* for example, *Time Warner Entertainment Co.* v. Federal Communications Commission, 240 F 3d 1126, 1136, 1139 (DC Cir 2001); *Comcast Cablevision Inc.* v. *Broward County*, 124 F Supp 2d 685, 694 (SD Fla 2000); *US West Inc.* v. *United States*, 48 F 3d 1092, 1095 (9th Cir 1994); *Chesapeake & Potomac Telephone Co.* v. *United States*, 42 F 3d 181, 202 (4th Cir 1994).

[42] *Ibid.*

[43] Dawn Nunziato *Supra* note 14, 24.

[44] The relevant portion of the First Amendment to the U.S. Constitution reads: "*Congress shall make no law abridging the freedom of speech, or of the press.*"

[45] Dawn Nunziato *Supra* note 14, 36.

[46] Laura Stein, *Speech Rights in America: The First Amendment, Democracy and the Media* 33-36 (2006).

exclusion of everyone else in all circumstances, as such an interpretation allows the media firm to do what it pleases over the networks it owns. The capitalist theory of free speech thus remains the overarching philosophy of this negative conception of freedom of expression.

However, the manifestation of the capitalist theory of free speech is hardly limited to American jurisprudence. In India as well, some of the most crucial judgments on freedom of speech and expression seem rooted in the capitalist theory. The Supreme Court judgment in *Sakal Papers (P) Ltd.* v. *Union of India*[47] is one example. *Sakal* concerned a State regulation that prescribed a minimum price below which big newspapers could not be sold. Such fixing of minimum price was done so that small newspapers, which could not easily attract advertising revenue, would not be driven out of business by big newspapers like *Sakal,* which could. The rationale of the regulation, therefore, was to "*prevent unfair competition amongst newspapers*"[48] and "*to prevent the rise of monopolistic combines so that newspapers may have fair opportunities of freer discussion.*"[49] One of the questions before the Court consequently was whether the regulation stood in violation of the big newspapers' Constitutional freedom of speech and expression? This question arose since such fixing of minimum price would make them more expensive and therefore likely to curtail the volume of their circulation. The Supreme Court employed a formalistic mode of interpretation to conclude that the newspapers' right to circulate as much volume as they wanted was an essential part of the freedom of speech and expression.[50] On that basis, it held that the intervention of the impugned State regulation, even though it was in the interest of creating fair opportunities for freer discussion, was not constitutionally permissible since it would encroach upon these newspapers' private networks of circulation.[51]

Under this judicial rationale, irrespective of the objective of State intervention, it is only a State policy which maintains a hands-off outlook to newspapers' circulation networks that will survive *Sakal's* constitutional test of free speech.[52] Consequently, this rationale also serves to strengthen

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[47] Sakal Papers Case *Supra* note 30.
[48] Sakal Papers Case *Supra* note 30, ¶11.
[49] *Ibid.*
[50] Sakal Papers Case *Supra* note 30, ¶31.
[51] Sakal Papers Case *Supra* note 30, ¶42.
[52] For an in-depth analysis of *Sakal,* see, Gautam Bhatia, *Sakal Papers v. Union of India – I: Why Do We Have The Freedom of Speech?,* 02 August 2013, *available at* <https://indconlawphil.wordpress.com/2013/08/02/sakal-papers-v-union-of-india-why-do-we-have-the-freedom-of-speech/>, *(last accessed* 08 January 2017); Gautam Bhatia, *Sakal Papers II: An Addendum – what is the Government permitted to do?,* 03 August 2013, *available at* <https://indconlawphil.wordpress.com/2013/08/03/

the idea of property rights which private newspapers claim in their circulation networks, to the exclusion of everyone else, including the State. In this way, the rationale of the *Sakal* also reflects the capitalist theory of the freedom of speech.

The question to ask for our analysis is whether the philosophical groundings of the capitalist theory are adequate for the protection of freedom of expression on the internet? The answer seems obvious. Since the capitalist theory roots the idea of free speech in ownership of the channels of communication, it would hardly view any kind of discrimination by private entities who own these channels as a violation of free speech. If the principle of net neutrality is understood to impose legal obligation of non-discrimination of expression that flows even on the private owner of broadband networks or other internet infrastructure[53], and therefore constitutes interference by the State in privately-owned media networks, it would constitute a free speech violation within the philosophical framework of the capitalist theory.

C. Addressing Private Forms of Discrimination through Democratic Culture of Expression

What we have seen so far is that capitalist theory's hypersensitivity to the power of the State to disrupt communication in private spaces makes it totally oblivious to the ways in which private economic power operating through markets can corrupt democratic processes.[54] This obliviousness also manifests itself in Indian jurisprudence in judgments like *Sakal*, which though traditionally hailed as landmark for the protection of freedom of expression[55], has been criticised by more recent scholarship for this reason.[56]

It is to combat this obliviousness, particularly in the digital context,[57] that Jack Balkin evolves his theory of democratic culture.[58] The emphasis of this

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sakal-papers-an-addendum-what-is-the-government-permitted-to-do/>, *(last accessed* 08 January 2017); Gautam Bhatia, *Sakal Newspapers v. Union of India – I: Why Do We Have The Freedom of Speech?*, 02 August 2013, *available at* <https://indconlawphil.wordpress.com/2013/08/02/sakal-papers-v-union-of-india-why-do-we-have-the-freedom-of-speech/>, *(last accessed* 08 January 2017); Gautam Bhatia, *Free Speech and Newspaper Regulation- III: What does it mean to "abridge"?*, 23 August 2013, *available at* <https://indconlawphil.wordpress.com/2013/08/23/free-speech-and-newspaper-regulation-iii-what-does-it-mean-to-abridge/>,*(last accessed* 08 January 2017).

53 Tim Wu *Supra* note 9.

54 Laura Stein *Supra* note 46, 16.

55 H.M. Seervai, *Constitutional Law of India: A Critical Commentary*, Vol. 1 454 (1983).

56 *See* for example, Smarika Kumar, *Concentration of Media Ownership and the Imagination of Free Speech,* 51 Economic and Political Weekly, 128-131 (2016); Gautam Bhatia, *Offend, Shock, or Disturb* 22-24(2016).

