

## **Act defined; Act on it**

**Chirag Tanna;** MS (Glasgow, UK), B.E. (Mumbai, India);  
**INK IDEÉ**

Thane Manisha CHS, 1st Floor, Dr. Ramesh Pradhan Marg, Off Dr. Moose Road, Behind  
Raymonds'

Showrrom, Talao Pali, Thane (W) 400 602, Maharashtra, India  
+91-9833739912

[chirag@inkidee.com](mailto:chirag@inkidee.com)

Seeds of innovation abound in plenty in the technological domain of study, typically in science and engineering institutes throughout India. What is the sad point, however, is the lackadaisical jacket worn by the ruling authorities when it comes to fertilising these seeds for fruitful endeavours. Lakhs of students graduate from the engineering/scientific/technical field in India, and each student, along with peers, must submit a research project, as a part of the curriculum in each university. What then goes to waste in this mechanism is the plausible tapping of potential, beginning at the grassroots level, thus nipping the bud of innovation in its infancy. Students lose; nonetheless the university loses a revenue generating mechanism, and also loses a launching platform to thrust its inmates, into an entrepreneurial venture; one that is intellect-driven and independent, one that paves the pathway for an innovation-driven India.

One of the major plagues that has perpetrated the working technical/science graduate is his large dependence on the western world, which is the source.

Thus, what we actually propagate and generate is only a second/third line of work, specifically relating to execution and testing.

There is a need for an ideation germination program.

Also, the balance between revenues spent on filing patents and revenue generated from licensing such patents is arbitrary. A rational, warranted nexus between the two needs to be sought.

### **Where's the Ideation?**

To seek this phenomenon, is the aim of the INDIAN Bayh-Dole (Act) generic, then! Factually called the 'Utilisation of Public Funded Intellectual Property Bill 2008', [this bill](#) is under consideration by the Parliament.

### **The Origin(al):**

Spearheading Government-funded research and defining the ownership boundaries of such research, the [US Bayh-Dole Act](#) was implemented in 1980. The Federal Government, sitting atop a dossier of 30000 patents, then, chose to create a revenue mechanism with efficient kickbacks to inventors and institutes.

India attempts to follow this pattern and walk the path, now.

### **Grim Reality:**

#### **[CSIR](#)**

The Council of Scientific and Industrial Research (CSIR) is an autonomous Government body under the Ministry of Science & Technology. One of the

largest public funded Research & Development Organizations, CSIR , is comprised of 38 constituent laboratories in various sectors ranging from aviation, leather, chemical, life sciences, healthcare, engineering, to physical sciences.

CSIR is India's largest patent holder organization. With 4000 patent/patent applications; both Indian and foreign, the engines of research are churned by 4600 scientists and the output of 300 contract R&D licensing agreements is proof of its worth.

CSIR filing data as under:

2004-2005: 50 patents

Royalties and licensing revenue: Rs. 4 crores.

Filing new and maintaining costs: Rs. 10 crores

2007-2008: 98 patents

This mismatch between filing costs and (lack of) subsequent revenues is alarming considering the public funds going to waste.

Council of Scientific and Industrial Research owns a dossier of 3016 patents (1,770 foreign, and 1,246 Indian patents). But its commercialization aspects are vagrant because of the following grounds:

- 1) By virtue of an inefficient recognizing body which could fail to forecast potentially viable (monetarily speaking) patentable subject matter, thus rendering ineffective the knowledge for steering the research in an appropriate revenue generating model;

2) By virtue of lack of accountability of fund utilization with respect to revenue generation.

Just as another sad point, it is [quoted](#) that out of 400 research works patented at Delhi's CSIR, only 34 reached the public.

CSIR initiates a sustainable yet slow diffusion of innovation into commercial space, marred only by a defunct money management scheme.

Unquestioningly, CSIR has quality and need-based research. However, its smartness falters due to the lack of an 'intellectual' IP Management Program; one where the fund routing is not accounted for merely because the kickback from such endeavours is not exploited seriously. With increasing bureaucratic reason, CSIR's success road has many bumps and potholes.

