JIRICO
Jindal Initiative on Research in IP and Competition

'WIPING THE DUST OFF ANTITRUST': THE LONG AWAITED ENFORCEMENT SHIFT, AND ITS IMPACT ON HIGH-TECH INNOVATION

Ashish Bhardawaj and Manveen Singh

JIRICO Brief

BACKGROUND

The mobile evolution has transformed into a digital revolution. People around the world, along with hundreds of objects surrounding them, will be connected to networks as well as to one another, through significantly faster, more robust and secure wireless communications. A range of industrial sectors will ride on this transformative digital wave, from automotive, healthcare and energy, to urban infrastructure, agriculture and entertainment. To facilitate this inevitable change, reliable networks running on technology standards enabling them, will be needed. This brings to centrestage the critical role of the patent system that incentivizes technology innovation, and the antitrust laws that ensure that market competition facilitating innovation is safeguarded.

It is no secret that standards and standards-setting organizations (SSOs) have played a crucial role in shaping the innovation landscape for over three decades, especially in the information and communication technologies (ICT) sector. The setting of standards and commercializing of innovation at large is facilitated by voluntary associations called SSOs. Competing firms come together under the auspices of SSOs to collaboratively select and adopt uniform technical standards. It is worth noting that the benefits brought about by these standards have a greater visibility in the ICT sector, primarily on account of two reasons. First, in order to make complex technologies work, there is a requirement of hundreds of thousands of patents. Second, there is a strong need for devices and networks to interoperate in the ICT sector, which makes it absolutely necessary to develop common technical standards.

SSOs are further tasked with the responsibility of fostering a regime of rapid technological innovation by balancing the interests of their members; their membership comprising of standard essential patent (SEP) holders or licensors on one hand and implementers or licensees on the other. While the SEP holders are involved in R&D, and look to maximize their earnings from licensing out their SEPs, the implementers look to seek licenses from SEP holders on terms that are fair, reasonable and non-discriminatory (FRAND), in order to use the patented technology in the manufacturing of standard-compliant end-use products.

O.P. Jindal Global University
A Private University Promoting Public Service
NAAC Accreditation - 'A' Grade

Dr. Ashish Bharadwaj is an Associate Professor at the Jindal Global Law School (JGLS) and Co-Director of Jindal Initiative on Research in IP & Competition (JIRICO) at O.P. Jindal Global University in Delhi NCR, India. He serves as the founding editor of the Law & Policy Brief. **Manveen Singh** is an Assistant Professor at Jindal Global Law School (JGLS) and fellow of JIRICO. He serves as an Assistant Director of the Centre for Intellectual Property and Technology Law (CIPTEL).

RENEWED DEBATE, PERSISTENT CHALLENGES

Most SSOs require their members to license patents essential to the implementation of the standard, i.e., the SEPs, on FRAND terms. But once technology involving patents is locked into a standard and investments towards the development of standard-complaint products have been made, working around the technology, or switching over to an alternative may become difficult for the technology implementers, leading to an increase in the bargaining power of the SEP holders. The collective interest of the standards implementers gives way to the private interest of the SEP holders and there is a potential likelihood of the latter being able to exploit its position to extract more favorable rate of royalties ex-post, due to the vagueness of FRAND terms. This phenomenon is commonly referred to as "patent hold-up" and has led to calls for a more precise definition of FRAND in the IPR policies of SSOs. Another area of contention has been the theory and empirical evidence of "hold-up" being at odds with each other, due to there being almost no empirical evidence of hold-up, since the very inception of the term in the context of standardization.

Several distinguished academicians have pointed out the problem that can potentially be created by innovators by holding up the market for licensing of critical patented technologies. Recent scholarly work, including research done by Stephen Haber, Alexander Galetovic and Ross Levine suggests that the concept of patent hold-up is based on an incorrect or fallacious understanding of the underlying economic principles in the domain of SEP markets.[1] In addition to this, these studies claim that an adverse effect of patent hold-up on innovation lacks empirical evidence, and instead raise concerns about the problem of patent hold-out in information and communication technologies.