57 Jonathan Zittrain *Supra* note 36; Balkin *Supra* note 40.

58 Balkin *Supra* note 40, 31.

theory lies on understanding free speech as a principle larger than democracy in the narrow sense of voting and elections as well as larger even than democracy in the sense of public deliberation about issues of public concern. The theory posits the concept of free speech not merely at the level of governance or governance, but at the level of culture.[59] This broad conception of free speech allows one to move beyond the exercise of the freedom only in the public sphere, viz., against the State like the capitalist theory focuses on. By connecting free speech to a democratic culture, the theory of democratic culture thus gives us a philosophical framework to recognize, conceptualise and limit private economic power over freedom of expression.

In jurisprudential analysis, the theory of democratic culture manifests itself in the development of an affirmative conception of freedom of speech, which instead of legal formalism, is rooted in balance of interests approach.[60] According to this approach, State intervention in private media infrastructure is best understood by perceiving the former as a tool through which the interests of those who are seeking to regulate versus the interests of those whose expression is to be regulated, are sought to be balanced.[61] Based on this, it has been argued that the doctrines of public forum, state action, fairness, common carriage, and must-carry obligations in American jurisprudence all contribute to solidifying the affirmative conception of freedom of speech, and consequently, the arguments for upholding net neutrality in law and policy making.[62]

Indian jurisprudence has also borrowed some of these, like the state action doctrine[63] and fairness doctrine from American jurisprudence[64], and some others, like the common carriage principle from English jurisprudence.[65] The affirmative conception of freedom of speech is also found in Indian jurisprudence,[66] notably in Justice Mathew's dissent in *Bennett Coleman &*

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[59] Balkin *Supra* note 40, 32.
[60] Dawn Nunziato *Supra* note 14, 36.
[61] *Ibid*.
[62] Dawn Nunziato *Supra* note 14, *see* Chapter 3 generally.
[63] *See* for example, *Board of Control for Cricket in India* v. *Cricket Assn. of Bihar*, (2015) 3 SCC 251, *Inter Media Publishing Ltd*. v. *State of Kerala*, 2015 SCC OnLine Ker 18656.
[64] *See* for example, *Bennett Coleman & Co*. v. *Union of India*, (1972) 2 SCC 788 : AIR 1973 SC 106; *Ministry of Information and Broadcasting, Govt. of India* v. *Cricket Assn. of Bengal*, (1995) 2 SCC 161 : AIR 1995 SC 1236.
[65] S*aghir Ahmad* v. *State of U.P.*, AIR 1954 SC 728; *see* also, Bhairav Acharya, *Net Neutrality and the Law of Common Carriage,* 16 January 2015, *available at* <http://cis-india.org/internet-governance/blog/net-neutrality-law-of-common-carriage.pdf>*, (last accessed* 08 January 2017).
[66] Smarika Kumar, *Governing Speech on the Internet: From the Free Market Policy to a Controlled 'Public Sphere'*28 August 2015, *available at* <http://cis-india.org/raw/blog_governing-speech-on-the-internet>, (*last accessed* 08 January 2017).

Co. v. *Union of India*, and in the Supreme Court judgment in *Ministry of Information & Broadcasting, Govt. of India* v. *Cricket Assn. of Bengal.*[67]

Drawing upon the democratic culture theory, arguments have also been made in literature that legal recognition of the net neutrality principle in India would preserve the affirmative conception of the freedom of speech, which would be in consonance with Article 19(1)(a) of the Constitution.[68] Since net neutrality is a principle of non-discrimination[69], it allows for State intervention in privately-owned internet infrastructure to prevent private forms of discrimination.[70] This is necessary to enable and strengthen individual participation in all cultural exchanges that occur on the internet, which as per the theory of democratic culture, is essential to the idea of freedom of speech and expression. Thus in contrast to the capitalist theory, the principle of net neutrality becomes not just compatible with the protection of freedom of expression, but also essential to protect it.[71]

D. Democratic Culture and Direct Discrimination: The Formulation of Negative Net Neutrality

Across the world, many legal and policy interventions addressing private discrimination of speech and expression on internet through deployment of the net neutrality principle have already been made. The first of such net neutrality law in the world was Act 20453, Ley queestablece la neutralidad de la red para consumidores y usarios de Internet, which was passed by the Chilean national legislature in 2010. The law lays down that internet service providers "*cannot arbitrarily block, interfere, discriminate, obstruct or restrict user's right to use, send, receive or offer*" internet content.[72] This was followed by the enactment of Marco Civil da Internet[73] by the Brazilian Senate in 2014, which among other things, lays down, "*when providing internet connectivity, free or at a cost, as well as, in the transmission, switching or routing, it is prohibited to block, monitor, filter or analyze the*

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[67] Bennett Coleman Case *Supra* note 64. For a detailed analysis of these cases and how they reflect the affirmative conception of freedom of speech, *see* Smarika Kumar, *Concentration of Media Ownership and the Imagination of Free Speech,* 51Economic and Political Weekly, 128-131 (2016); Gautam Bhatia, *Offend, Shock, or Disturb* 294-297(2016).

[68] *See*, *for example*, Gautam Bhatia, *Offend, Shock, or Disturb* 315-320(2016); Smarika Kumar, *Net Neutrality for a Web of Equals,* 18 April 2015, *available at* <http://www.thehinducentre.com/the-arena/current-issues/article7117145.ece>, (*last accessed* 08 January 2017).

[69] Tim Wu *Supra note* 9.

[70] Nikhil Pahwa *Supra* note 15; *see* also Jonathan Zittrain *supra* note 36.

[71] Gautam Bhatia *Supra note* 21, 19.

[72] State of Chile, Act 20453, Article 24H (2010).

[73] State of Brazil, Act 12965 (2014).

content of data packets."[74] Other South American countries like Colombia and Peru have also been active in developing net neutrality legislations.[75]

Though there are differences,[76] one will note that the emphasis in these earliest net neutrality laws is upon prevention of a particular kind of private discrimination, viz., direct discrimination. Such interpretation of net neutrality has been termed as "negative net neutrality" in legal literature.[77]

In February 2015, this concept of negative net neutrality was translated by the U.S. Telecommunications Regulator, FCC, into two basic principles as part of the "bright-line rules"[78] in its Open Internet Order[79]: First, the principle of no blocking, which lays down that broadband providers may not block access to legal content, applications, services, or non-harmful devices.[80] Second, the principle of no throttling, which lays down that broadband providers may not impair or degrade lawful Internet traffic on the basis of content, applications, services, or non-harmful devices.[81] In November 2015, the European Union also adopted the Regulation on Open Internet Access[82] which incorporates the principles of no blocking and no throttling in the EU Digital Single Market[83], thus broadly enshrining the concept of negative net neutrality.