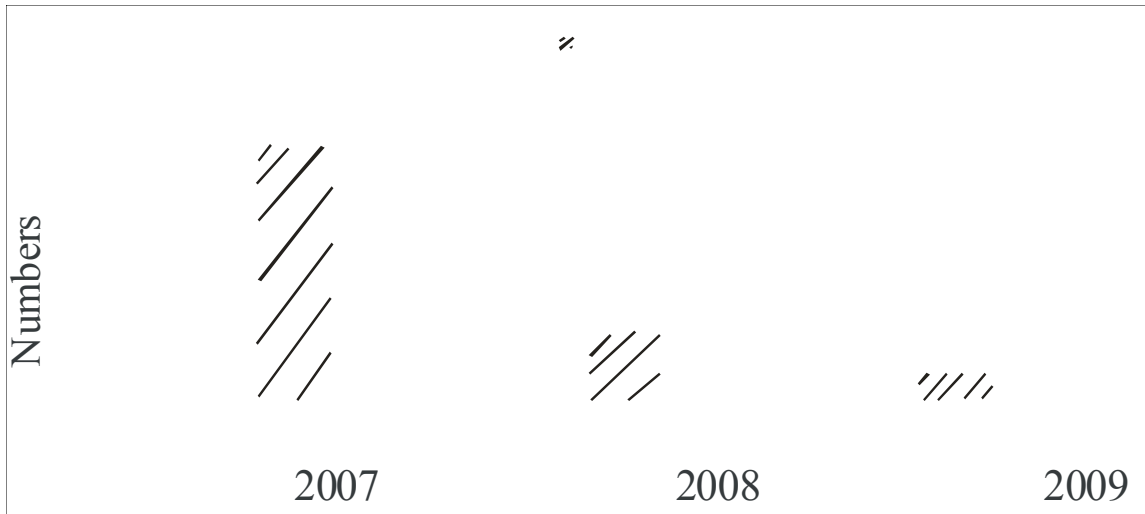
A paradigm shift, according to Mr. Kapil Sibal, is being sought to maximize CSIR's IP profitability. And articles [1](#) & [2](#) reveal this cause. Again, the first part of this [publication](#) (CSIR leads in patent filings from a developing nation. What does this mean for India?), truly reveals the heavy-duty sleeve of CSIR's patent filing activity. Another promising status report (dated 2004) can be read [here](#). According to this [report](#), CSIR's dream, could well be in the offing, albeit with an undefined timeframe.

Licensing revenue of previously identified valuable and secured IP rights in conjunction with reduced redundant protection (i.e. raking out plausibly non-money-worthy patent applications altogether), if handled smartly, could be

the single largest grabber of revenue, based upon which CSIR's research could be self-dependant.

Another Government watered seed, [\*IISc\*](#), counts itself amongst the breed of slow and steady, akin to the rabbit and hare story. The second part of this [publication](#) (IISc: Slow and steady) shows the potential that IISc holds and develops, but also gestures at the 6-year time lag between where CSIR is at this moment (of course, overlooking the proper monetizing aspect, but merely focusing on the patenting activity) with respect to IISc's nascency, and the bridging gap between the amount of throughput in terms of research and the steps taken to protecting the same.

Also, [\*IIT Kharagpur\*](#); a premier academic and research institute has formulated its own [IPR policy](#) which allows mutual sharing of revenues between the institute and inventor in an equal ratio. Upping its research funds (2007-1008) from Rs. 126.34 crores to Rs. 300 crores (2009-2010), the reliability of government, private, and international funding agencies/enterprises upon this institute is visible.



GRAPH – Patent filing data vs. licensing data

Showcases a healthy revenue generating mechanism and the value of the IPR docket. Amplification of public money can hence be justified in its further outlook. IIT K is enroute to stress on patent pooling, identifying clear research experiments among public funded research entities to enable upstream research, introducing audit committees for monitoring technology transfers, giving an inventor the freedom for commercializing an invention, and assuming a non-exclusive licensing approach.

### **Open Science:**

Debaters and contesters of open science flinch at the concept of patents for summoning monopolistic rights. Paper publication; a culture formed and vigorously pursued by professors worldwide defeats the ownership right. While it provides mere acknowledgement, the right to ‘own’ and ‘deal’ with the inventive concept is lost, if proper protection by means of patent filing is not sought. This directly translates into novelty loss as there is no control

over infringers and/or copiers. Even, in cases, where open science is the paradigm sought, to own and then disseminate should be an ideal motto.