Claims that SEP holders abuse their market position has been found to lack empirical rigor, which fails to establish patent hold-up as an institutional practice that needs a regulatory correction. When implementers fail to undertake investment in research and development of new technologies or make commercial use of the existing technology without proper licenses, the entire ecosystem of innovation and technological progress comes under stress. An excessive scrutiny of the actions of SEP holders in the past few years has resulted in the imposition of unilateral good faith obligations on the SEP holders, while the implementers enjoy lower liability to comply with FRAND terms in such patent licensing contracts.

Therefore, one would be led into believing that bargaining power is concentrated in the hands of technology developers, with none lying with the technology implementers. However, there is also a possibility of opportunistic conduct on behalf of technology implementers in the form of "reverse hold-up" or "hold-out". "Reverse hold-up" or "hold-out" situations arise on the refusal of technology implementers to pay royalties to SEP holders at a reasonable rate, after the standard has been set and significant R&D costs have been incurred by the SEP holders. Since it is obligatory on the part of licensors to charge royalties based on FRAND terms, even on successful litigation by the SEP holders, the maximum royalties recovered from licensees are, what they would have paid to the licensors in the first place, had they not indulged in hold-out. In such a scenario, one would like to believe there is a significant incentive for technology implementers to hold-out and refuse to pay royalties to the SEP holders. Such a behavior on the part of implementers has been duly recognized by antitrust agencies globally.[2]

RESETTING TONE OF LAW AND POLICY, BACK TO BASICS

A series of recent developments on competition policy and antitrust enforcement, in the United States could not be timelier. The views echoed by the newly appointed Assistant Attorney General of the US Department of Justice, Makan Delrahim, carves out a fresh strategy to embrace technological changes led by innovation, patents and digitization. Some of the speeches delivered by the new antitrust chief are so powerful that they have come to not just redefine a new path for policymaking in antitrust and IP, but to also reignite the fire on technology and innovation. Since his confirmation as the new AAG on September 27th 2017, Mr. Delrahim has made 9 speeches, out of which he has touched upon several aspects of the current IP policy of the US antitrust division in 5 of them. Introducing the new IP policy for the first time in November 2017, the AAG stressed the need to revive appreciation of the rights of innovators to boost innovation.[3] In the context of standard essential patents (SEPs), he recognized that leaning of the US Department of Justice towards implementers of standards could potentially damage future innovation, and that competition authority "must exercise greater humility" in the application of antitrust laws to SEPs.[4]

Building upon his ideas in his address at the US Embassy in Beijing in February 2018, the AAG noted that the focus of competition authorities must be on the promotion and growth of innovation rather to short term pricing. He built upon the idea of protection and promotion of rights of SEP holders, which is at the core of the new policy. The policy change envisages that competition laws should not work to stifle innovation by creating disincentives for innovation. In furtherance of this view, he also placed emphasis on IP courts, as they would be better equipped to resolve disputes between implementers and SEP holders. Subsequently, the AAG's delivered remarks in Brussels where he acknowledged that bridging the gap between "policy and substance" is essential for enforcement of competition laws in the EU and US.[5] He stressed on the goal of competition policy in protection of consumers and market competition, rather than protection of competitors, which is a policy stand espoused by both the EU and US antitrust establishments.

At the core of all these developments is attention to the issue of whether and how to apply principles of competition policy to new technology and patent licensing.[6] Reiterating the long-standing view of the antitrust division of DOJ that (a) patent laws incentivize innovation for the benefit of consumers, and (b) licensing of patent rights is generally pro-competitive, the AAG indicated an approach that is quite different from the one that prevailed during the Obama administration. He underscored the fact that antitrust enforcement in the current and earlier regimes has "strayed too far"[7] in their protection of the rights of implementers (of patent-based technical standards), at the expense of rights of innovators (holders of patents that become a part of the standard).