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74 State of Brazil *Supra* note 73, Chapter 3, Section I., Article 9, §3.

75 Patricia Adriana Vargas-Leon, *Net Neutrality: An Overview of Enacted Laws in South America* in Net Neutrality Compendium: Human Rights, Free Competition and the future of The Internet *(eds. Belli and de Filippi),* 109-123 (2016).

76 Patricia Adriana Vargas-Leon *Supra* note 75, 110.

77 Christopher T. Marsden *Supra note* 20, 22-30; *see* also, Milton Mueller et al, *Net Neutrality as Global Principle for Internet Governance (2007), available at* <https://papers.ssrnotecom/sol3/papers.cfm?abstract_id=2798314>, *last accessed* 08 January 2017; Christian Sandvig, Network Neutrality Is The New Common Carriage (2007), *available at* <http://www-personal.umich.edu/~csandvig/research/Sandvig--Network_neutrality_is_the_new_common_carriage.pdf>, *last accessed* 08 January 2017; Edward W. Felten, *Nuts and Bolts of Net Neutrality (*2006), *available at* <https://www.cs.princetonoteedu/courses/archive/fall09/cos109/neutrality.pdf>, (*last accessed* 08 January 2017).

78 Federal Communications Commission (USA), *Open Internet* (2015), *available at* <https://www.fcc.gov/general/open-internet>, (*last accessed* 08 January 2017).

79 Federal Communications Commission (USA), *Open Internet Order,* FCC 15-24 (2015), *available at* <https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-24A1.pdf>, (*last accessed* 08 January 2017).

80 Federal Communications Commission (USA) *Supra* note 79, 7.

81 *Ibid*.

82 Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union (2015).

83 Digital Single Market (EU), *Open Internet* (2015), *available at* <https://ec.europa.eu/digital-single-market/en/open-internet-net-neutrality>, (*last accessed* 08 January 2017).

In India, the telecommunications regulator TRAI also issued Recommendations on Net Neutrality in November 2017 after extensive public consultations.[84] The Recommendations prohibit "*any form of discrimination, restriction or interference in the treatment of content including practices like blocking, degrading, slowing down,*"[85] thus embodying the principle of negative net neutrality.

E. Unpacking Zero Rating: Democratic Culture and Indirect Discrimination

However while essential, is this principle of negative net neutrality *enough* to protect freedom of expression online? To answer this, one needs to return to the philosophical framework of democratic culture to analyse what it really means to have free expression.

According to the theory of democratic culture, individual participation is an essential part of freedom of expression,[86] which implies having access to the media technologies (in this case, the internet) which make such participation possible. To this end, Balkin argues that freedom of expression means "*giving everyone – not just a small number of people who own dominant modes of mass communication, but ordinary people, too – the chance to use technology to participate.*"[87] In this manner, the democratic culture theory recognises the right of all citizens to have an opportunity to access the internet as an essential part of the freedom of speech and expression.

Zero-rated services claim to provide and enhance exactly this opportunity for internet access by providing internet content free of data cost, and thus eliminating the digital divide. Read in conjunction with the democratic culture theory, this claim can thereby also be understood as a claim to enhance freedom of expression on the internet.

However, the problem is that this claim is only made possible through private discriminatory practices whereby certain content is eliminated from the scope of the zero-rated service, and certain other content favoured, viz. through indirect discrimination. However, such indirect discrimination is argued to enhance the experience of the internet usage by improving some accessibility. The improvement of Quality of Service (QoS) has been one of the most prominent examples of such indirect discrimination. QoS

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[84] Telecom Regulatory Authority of India, *Recommendations on Net Neutrality*, 28 November 2017, 2-3.
[85] Telecom Regulatory Authority of India *Supra* note 84, 30.
[86] Jack M. Balkin *Supra* note 40, 40-42.
[87] Jack M. Balkin *Supra* note 40, 42.

improvement has been a prominent objective of internet engineering for a long time now,[88] and became especially relevant for internet users with the advent of the so-called "specialised services" like internet video, P2P, and online gaming, which consume large bandwidths and require reliable flow of data packet traffic[89] - in other words, better QoS. Often, the deployment of better QoS for specialised services has meant some erosion of absolute non-discrimination principles which negative net neutrality may prescribe.[90] Mirroring this phenomenon, the business model of mobile internet zero-rating allows the Mobile Network Operator (MNO) to discriminate between different internet content services to provide some for a reduced price or for 'free.'[91] Thus, like specialised internet services, zero-rating is also a phenomenon that imbibes private indirect discrimination[92], which can undermine online freedom of expression.

Private indirect discrimination thus seems to both enhance and undermine citizens' accessibility to the internet. It is in this background that the concept of 'positive net neutrality' has been formulated, which allows for certain discriminatory practices like offering higher QoS for higher prices as long as it is conducted on fair, reasonable, and equal terms to all.[93] The EU Regulation on Open Internet Access embodies the positive net neutrality principle by allowing for"*reasonable traffic management*"[94] and the offer of specialised services that are optimised to "*meet requirements of the content, applications or services for a specific level of quality*,"as long as it they are not offered in "*detriment of the availability or general quality of internet access services for end-users*."[95] On the other hand, positive net neutrality is not recognised under the FCC's bright line rules of 2015 which make a blanket prohibition on paid prioritisation of internet traffic by the ISP under their third principle.[96] In its Recommendations on Net Neutrality, TRAI leans towards the EU model in recognizing a principle of positive net

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88 Christopher T. Marsden *Supra* note 20, 58.
89 Edward W. Felten *Supra* note 34.
90 Nikhil Pahwa *Supra* note 15
91 It should however be noted that even though zero-rating apps might be offered for free in the sense of free from need for monetary consideration by the service-user, other kinds of consideration in the form of personal data alienation from the user are nevertheless made. *See* for discussion on this point, Christopher T. Marsden, Network Neutrality: A Research Guide, in Research Handbook on Governance of the Internet*(ed. Ian Brown)* 440-444 (2012).
92 Christopher T. Marsden, *Zero Rating and Mobile Net Neutrality* in Net Neutrality Compendium: Human Rights, Free Competition and the future of The Internet *(eds. Belli and de Filippi),* 245 (2016).
93 Christopher T. Marsden *Supra* note 20, 43.
94 Regulation (EU) 2015/2120 *Supra* note 82, Articles 3(3) & 3(4).
95 Regulation (EU) 2015/2120 *Supra* note 82, Articles 3(5).
96 Federal Communications Commission (USA) *Supra* note 79, 8.

