

Security-related Provisions in IPR Laws in India

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ABSTRACT

The paper highlights the security-related provisions in IPR laws in India. There are no specific provisions related to national security in the laws on copyright, trademark, and geographical indication. It describes the provisions in the laws relating to patents, designs, integrated circuits, and plant varieties. The components of the Competition Act and the Information Technology Act relevant to the application of the acts keeping in mind the security of the country have also been included. The paper also points out the importance of other issues in the management of IPRs in defence like protection of confidential information, use of patent information in R&D, and sharing of IPRs during collaboration and the joint ventures in the development of technology.

Keywords: Copyright, IPR, WIPO, UCC, WPTT, neighbouring rights, TRIP

1. INTRODUCTION

National security in the modern context is impacted by several initiatives, particularly those related to scientific research and technology development including development of conventional and modern weapon systems involving nuclear and space capabilities, and critical military technologies. There are worldwide efforts in developing scientific and technological capabilities for critical military technologies covering a whole range of technological domains relating to armaments; aeronautics; energetic materials; biological, biomedical, and chemical technologies; electronics; information systems; security, and signature control; manufacturing and fabrication; marine systems; sensors; ground combat; and energy systems¹. Even

the basic approach to the development of new technologies is changing with the "dual use" in mind, i.e., military and civil, creating newer forms of alliances to develop defence or security systems, determined by a mix of security and commercial considerations². National security also impinges on a host of issues related to internal security or terrorism wherein appropriate technological systems are required to be developed².

The importance of indigenous research and development (R&D) for defence and intellectual property rights (IPRs) are thus evident. If research and development is performed in-house, resulting innovations need protection from exploitation, using IPR. The principal benefit of IPR for defence may not be the money, which it might bring, but the strategic

pitfalls that it might avoid; to prevent others from claiming its innovations as their own or to infringe the third party rights. In India, the Defence Research and Development Organisation (DRDO) has set its vision to make India self-sufficient by establishing world class science and technology base and to provide an edge to the defence services by equipping them with the state-of-the-art internationally competitive systems and solutions³. DRDO is actively collaborating with other R&D institutions, universities, national laboratories, and the private commercial enterprises in technology development for defence. It is also promoting participation of private industries and the commercialisation of defence-related research and technological developments. One of the key concerns, from the viewpoint of safeguarding the national security interests, is to secure the legal protection of results of research produced within domestic R&D system.

The present paper highlights the security-related provisions in the IPR laws in India as well as some of the related issues prevalent for the protection of intellectual property.

2. WHAT IS INTELLECTUAL PROPERTY?

Loosely defined, intellectual property is a "product of the mind". It is similar to the property consisting of movable or immovable things like a house or a car, wherein the proprietor or owner may use his property as he wishes and nobody else can lawfully use his property without his permission. The Convention establishing the World Intellectual Property Organisation⁴ (one of the specialised agencies of the United Nations System) in 1967 provided that "intellectual property" shall include rights relating to

- ✘ Literary, artistic, and scientific works
- ✘ Performance of performing artists, phonograms and broadcasts
- ✘ Inventions in all the fields of human endeavour
- ✘ Scientific discoveries, industrial designs

- ✘ Trademarks, service marks and commercial names and designations
- ✘ Protection against unfair competition, and
- ✘ All other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

3. PROTECTION OF INTELLECTUAL PROPERTY

The intellectual property is protected and governed by appropriate national legislations relating to patents, copyright, trademarks, designs, geographical indications, integrated circuits, plant varieties, and confidential information and know how. India became the member of the World Trade Organisation (WTO) on January 1, 1995, and brought its laws in compliance with the commitments under the agreement on trade-related aspects of the intellectual property rights (TRIPS). The national legislations on IPR in India include the following

- ✘ The Indian Patents Act, 1970 with amendments till 2005
- ✘ The Copyright Act, 1957 with amendments till 1999
- ✘ The Trademarks Act, 1999
- ✘ The Designs Act, 2000
- ✘ The Geographical Indications of Goods (Registration and Protection) Act, 1999
- ✘ The Semiconductor Integrated Circuits Layout Design Act, 2000, and
- ✘ The Protection of Plant Varieties and Farmer's Rights Act, 2001.