What is put forth now is a new evidence-based approach in the application of antitrust law to the needs and concerns of both implementers and SEP holders to facilitate a symmetric application of the law. This brings a significant change in the industry by introducing much needed clarity in the roles of implementers and innovators. It also brings to the fore the often neglected issue of "hold-out".[8] According to Mr. Delrahim, patent hold-out poses a more serious challenge than hold-up as it arises due to under-investment by implementers or their refusal to take a license. He states, "*It is important to recognize that innovators make an investment*

before they know whether that investment will ever pay off. If the implementers hold-out, the innovator has no recourse, even if the innovation is successful."[9] The potentially serious impact on the market and on the consumers of such opportunistic behavior in the industry is a critical issue that will be focused upon in the new policy. The shift in US policies in large part is driven by an increased focus on substantive implementation of competition policy, which champions (1) the principle of protection of free market competition in a freely functional and dynamic market; and (2) the policy pertaining to IP that embraces the principle of the right to exclude through available remedies, including injunctive relief. The new approach lays emphasis on a harmonious application of both these principles to allow the market to function smoothly without an overreach of antitrust laws to unilateral conduct of implementers and innovators.[10]

The right of SEP holders to exclude others from the use of their patented technology has long been lost in the tussle between implementers, innovators and standards-setting bodies. AAG Delrahim reinstated this principle and was of the belief that "*patents are a form of property, and the right to exclude is one of the most fundamental bargaining rights a property owner possesses. Rules that deprive a patent holder from exercising this right—whether imposed by an SSO or by a court—undermine the incentive to innovate and worsen the problem of hold-out.*"[11]. He observed that if the innovators are deprived of rights over their property by means of controlling their licensing agreements and use of information without correct licensing, then such practices will have a severe impact on the quality and quantity of innovation. In the case of standard essential patents, many a times the SEP holders have been deprived of their right to exclude under the garb of FRAND licensing, and have also been denied their right to injunctions, making FRAND a unilateral obligation.

It becomes essential to reinstate the exclusive rights doctrine so that FRAND obligations are applicable to both implementers and innovators, and, at the same time, the SEP holders can freely exercise their right to injunctive relief. In Mr. Delrahim's view, this right of exclusion granted by intellectual property law should not be taken away in the name of utilitarian policies of technical standardization. This trend is also problematic as the innovators of standardized technologies are faced with a lower value and unfair commercialization of their invention. In the long run, lower returns on patents that are critical to the working of key technical standards are likely to reduce investment in future innovation.

ADDITIONAL PROBLEMS, ALTERNATIVE REMEDIES

In 2015, the Institute of Electric and Electronic Engineers ('IEEE') revised its policy and became the first SSO in the world to establish regulation of FRAND royalties. In a post *Rambus* world, the US courts have necessarily enforced FRAND commitments between SEP holders and implementers to avoid opportunistic behavior by parties.[12] The antitrust division of the US DOJ absolutely failed to check, and, in fact, blessed, the amendments made by IEEE to its by-laws that include policies that govern use of patents in IEEE standards. These amendments seek to reduce the royalty rates demanded by SEP holders in addition to diminishing the ability of SEP holders to enforce their patent rights. The antitrust division, applauding the efforts of the IEEE, entirely ignored the possible effects of these amendments that may potentially facilitate collusion among implementers.[13]

Under the new policy highlighted by the AAG, focus will shift to include the actions of SSOs and implementers, which may be anticompetitive, and require interference of antitrust authorities. This will see the antitrust authorities taking cognizance of, and carefully scrutinizing any anticompetitive behavior of implementers and SEP holders. Further, a policy enforcing the SEP holder's right to exclude will make injunctive relief available to innovators. Injunctive relief is a right of an IP holder that no SSO should deprive the IP holder of. Not doing so goes against the basic tenets of property law, where a right to exclude is prime.

The new policy change also focuses on 'other remedies', including civil and contractual reliefs, in place of antitrust law. Observing unwarranted involvement of antitrust agencies in certain disputes related to patents in high technology, AAG Delrahim stated that remedies, other than those offered under antitrust law, could be relied upon to ensure that interests of all parties are preserved. The reason is that several issues involving implementers and SEP holders are largely associated with some form of contractual arrangement. In cases where such contracts are breached or contractual duties are reneged, damages and injunctions should be the primary source of relief instead of antitrust remedies under common law. Common law remedies for contractual disputes (including those around licensing of essential patents under terms that are fair, reasonable and non-discriminatory) allow both parties a chance to present their case and have a dialogue on the interpretation and implication of each prong of 'FRAND'[14]. Common law remedies allowing settlement of a contractual dispute between private individuals better serves the interests of the parties without an interference of public regulatory bodies.