neutrality by also allowing exceptions for "reasonable traffic management practices"[97] and for specialized services as long as they are "not detrimental to the availability and overall quality of internet access service."[98]

However, positive net neutrality in these instances has been specific to the addressing the advantages and disadvantages of indirect discrimination in the cases of traffic management, paid prioritization of content and specialized services.[99] What concept of net neutrality is needed to govern the consequences of indirect discrimination created by zero-rated practices? To address indirect discrimination created by zero-rating, TRAI issued a Regulation in February 2016 that prohibits the differential pricing of data services on the basis of source and content.[100] As a corollary, it also prohibits zero-rating practices. But what should one then make of the claim that zero-rating also improves internet accessibility? How can one make sense of this paradox where zero rating seems to both enhance opportunities to connect to (a portion of) the internet as well as perpetuate indirect private control over the citizens' expression online? What conception of net neutrality can create an effective legal response for this scenario? To answer this question, one needs to first clarify what exactly is meant by internet accessibility in this context and how it relates to indirect private discrimination. Subsequently, what precise aspects of freedom of expression are impacted by such lack of access to the internet? To address this, I map the relationship between these understandings of internet access as indirect discrimination in law and policy debates concerning net neutrality and zero rating in India in the next section.

III. ZERO RATING: MAPPING DEBATES AROUND MEDIA ACCESS

A. Meanings of Internet (In)Access

In public policy debates concerning net neutrality and zero-rating, the precise scope of the barriers to internet access, and therefore the meaning of internet access itself, has not always been clear. Because of this, net neutrality

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[97] Telecom Regulatory Authority of India *Supra* note 84, 30.

[98] Telecom Regulatory Authority of India *Supra* note 84, 29.

[99] In addition, TRAI in its recommendations on net neutrality addresses indirect discrimination in the context of content delivery networks by excluding it from its net neutrality obligations, *see* in this regard, Telecom Regulatory Authority of India *Supra* note 84, 20-23.

[100] Telecom Regulatory Authority of India, *Prohibition of Discriminatory Tariffs For Data Services Regulations*, No. 2 of 2016.

discussions tend to mix up different understandings of access to the internet, often offering solutions from merely a competition law framework,[101] or from only a negative net neutrality perspective, when the problems concerning freedom of expression in its context are much wider. Consequently in the present section, I start by delineating the different kinds of internet (in) access which are faced by citizens that a comprehensive idea of freedom of expression must distinguish in the context of net neutrality.

The precise way in which the lack of internet access is experienced by the citizen relates to the manner in which private indirect discrimination over her speech or expression may be exercised. Many of these factors which result in the lack of internet access contribute to the digital divide. These factors and their relationship to private indirect discrimination of speech and expression are discussed below:

i. Access limited by price

Often, citizens are unable to access the internet simply because they are not able to afford the data price at which internet is offered by any MNO. This creates a situation whereby access to the internet is limited by price. Such lack of access perpetuates indirect discrimination between those who have the financial capability to access the internet and those who don't by preferring the circulation of speech of the former over the latter. Zero-rating, even as it perpetuates other forms of private discrimination,[102] is a business model which claims to provide solution to such lack of access.[103]

ii. Access limited by QoS

Access limited by QoS refers to a situation where citizens are not able to access content on internet because the quality of service is less than desirable. This results in indirect discrimination between those who have access to better QoS and those who do not, by preferring the circulation of speech online and receipt of information from the internet by the former over the latter.

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[101] *See, for example*, Barbara van Schewick, *Network Neutrality and Quality of Service: What A Non-Discrimination Rule Should Look Like,* 67 Stanford L. Rev. 14 (2015).

[102] Nikhil Pahwa, *A Change of Name To Free Basics Does Not Make Facebook's Zero Rating Service Neutral,* 25 September 2015, *available at*<http://www.medianama.com/2015/09/223-free-basics-internet-net-neutrality/>, *last accessed* 08 January 2017; Mahesh Murthy, *Poor Internet for Poor People: Why Facebook's Internet.org Amounts To Economic Racism,* 17 April 2015, *available at* <https://qz.com/385821/poor-internet-for-poor-people-why-facebooks-internet-org-amounts-to-economic-racism/>, *(last accessed* 08 January 2017).

[103] Mark Zuckerberg, Facebook post, (April 17, 2015), *available at* <https://www.facebook.com/zuck/posts/10102033678947881>, (last accessed 14 February 2018).

Internet access is often limited by QoS by lost data connections or a congested bandwidth or bad traffic management, and most remarkably affects internet experiences which consume high bandwidth in the context of specialised services like video streaming, P2P, hi-res images or online gaming.[104] Better network management practices can be a solution to this. One such proposed solution is the paid prioritisation of content, which even as it perpetuates other forms of private discrimination,[105] is a business model which claims to offer a solution to this QoS-limited barrier to internet access.[106]

iii. Access limited by infrastructure

This refers to a situation whereby the physical (mobile) network infrastructure which is necessary for making internet possible is itself not available in the geographical area where the citizen resides in. Often, especially in developing countries, the infrastructure is absent due to limited State resources[107] or the disinterest of MNOs in extending their services to these areas because they are not seen as commercially viable ventures. This results in indirect discrimination by preferring the speech of those who have access to such infrastructure over those who don't, for example, by preferring the online expression of urban residents over rural ones. Project Loon and Facebook Aquila are some business models, which even as they perpetuate other forms of private discrimination,[108] claim to offer a solution in situations when access is limited by infrastructure.[109]

I term the first of these three varieties of lack of access as structural barriers to internet access (more generally, structural barriers to media access)

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[104] Christopher T. Marsden *Supra* note 20, 3, 22.

[105] Zachary M. Seward, *Read Netflix's Plea to Ban 'fast lanes' on the Internet,* Quartz, 16 July 2014, *available at* <https://qz.com/235736/read-netflixs-plea-to-ban-paid-fast-lanes-on-the-internet/>, *last accessed* 14 February 2018.

[106] Gene Marks, *Netflix and Youtube Now Consume 50% of the Internet As The Argument for Net Neutrality Weakens,* 24 November 2014, *available at*<http://www.forbes.com/sites/quickerbettertech/2014/11/24/netflix-and-youtube-now-consume-50-of-the-internet-as-the-argument-for-net-neutrality-weakens/#57666a427982>, (*last accessed* 08 January 2017).