**Solution:**

Put together an IPMD focusing on the following issues:

- 1) Studying industry trend, demand, and supply;
- 2) Channeling the course of research onto the trends of industry demands and supply;
- 3) Managing the percentage of patent filing in an intelligent manner, deciding upon preferring industrial patent applications to academic/theoretical patent applications, thus downsizing frivolous patenting;
- 4) Duly deciding the revenue sharing model vis-à-vis, the funding agency, the research department, the institute, and the inventors; and
- 5) Analysing foreign markets for protecting patent rights.

**Current Groundwork:**

As a mechanism to blur the tripartite seam between research bodies (the engine), corporate/industries (the driver) and the Government/funding bodies (the fuel), the bill should do more good than harm, especially if the nitty-gritty of timelines, evidence of disclosure, boundaries of work-sharing are worked out.

As may be observed, the pillars of every Act are tested when precedence in the form of judgements are sought. In view of patents, the Patent Act, in India has begun to establish its cornerstones as various cases are

simultaneously being heard and concurred upon at the courts, the Appellate Board, and at the Patent Offices; which, in turn, provide increasing awareness.

Another interesting read in the questionable department with respect to the implementing a copycat version of the US Bayh-Dole Act in a developing nation such as India, can be found [here](#).

### **THE ACT:**

The Federation of Indian Chambers of Commerce and Industry and the Pacific Council on International Policy, a non-partisan organisation based in Los Angeles, have joined hands to draft the legislation for the Act, and to present it. It is supposed to be borrowing heavily from America's [COMPETE Act](#).

[Incorporating science into policy](#) is the need of the hour.

### **Keypoints:**

Some sections, straight out from the bill, are:

#### *Funding of Agreement: Section 3*

*3 (1) Any recipient interested to take a grant from the Government for the purpose of research and development shall enter into an agreement with the Government before receipt of such grant.*

*(2) The agreement entered into under sub-section (1) shall be in such form and manner as may be prescribed.*

*(3) The recipient of the grant shall.-*

*(a) make disclosure of public funded intellectual property to the Government within the time specified under section 4;*

*(b) perform the duties under section 7:*



*(c) constitute an intellectual property management committee in the manner specified under section 10;*

*(d) abide by such other conditions as may be prescribed*

*(4) The Government shall not release any grant to any recipient until an agreement under sub-section (l) is entered into.*

*Disclosure of public funded Intellectual Property: Section 4*

*4 The recipient shall within a period of sixty days of actual knowledge of the public funded intellectual property make a disclosure thereof to the Government in such form and manner as may be prescribed.*

*Sharing of Royalites or Income: Section 11*

*11. (1) The income or royalties arising out of the public funded intellectual property shall be shared as under:*

*(a) subject to the provisions of any agreement which may be entered into between the Intellectual Property Creator and the recipient, not less than thirty per cent, of such income or royalties after deducting the expenses incurred in protection and utilization shall be given to the creator of intellectual property*

*Provided that where such agreement has a provision for a lesser amount than thirty per cent of the net income, the provisions of this section shall prevail;*

*(b) out of the remainder, thirty per cent shall be paid into the fund created by the intellectual property management committee;*

*(c) rest of the income or royalty shall be retained by the recipient for its utilization in any further research and to meet other expenses for the protection and maintenance of public funded intellectual property.*

[This paper](#) highlights some key aspects.

**Questions:**

Although, the bills allows for transferring of rights, partially, from the research institute to the inventors, it remains largely unclear as to how the public stands to gain. Working on the premise that with additional monetary recognition at stake, a researcher may work on industry-specific projects, by and large, we stand to lose out on two counts:

- 1) Does pure academia or pure theoretical research get a slash?
- 2) Would researchers 'push' to get patent rights anyway, in light of the possibility of direct commercial gain? What is the evaluator mechanism in place to ensure the 'picking processes' for patenting?

An interesting read can be found [here](#).

**Conclusion:**

Questionable aspects of suitable mentoring, rightly channeled and swift funding, support and development of infrastructure may still continue to loiter the lobbies of innovation, and mar its growth. The path upward from this juncture, by the mechanism of the Act, should be aimed towards the process of identifying virtuous patents, monitoring their disclosure, protecting it appropriately, and end at appropriately distributing the commercialized venture profits in a just manner.