The earlier stand of DOJ was that the involvement of antitrust agency was necessary in investigating FRAND commitment for SEPs to judge the actions of SEP holders,[15] but now the department is seeking to regulate the actions of SSOs. Intervention by an antitrust agency is called for where anticompetitive actions and collusive behavior by prospective licensees is detected, including restricting royalty rates and diluting right to seek injunctive relief by SSOs. Other than minimizing unnecessary intervention by antitrust authorities, such narrowing of the scope of antitrust investigation is said to open the larger market to more competition and innovation. The aim of correcting market distortions arising from any asymmetry in bargaining power may not be fulfilled using antitrust law, and may, in fact, may lead to an adverse impact on innovation.

ADDRESSING UNCERTAINTY, RESTORING BALANCE

AAG's remarks rekindles the belief that public law regulation of private contracts may create more market distortions, including the problem of under-investment or reverse patent hold-up, instead of solving them. The intervention of antitrust enforcers should be limited or "exercised with humility" to avoid any adverse effect on market competition. Antitrust law should be expanded to include "non-competition public interest factors that balance competition and non-competition factors with equity."[16] It can also be inferred from Mr. Delrahim's speeches that his new policy proposal supports self-regulation of SSOs. A regulatory approach followed by the SSOs that is more precautionary of assessing their own rules vis-a-vis antirust laws would result in less intrusion of antitrust authorities in standard setting and development processes. In sharp contrast to the beliefs of Mr. Delrahim's predecessors, the new approach restores faith in free market and throws light on equality in the treatment of parties.

Mr. Delrahim's emphasis on the symmetric nature of patent hold-up and hold-out as a recurring issue in his speeches throws light on several thought-provoking issues. If implemented, not only is it likely to broaden the scope of antitrust scrutiny, it would also restore balance to an otherwise imbalanced discourse prevailing today. The actions of implementers, including unnecessary delays in the licensing process, patent trespassing, unresponsiveness to negotiation and placing all liability of FRAND on the innovators, will also be under the scanner, as proposed by the AAG.

In his latest speech in March, the AAG drew attention to the enduring belief underlying the American innovation ecosystem that the rights over intellectual property belongs to the inventor as much as they belong to the public. He referred to a "new Madison approach", after James Madison, who is considered by the AAG to be the true founding father of U.S. patent law.[17] The AAG is attempting to recreate an environment where the rights of patent holders are respected, in order to move away from a "retro-Jefferson" view that patents confer too much power that should be curbed.[18] The new Madison approach seeks to regulate the innovation environment in a way that preserves sufficient incentives to innovate. He relates the premise of Madison's theory with issues around SEP licensing, regulation of SSOs, and the role of antitrust law in regulating patents. The Madison approach forms part of the basic argument of Delrahim, which is centered on the fundamental right of the patent holder to exclude.[19]

In addressing the misplaced role of antitrust law in policing the hold-up problem, the AAG restates that when antitrust agencies scrutinize private contracts in the context of patent licensing, it adversely affects innovation and market competition.[20] The AAG succinctly alluded to the following[21]: *First*, that application of antitrust laws to the issue of hold up has, so far,remained devoid of empirical data, and, therefore, an evidence-based enforcement of antitrust is called for. *Second*, antitrust law enforcement bodies should ensure that their actions do not transform a private voluntary licensing regime for SEPs into a regime of compulsory licensing. *Third*, in line with the Madison approach, it is important to look at regulation of SSOs to deter any possibility of collusive behaviour.

Although collaborative standard setting runs the risk of antitrust violation, yet the role of SSOs in driving technological innovation has been duly recognized by antitrust agencies. Having said that, the task of balancing the varied interests of stakeholders is entrusted upon SSOs, which necessitates the creation of internal IPR policies. These policies are the focal point of all the standardization activity taking place in SSOs and play a key role in incentivizing the development of new technologies. With changing standards, the SSOs also end up amending their IPR policies from time to time. Sometimes, these IPR policy amendments might come in the way of standardization and cause the standardization process to slow down, while on other occasions, they might run the risk of attracting antitrust scrutiny. In the era of highly complex telecommunications industries, various viewpoints have been put forward vis-à-vis IPR policies of SSOs, without any consensus being achieved. Since IPR policy changes have the potential of causing a ripple effect across innovation circles, they demand immediate attention at a microscopic level, something that has been echoing from remarks made by Makan Delrahim in his speeches.