[107] Jeffrey James, *Digital Interactions in Developing Countries: An Economic Perspective* 15 (2013).

[108] Stuart Dredge, *Bill Gates Criticises Google's Project Loon Initiative,* 9 August 2013, *available at* <https://www.theguardianotecom/technology/2013/aug/09/bill-gates-google-project-loon>, *(last accessed* 08 January 2017).

[109] Dieter Bohn, *Google Unveils Project Loon,* 14 June 2013, *available at* <http://www.theverge.com/2013/6/14/4432262/google-unveils-project-loon-ballon-powered-internet-for-the-entire>, *last accessed* 08 January 2017; Cade Metz, *Facebook's Giant Internet Beaming Drone Finally Takes Flight, 21 July 2016, available at* <https://www.wired.com/2016/07/facebooks-giant-internet-beaming-drone-finally-takes-flight/>, *(last accessed* 08 January 2017).

because they relate to infrastructural problems in the media access ecology. However as discussed below, there are still more ways in which internet access may be hindered.

iv. Access limited by cost

When the citizen is unable to make their content or application available to others on the internet because they encounter significant cost barriers that go over connecting to the basic internet architecture, then their access is limited by cost. This kind of lack of internet access perpetuates indirect discrimination by preferring those who can afford to pay for better circulation of their speech and those who cannot. Such discrimination is most clearly visible in situations of paid prioritisation where a content provider has to pay the MNO more than mere internet connection charges to make their content available on the MNO network.[110] Conversely, internet access limited by cost is also observed in the issue of differential pricing whereby the MNO charges different rates for different applications, depending on the kind of application it is.[111]

It is necessary to distinguish between internet access limited by cost and that limited by price, since in the case of access limited by cost, it is the MNO that decides to charge extra for a particular kind of application or content, which exceeds the data charges incurred by the consumers. But in the case of access limited by price, the data price itself is unaffordable.

v. Access limited by social and cultural factors

Cultural and social factors like digital literacy,[112] familiarity with English,[113] and caste barriers,[114] to name a few, also play a significant role in curtailing citizens' internet access. This results in indirect discrimination by preferring the speech of those who are not hindered by these socio-cultural factors in accessing the technology over those who are.

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[110] Sean Hollister, *Netflix Accuses Comcast of Charging Twice for the Same Internet Content*, The Verge, April 24, 2014, *available at*<http://www.theverge.com/2014/4/24/5650406/netflix-accuses-comcast-of-double-dipping-with-isp-toll> (*last accessed* 3 January 2017).

[111] Nikhil Pahwa, *Airtel Wants To Ruin The Internet By Bringing In A Digital VIP Culture*, Scroll.in, 7 April 2015, *available at*<https://scroll.in/article/718820/airtel-wants-to-ruin-the-internet-by-bringing-in-a-digital-vip-culture> (*last accessed* 3 January 2017).

[112] Centre for Communication and Development Studies, *Towards Digital Inclusion: Barriers to Internet Access for Economically and Socially Excluded Urban Communities* 100 (2015), *available at* <http://netpehchaanotein/download/barriers_to_internet_access.pdf>, (*last accessed* 08 January 2017).

[113] *Ibid*.

[114] Sandeep Mertia, *Rural Social Media- A Meta-Digital Divide* (2014), *available at* <http://sarai.net/rural-social-media-a-meta-digital-divide/>, (*last accessed* 08 January 2017).

The factors outlined here are all dominant problems which hinder internet access in India, and are also important factors contributing to the digital divide across the global south generally.[115] Of course, a citizen's access to internet might be encumbered in all these ways, or through a combination of them. But for the purposes of the present paper, I focus on the structural barriers to internet access, and cost barriers to internet access, and refrain from dealing in detail with the limitation of internet access by social and cultural factors since it requires the formulation of certain peculiar cultural and social contexts which are beyond its scope.

How exactly do these different barriers to access to internet map on to the vocabulary of freedom of speech and expression online? Specifically, how are free speech arguments formulated law and policy debates to critique or advocate for indirect discrimination practices like zero-rating? I address this question in what follows by examining policy debates on net neutrality and zero rating in India.

B. Structural Media Access: Arguments for Expanding Access Limited by Pricing

The TRAI Consultation Paper on Free Data outlines the debate concerning zero-rating in India, stating that a key argument claimed for zero-rating is that it will serve as an effective tool to increase internet penetration,[116] which is also found important for the advancement of developmental goals[117] and the reduction of the digital divide.[118] In the same vein, the Explanatory Memorandum to TRAI's February 2016 Regulation on Differential Pricing also recognises that zero-rated services, which are a form of differential pricing, *"appear to make overall internet access more affordable*."[119] Such arguments see the value of zero-rated apps in expanding internet access limited by price, and therefore improving structural media access generally.

Similar legal arguments have been made in case of other media in Indian jurisprudence: *Sakal*, which has been critiqued for its inability to recognise private discrimination of speech and expression[120], was actually also a case

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[115] International Telecommunications Union, *Measuring the Information Society Report* 177-199 (2016), available at https://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2016/MISR2016-w4.pdf, (*last accessed* 14 February 2018).

[116] Telecom Regulatory Authority of India, *Consultation Paper on Free Data*, 19 May 2016, ¶18.

[117] Department of Telecommunications, Ministry of Information & Broadcasting, Government of India, *Net Neutrality DoT Committee Report*, ¶1.2 (2015).

[118] International Telecommunications Union *Supra* note 115.

[119] Telecom Regulatory Authority of India *Supra* note 116, ¶5.

[120] Sakal Papers Case *Supra* note 30.

where the Supreme Court recognised the importance of expanding media access limited by price. As one would recall, in that case, the Government had argued that the impugned regulation limiting number of newspaper pages was necessary to prevent indirect discrimination by the big newspapers.

The Court however held that the government regulation stood in violation of freedom of speech and expression, among other things recognising that the increase in newspaper prices mandated by it would reduce citizens' access to the newspaper.[121] This means that the regulation would limit access of citizens to the newspapers on the basis of price. This limitation of access by price has a corresponding effect on the media creators as well. In *Sakal*, this happens when the inability of the citizens to purchase the newspapers due to high prices, viz. (in)access limited by price, leads to a reduction in the ability of the newspaper owners and editors to circulate their opinions and views.[122] The Court found this aspect of the impugned regulation to be in violation of Article 19(1)(a) since it hindered "*the right to circulate one's views to all whom one can reach or care to reach.*[123]

In this manner, the argument in that indirect discrimination of citizens' will enhance freedom of expression through strengthening structural media access, has been successfully made in legal debates in India. Can the *Sakal* argument then also provide guidance about how to govern indirect discriminatory practices like zero-rating? One needs to examine the entire picture to answer this.

C. Media Diversity: Arguments for Expanding Access limited by Cost

Examining the entire picture suggests that while the judgment in *Sakal* argues for enhancing structural media access by limiting price barriers to media access, it was also found on the capitalist theory, which stays oblivious to private discrimination of free speech and expression.[124] This obliviousness to private discrimination is manifested specifically in its obliteration of arguments concerning cost barriers to media access. The judgment is dismissive of the Government argument that the market power of the big newspapers prohibited the smaller newspapers for accessing their audience because they

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[121] Sakal Papers Case *Supra* note 30, ¶34.
[122] *Supra* note 30.
[123] *Supra* note 30, ¶41.
[124] *See supra* Section II.B. for a discussion on this point.

could not cover costs for the same.[125] This situation actually hurts another aspect of freedom of speech and expression, viz., media diversity.[126]

Media diversity finds manifestation as an important part of freedom of speech and expression in many jurisdictions around the world, though they all have different approaches to understanding and achieving it.[127] In India, certain aspects of media diversity have been recognised by the Supreme Court as an integral part of Article 19(1)(a) of the Constitution in context of television media in the *Cricket Assn.* case.[128]

In policy debates concerning net neutrality as well, the concern that zero-rating practices increase cost barriers to internet access can be found. The TRAI Explanatory Memorandum to the Regulation on Differential Pricing outlines this argument:

> "*Several stakeholders have highlighted the potential anti-competitive effects of allowing differential pricing. It is argued that this will create an uneven playing field among content providers and service providers or those that have the benefit of large networks will find themselves in a much stronger bargaining position as compared to new or smaller businesses. This may create significant entry barriers and thus harm competition and innovation.*"[129]

Zero-rating can thus potentially create an uneven playing field between large networks and large content providers which have stronger position in the market, as compared to start-ups and smaller businesses. This kind of situation which limits access to the internet by cost between would create an anti-competitive situation since dominant firms in the market have stronger bargaining power to negotiate with MNOs on favourable terms to use the latter's networks, as compared to smaller content creators, which increases

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[125] *Ibid.*

[126] For a detailed discussion on this argument, *see* Smarika Kumar, *Net Neutrality for a Web of Equals,* 18 April 2015, *available at* <http://www.thehinducentre.com/the-arena/current-issues/article7117145.ece>, (*last accessed* 08 January 2017); *see* also, Smarika Kumar, *How Internet.org presents an Opportunity to rethink Freedom of Speech,* Medianama, 16 February 2015, available at <https://www.medianama.com/2015/02/223-how-internet-org-presents-an-opportunity-to-rethink-freedom-of-speech-by-smarika-kumar-alternative-law-forum/> (*last accessed* 14 February 2018).

[127] J. Van Cuilenburg, *Diversity Revisited: Towards a Critical Rational Model of Media Diversity* 40-45 in The Media in Question: Popular Cultures and Public Interests (eds. Brants, Hermes, van Zoonen (1998).

[128] *Ministry of Information and Broadcasting, Govt. of India* v. *Cricket Assn. of Bengal*, (1995) 2 SCC 161 : AIR 1995 SC 1236, ¶82.

[129] Telecom Regulatory Authority of India, *Explanatory Memorandum to Prohibition of Discriminatory Tariffs For Data Services Regulations*, No. 2 of 2016, ¶20, ¶5.

the latter's cost barriers to internet access.[130] However, it should be noted that the use of the word "competition" here acts only as a metaphor, and does not refer to "competition" as defined under a competition law framework. This is not to say that competition law- related issues do not exist in the zero-rating context. But when concerns about dominant power of MNOs and of large content providers are being voiced, it is not competition law which is being referred to.[131]

Such arguments that critique zero-rating on the reasoning that it increases cost barriers to internet access, can be understood to recognise the adverse impact that it has on media source diversity,[132] which is an important part of the freedom of speech and expression under the democratic culture theory. In this light, the use of the *Sakal* reasoning to argue that zero-rating practices, or indirect discrimination generally, enhance freedom of speech and expression rings false, or at least, fragmentary.

However, this analysis heralds two significant realisations that have implications for formulating an effective principle of net neutrality: First, that indirect discriminatory practices like zero-rating do undermine one crucial aspect of freedom of expression, viz. media (source) diversity by increasing cost barriers to media access, even as they strengthen another aspect of freedom of expression, viz., structural media access by lowering price barriers to media access. The paradox of private indirect discrimination is thus produced by pitching these two essential aspects of freedom of speech and expression against each other.

Second, that the paradox of private indirect discrimination and the nature of problems raised by zero-rating in the free speech context is not novel or specific to the internet, but has already been encountered and discussed in unresolved debates in the context of older media, like newspapers. It points to a need to consider the larger history of media regulation to address the regulatory problems around zero-rating practices.

How can these two realisations help us formulate a principle of net neutrality which comprehensively responds to the demands of the freedom of speech and expression in a world rampant with indirect discriminatory

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[130] Barbara van Schewick, *The Case for Rebooting the Network Neutrality Debate*, 6 May 2014, *available at* <https://www.theatlantic.com/technology/archive/2014/05/the-case-for-rebooting-the-network-neutrality-debate/361809/>, *last accessed* 08 January 2017.

[131] Barbara van Schewick *Supra* note 101, 28.

[132] Vibodh Parthasarathi, *Net Neutrality: Key To Media Diversity*, 30 October 2015, *available at* <http://www.financialexpress.com/opinion/column-net-neutrality-key-to-media-diversity/158732/>, (*last accessed* 08 January 2017).

practices like zero-rating? I attempt to address this question in the next section.

IV. RETHINKING GOVERNANCE DESIGN PRINCIPLES FOR FREE EXPRESSION

A. Delinking of Media Diversity and Structural Media Access as a Problem

The paradox that zero-rating practices undermine media diversity on the one hand, and strengthen structural media access on the other leads to a deadlock in formulating regulation for it which responds to freedom of expression. But why does this paradox exist? I argue that it has its roots in the delinking of the governance frameworks that deal with media diversity and with structural media access.