[1] Alexander Galetovic and Stephen Haber; 'The Fallacies of Patent-Holdup Theory' (2017) 13(1) Journal of Competition Law & Economics 1; Alexander Galetovic, Stephen Haber and Ross Levine, 'An Empirical Examination of Patent Holdup' (2015) 11(3) Journal of Competition Law & Economics 549.

[2] Richard Epstein and Kavyan B. Noroozi, 'Why Incentives for 'Patent Holdout' Threaten to Dismantle FRAND and Why it Matters' (2017) Berkeley Technology Law Journal (forthcoming).

[3] Makan Delrahim, Assistant Attorney General, Antitrust Division, U.S. Department of Justice, 'Competition, Intellectual Property and Economic Prosperity' (speech delivered at US Embassy, Beijing, February 1, 2018).

[4] Makan Delrahim, Assistant Attorney General, Antitrust Division, U.S. Department of Justice, 'Take It to the Limit: Respecting Innovation Incentives in the Application of Antitrust Law' (speech delivered at USC Gould School of Law, California, November 10, 2017, pp. 10)

[5] Makan Delrahim, Assistant Attorney General, Antitrust Division, U.S. Department of Justice, 'Good Times, Bad Times, Trust Will Take Us Far: Competition Enforcement and the Relationship Between Washington and Brussels' (speech delivered at College of Europe, Brussels, February 21, 2018, pp. 4)

[6] Delrahim, (n 5).

[7] *ibid* 3.

[8] Ashish Bharadwaj, '*A Note on the Neglected Issue Of Reverse Patent Hold-up*' (2018) 13(2) Journal of Intellectual Property Law & Practice, pp. 3.

[9] Delrahim (n5) 6.

[10] Delrahim (n6).

[11] Delrahim (n5) 13.

[12] Ericsson, Inc. v. D-Link Sys., Inc., 773 F.3d 1201, 1231 (Fed. Cir. 2014); Microsoft Corp. v. Motorola, Inc., 795 F.3d 1024, 1033 (9th Cir. 2015) (citing Microsoft Corp. v. Motorola, Inc., No. 11 C 9308, 2013 WL 2111217, at 2 (W.D. Wash. Oct. 3, 2013)

[13] Ashish Bharadwaj and Manveen Singh, '*A Single Spark Can Start A Prairie Fire: Implications of the 2015 Amendments to IEEE-SA's Patent Policy*' (2018) 46(1) Capital University Law Review.

[14] Telefonaktiebolaget LM Ericsson v Mercury Electronics & Anr, I.A No. 3825 of 2013 and I.A No. 4694 of 2013 in Civil Suit (Original Side) No. 442 of 2013, High Court of New Delhi (12 November 2014; Telefonaktiebolaget Lm Ericsson (Publ) Vs. Intex Technologies (India) Limited 2015(62)PTC90(Del); Microsoft Corp. v. Motorola, Inc., No. C10-1823JLR, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013)

[15] See: Dell Computer Corp., 121 F.T.C. 616 (1996); Union Oil Co. of Cal., 140 F.T.C. 123 (2005); Rambus Inc., 142 F.T.C. 98 (2006)

[16] Koren W. Wong-Ervin, 'Protecting Intellectual Property Rights Abroad: Due Process, Public Interest Factors, and Extra-Jurisdictional Remedies', George Mason University Law & Economics Research Paper Series 17-18.

[17] Makan Delrahim, Assistant Attorney General, Antitrust Division, U.S. Department of Justice, 'The "New Madison" Approach to Antitrust and Intellectual Property Law' (speech delivered at University of Pennsylvania Law School, Philadelphia, March 16, 2018).

[18] *ibid* 3-4

[19] *ibid* 5.

[20] Delrahim (n 18) 9.

[21] *ibid* 5-9.