In independent India, this phenomenon of delinking can be traced to legal debates about newspapers. It has already been discussed how the Supreme Court's reasoning in *Sakal* acknowledges structural media access but obliterates media diversity from its discourse on freedom of speech and expression. However, even critiques of *Sakal*[133] illustrate the same folly when they employ Justice Mathew's dissent in *Bennett Coleman* to make a case for media source diversity. Unlike *Sakal,* the latter acknowledges media diversity as an essential part of freedom of expression while acknowledging that private indirect discrimination can increase cost barriers to access.[134] However, it completely overlooks issues of structural media access. Consequently critique and scholarship which build on this dissent also implicitly treat the issues of structural media access and media diversity as two delinked issues which are separable from the discourse of freedom of speech and expression.

In policy debates around net neutrality as well, there is a strong tendency to argue for the separation of issues of media diversity from issues of structural media access.[135] The proponents of zero-rating services argue that they help enhance structural media access through provision of free basic internet

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[133] Smarika Kumar *Supra* note 56.

[134] *See* Justice Mathew's dissent in *Bennett Coleman & Co.* v. *Union of India*, (1972) 2 SCC 788 : AIR 1973 SC 106. For in-depth analysis of how the dissent acknowledges media (source) diversity as essential to freedom of expression, *see* Smarika Kumar, *Concentration of Media Ownership and the Imagination of Free Speech,* 51Economic and Political Weekly, 128-131 (2016).

[135] Barbara Van Schewick *Supra* note 101.

services,[136] while ignoring their implications for media diversity. In a similar way, critics of zero-rating realise the adverse impact it has for media diversity, acknowledging it as a free speech issue,[137] but argue for the separation of this issue from the problem of structural media access. For example, noted net neutrality scholar Barbara van Schewick writes that issues of offering differential treatment for online expression, which would relate to media diversity, and issues of (not) charging for the same, which would relate to structural media access, "*are driven by different sets of policy considerations, which should be considered and evaluated separately.*"[138] On this assumption, she builds a framework for net neutrality regulation, which seeks to preserve the media diversity aspect of freedom of speech and expression, while at the same time, separating the issue of structural internet access therein. This framework has been implicitly endorsed by several civil society actors in India and also explicitly by the TRAI in framing its regulation on differential pricing.[139] It is also in this vein that TRAI initiated separate consultations[140] and recommendations[141] on free data, splitting this discourse from its consultations[142] and recommendations[143] on net neutrality, thus also delinking the issue of access limited by price from the issue of erosion of source diversity.

While a conception of net neutrality which separates the issues of media diversity and structural media access, might work to foster freedom of speech and expression in developed countries, the same cannot be said for the global south. This is simply because the problem of structural internet (in)access in developed countries is of a different nature than in developing countries. For instance, insofar as USA faces price barriers to internet access, it is due to monopolistic combines[144], which is not true for India, which has

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136 Mark Zuckerberg *Supra* note 103.
137 Barbara Van Schewick *Supra* note 101, 18.
138 Barbara Van Schewick *Supra* note 101, 14.
139 Cricket Assn. of Bengal Case *Supra* note 128, ¶27.
140 Telecom Regulatory Authority of India *Supra* note 116.
141 Telecom Regulatory Authority of India, *Recommendations on Encouraging Data Usage in Rural Areas through Provisioning of Free Data*, 19 December 2016; Telecom Regulatory Authority of India, *Recommendations on Encouraging Data Usage in Rural Areas through Provisioning of Free Data*, 29 November 2017.
142 Telecom Regulatory Authority of India, *Pre-Consultation Paper on Net Neutrality*, 30 May 2016; Telecom Regulatory Authority of India, *Consultation Paper on Net Neutrality*, 4 January 2017
143 *Supra* note 84.
144 Christopher S. Yoo, Deregulation v. Reregulation of Telecommunications: A Clash of Regulatory Paradigms 856-859 (2011), *available at*<http://scholarship.law.upennoteedu/cgi/viewcontent.cgi?article=1410&context=faculty_scholarship>, (*last accessed* 08 January 2017).

a fairly competitive MNO market.[145] Structural barriers to internet access in India, as in other developing countries, primarily stem from a lack of capital resources: low per capita incomes lead to price barriers to access[146], and a combination of corrupt practices in granting MNO licenses[147] and capital scarcity in the economy leads to access limited by QoS and infrastructure since in that scenario, neither the State nor the market can invest in Next-Generation Networks or in effectively expanding MNO networks to the entire populace. These issues of capital scarcity are not as acute in developed countries, where can afford to separate the issue of structural media (in) access from media diversity on the internet.

But in the context of the global south, the objective of expanding structural internet access becomes a complicated problem of resource allocation within the economy. In such a scenario, governance mechanisms must define whether the scarce capital resources needed for the expansion of structural internet access should be allocated by a State mechanism like planning or by the forces of a free market, or by a mixed mechanism which combines the two, and if the third, it must define what exactly the parameters of such a combination are, as well. This problem of resource allocation is also the broad question which cropped up in the Newspaper Cases,[148] as it has been in the case of zero-rating on mobile internet.

In this way, the delinking of media diversity and structural media access and the exclusion of either from considerations of freedom of expression results in an unambitious law and policy discourse for the global south. Though such a discourse is thankfully cognizant of the spectre of private discrimination, it is still constructed in the rather simplistic and mutually exclusive binary of citizen interests versus big media interests: Media diversity is correctly recognised as a citizen interest, but price barriers to media access – another essential citizen interest – is kept outside of the scope of the discussion, and vice-versa. This results in a lack of recognition of the complex intertwined nature of citizens' interest in freedom of speech and

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[145] Here, I use "monopolistic" and "competitive" from a competition law framework, and not a media diversity framework; on the point of competitiveness of India's mobile market, *see* also, V. Sridhar, *Modeling the Growth of Mobile Telephony Services in India*, 10 Vision: The Journal of Business Perspective (2006).

[146] Centre for Communication and Development Studies *Supra* note 112.

[147] Paranjoy Guha Thakurta and Aditi Roy Ghatak, *The Immaculate Conception of Reliance Jio*, 04 March 2016, *available at* <https://thewire.in/23620/the-immaculate-conception-of-reliance-jio/>, (*last accessed* 08 January 2017).

[148] The Supreme Court judgments in *Sakal Papers (P) Ltd.* v. *Union of India* AIR 1962 SC 305, *Bennett Coleman & Co.* v. *Union of India*, (1972) 2 SCC 788 : AIR 1973 SC 106; *Indian Express Newspapers (Bombay) (P) Ltd.* v. *Union of India*, (1985) 1 SCC 641 : AIR 1986 SC 515 are often referred to as the 'Newspaper Cases' in literature.

expression.[149] Consequently, proposed frameworks for governance tend to operate upon only a partial consideration of citizens' interest in freedom of speech and expression. This also means that two important principles of freedom of speech and expression, viz. media diversity and structural media access, which should ideally go hand-in-hand, instead find themselves on opposite sides and in conflict with each other in governance debates. It results in said paradox of private discriminatory practices like zero-rating that hinders design of a comprehensive governance framework for free expression online.

B. Formulating a Freedom of Expression-Oriented Concept of Net Neutrality

The inadequacy of net neutrality interpretation in addressing all forms of private discrimination of online speech and expression can also be attributed to the delinking of the issues of media diversity and structural media access. It takes into account what has been described as private direct discrimination and thus embodies the principle of negative net neutrality, but as far as private indirect discrimination is concerned, it only accounts for the issue of lack of access limited by cost. Both the issues of lack of structural media access and limitation of access due to socio-cultural factors are kept out of the ambit of the net neutrality conception produced in the wake of said delinking. One can observe this in TRAI's recommended conception of net neutrality which excludes from its ambit, specialised services that are QoS-optimised for specific content, protocols or user equipment.[150]

However, much like negative net neutrality, the conception of positive net neutrality underlying TRAI's Recommendations on Net Neutrality is also unable to respond to all forms of private discrimination of speech and expression. By separating the issue of zero-rating and free data from this discussion on net neutrality, TRAI's positive net neutrality conception is unable to envisage the lack of structural media access as a problem of indirect discrimination. Consequently, the fact that specialised services create indirect discrimination by preferring the speech, expression and the ability to receive information online of those with the capability to pay for higher QoS (access limited by QoS) or with the capability to pay for internet at all (access limited by price) – both of which contribute to lack of structural

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[149] For a detailed discussion on how citizens' interest in free speech and expression are entangled with the interests of private media companies and the State, *see* Smarika Kumar, *Five Net Neutrality Myths Busted,* The Hoot, 4 January 2016, *available at*<http://www.thehoot.org/media-watch/digital-media/five-net-neutrality-myths-busted-9095> (*last accessed* 14 February 2018).

[150] Barbara Van Schewick *Supra* note 101, 31

media access- remains unrecognised. One can argue that TRAI tries to address issues of structural media access through its recommendations on free data[151], and thus is not entirely insensitive to the issue. But it should be noted that these recommendations are limited to only short-term internet access schemes with a focus on the narrow category of first-time internet users in rural areas[152], rather than the larger category of users whose access is limited by price, QoS, and infrastructure. As a result, it does not regard such lack of access as a form of discrimination or locate it within in the wider context of freedom of expression.

This is in contrast to its delinked yet mirrored context of zero-rating,[153] which TRAI legitimately understands as a free speech issue and recognises as discriminatory.[154] Such a position implies that even as it remains unresponsive to indirect discrimination inhered through lack of structural media access, TRAI's 'positive net neutrality' stays sensitive to indirect discrimination by hindering the opportunity for all citizens to be equally heard without cost constraints (access limited by cost).

I outline these points not to suggestvia a regulation-heavy approach that like zero-rated services, specialised services should also be banned as discriminatory under a freedom of expression-oriented conception of net neutrality. Nor is my intention to propose the neoliberal path of regulation'Lite'. Rather, it is to argue that a comprehensively responsive net neutrality-based framework of governance must take a nuanced approach to determine the modalities of what constitutes discrimination on the basis of speech and expression. Such nuance can be achieved only by relinking the issues of media diversity and structural media access and bringing them together under the discourse of right to freedom of speech and expression under Article 19(1)(a).

As mapped before, our experience of designing regulatory frameworks for older media technologies like newspapers warns us that we need to take a more nuanced approach in developing new governance designs for freedom of expression on the internet: Considering that structural media access and media diversity are intimately intertwined issues, one needs to bring discussions concerning media diversity and structural media access together if one wants to develop a legal mechanism which effectively and comprehensively protects citizens' freedom of expression in the digital age. To recognise these

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[151] *Supra* note 116

[152] Telecom Regulatory Authority of India, *Recommendations on Encouraging Data Usage in Rural Areas through Provisioning of Free Data*, 29 November 2017, 10-12.

[153] Christopher T. Marsden *Supra* note 92.

[154] Cricket Assn. of Bengal Case *Supra* note 128.

two aspects as essential parts of freedom of expression is to address all forms of private indirect discrimination on the basis of speech and expression. Without addressing all these different forms of indirect discrimination, one cannot eliminate the paradox of zero-rating whereby the principles of structural media access and media diversity become pitted against each other, and at least one needs to be ignored or prioritised against the other to yield a feasible governance framework. A freedom of expression-oriented conception of net neutrality then needs to account for all forms of discrimination – private and public, direct and indirect, and the various forms of indirect discrimination – within its own discourse.

V. CONCLUSION

In this paper, I have attempted to develop a theoretical framework for illustrating the limitations of current law and policy understandings of net neutrality. I have illustrated how both the concepts of negative net neutrality and positive net neutrality, even when considered together, fail to effectively respond to the challenges of freedom of speech and expression in global south contexts generally and in India particularly. To do this, I have outlined the different barriers to media and internet access that are faced more acutely by citizens in the global south, and illustrated how they perpetuate various forms of private indirect discrimination of speech and expression of citizens. I have then linked these forms of discrimination to long-standing issues of media diversity and structural media access using various conceptions of freedom of speech and expression under Article 19(1)(a) of the Constitution.

In all this, my main argument has been that the delinking of principles of media diversity and structural media access in the freedom of expression discourse has been consistent not just in net neutrality debates concerning the internet, but also in debates concerning older media like newspapers. This is a sign that issues like net neutrality are not rooted in the novelty of internet architecture, but rather in the conceptual poverty of our ideas about freedom of expression. Consequently, only a conceptual enrichment through relinking of the principles of structural media access and media diversity under the umbrella of freedom of expression can lead to the formulation of a concept of net neutrality that is capable of comprehensively responding to internet access issues in India. In this light, while the regulatory framework in India has laudably accomplished a lot to address issues of private discrimination online, it still has a long way to go.

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