ABOUT O.P. JINDAL GLOBAL UNIVERSITY

O.P. Jindal Global University (JGU) is a non-profit global university established by the Government of Haryana and recognised by the University Grants Commission (UGC). JGU was established as a philanthropic initiative of its Founding Chancellor, Mr. Naveen Jindal in memory of his father, Mr. O.P. Jindal. JGU has been awarded the highest grade 'A' by the National Accreditation & Assessment Council (NAAC). JGU is one of the few universities in Asia that maintains a 1:13 faculty-student ratio and appoints faculty members from India and different parts of the world with outstanding academic qualifications and experience.

The vision of JGU is to promote global courses, global programmes, global curriculum, global research, global collaborations, and global interaction through a global faculty. JGU is situated on an 80-acre state-of-the-art residential campus. JGU is a research-intensive university, which has established several research centres. JGU has established eight schools: Jindal Global Law School (JGLS), Jindal Global Business School (JGBS), Jindal School of International Affairs (JSIA), Jindal School of Government and Public Policy (JSGP), Jindal School of Liberal Arts & Humanities (JSLH), Jindal School of Journalism & Communication (JSJC), Jindal School of Art & Architecture (JSAA), and Jindal School of Banking & Finance (JSBF).

ABOUT JIRICO

Jindal Initiative on Research in IP and Competition (JIRICO) is an initiative of JGU. It focuses on initiating and complementing well-informed policy related deliberations that can result in concrete reforms. Towards this end, JIRICO seeks to become a leading think-tank that engages in interdisciplinary and high-impact work. This involves contributions from experts in the fields of intellectual property law, competition law, economics and management. Further, JIRICO focuses on global developments, with a special emphasis on the Indian policy environment, which inform stakeholders about the issues in this niche area. JIRICO provides a unique platform to facilitate dialogue amongst industry partners, policymakers, regulators, practitioners and academicians.

O.P. Jindal Global University at a Glance

People

3500 *Students*

FEMALE 42% | MALE 58%

290 *Faculty*

FEMALE 45% | MALE 55%

310 *Non-teaching staff*

FEMALE 28% | MALE 72%

1:13 *Faculty-Student ratio*

37 *Average age of faculty members*

1400 *Alumni*

Faculty

4 *Rhodes Scholars*

72% *Alumni from the top 200 global universities*

20% *International faculty from 20 countries*

Students

UNDERGRADUATE 90% | MASTERS / DOCTORAL 10%

70% *Students on scholarships*

29 *Indian States & Union Territories represented by students*

20 *Countries represented by students*

Schools

18 *Programmes*

11 Undergraduate Programmes
6 Postgraduate Programmes
Doctoral Programme

8 *Schools*

- Jindal Global Law School — India's First Global Law School
- Jindal School of International Affairs — India's First Global Policy School
- Jindal Global Business School — India's First Multi-Disciplinary Global Business School
- Jindal School of Liberal Arts & Humanities — India's First Transnational Humanities School
- Jindal School of Government and Public Policy — India's First Public Policy School
- Jindal School of Journalism & Communication — India's First Global Media School
- Jindal School of Art & Architecture — India's First Interdisciplinary School of Built Environment
- Jindal School of Banking & Finance — India's First Global Finance School

Research

2000+ *Publications*

50+ *Interdisciplinary research centres*

3 *Research & capacity building institutes*

JILDEE — Jindal Institute of Leadership Development and Executive Education

Jindal Institute of Behavioural Sciences

IIHEC — International Institute for Higher Education Research & Capacity Building — O.P. Jindal Global University

International Collaborations

200+ *Collaborations*

50+ *Countries*

87 *Student exchange collaborations*

66 *Faculty exchange & development programmes*

25 *Joint research collaborations*

Accreditation , Rankings & Memberships

QS University Rankings: BRICS — Quacquarelli Symonds (QS) — 2018 Edition

Ranked 251-300 amongst 9000 universities in the BRICS

- Ranked 1st 'SWACHHTA' Ranking 2017 Government of India
- Member of Association of Indian Universities
- Member of Association to Advance Collegiate Schools of Business
- Member of International Development and Public Policy Alliance
- Member of Law Schools Global League
- Recognised by University Grants Commission
- Recognised by Bar Council of India
- Accredited by National Assessment and Accreditation Council
- Member of Association of American Colleges and Universities