In addition, there are other acts like the Competition Act, 2002, and Information Technology Act of India, 2000, which also impact the governance of IPRs in the country. Of these, there are no specific provisions related to the national security in the laws

on copyright⁵, trademark⁶, and geographical indication⁷. The relevant security-related provisions in the case of other IPRs laws are described below.

3.1 Patents

A patent is a government granted and secured legal right to prevent others from 'practicing', i.e., making, using, selling or importing the inventions covered by the patent. A patent is a personal property that can be licensed or sold like any other property. An invention is patentable if it is new, involves an 'inventive step' (i.e., it is not obvious) and is industrially applicable⁸. The 'inventive step' means a feature of an invention that involves technical advance as compared to the existing knowledge or having economic significance or both, and that makes the invention not obvious to a person skilled in the art. The 'new invention' means any invention or technology, which has not been anticipated by publication in any document or used in the country or elsewhere in the world before the date of filing of patent application with complete specifications, i.e., the subject matter has not fallen in public domain or that it does not form part of the state-of-the-art.

The Indian Patents Act describes the inventions, which are excluded from protection⁸. No patents are granted in respect of an invention relating to atomic energy falling within Subsection (1) of Section (20) of the Atomic Energy Act, 1962. Chapter VII (Sections 35 to 42) of the act particularly relate to the provisions for secrecy of certain inventions⁸. Some of the important Sections are:

3.1.1 Section 35

The Section 35 stipulates secrecy directions relating to inventions relevant for defence purposes. Some of the important subsections of Section 35 are:

- (i) Where, in respect of an application made before or after the commencement of this act for a patent, it appears to the Controller that the invention is one of a class notified to him by the Central

Government (CG) as relevant for defence purposes, or, where otherwise the invention appears to him to be so relevant, he may give directions for prohibiting or restricting the publication of information with respect to the invention or the communication of such information.

- (ii) Where the Controller gives any such directions as are referred to in subsection (i), he shall give notice of the application and of the directions to the CG, and the CG shall, upon receipt of such notice, consider whether the publication of the invention would be prejudicial to the defence of India, and if upon such consideration, it appears to it that the publication of the invention would not so prejudice, give notice to the Controller to that effect, who shall thereupon revoke the directions and notify the applicant accordingly.
- (iii) Without prejudice to the provisions contained in subsection (i) where the CG is of the opinion that an invention in respect of which the Controller has not given any directions under subsection (i), is relevant for defence purposes, it may at any time before grant of patent notify the Controller to that effect, and thereupon, the provisions of that subsection shall apply as if the invention were one of the classes notified by the CG, and accordingly, the Controller shall give notice to the CG of the directions issued by him.

3.1.2 Section 36

The Section 36 states that the secrecy directions are to be periodically reviewed. Some of the important subsections of Section 36 are:

- (i) The question, whether an invention in respect of which directions have been given under Section 35 continues to be relevant for defence purposes, shall be reconsidered by the CG at six month interval or on a request made by the applicant, which is found to be reasonable by the Controller, and if on such reconsideration it appears to the CG

that the publication of the invention would no longer be prejudicial to the defence of India, or in case of an application filed by a foreign applicant, it is found that the invention is published outside India, it shall forthwith give notice to the Controller accordingly and the Controller shall thereupon revoke the directions previously given by him.

- (ii) The result of each reconsideration under subsection (i), shall be communicated to the applicant within such time and in such manner as may be prescribed.

3.1.3 Section 37

The Section 37 of the act relates to the consequences of secrecy directions. Some of the important subsections of Section 37 are:

- (i) So long as any direction under Section 35 are in force in respect of an application, the Controller shall not pass an order refusing to grant the same; and notwithstanding anything contained in this act, no appeal shall lie from any order of the Controller passed in respect thereof "Provided that the application may, subject to the directions, proceed up to the stage of grant of the patent, but the application and the specification found to be in order for grant of the patent shall not be published, and no patent shall be granted in pursuance of that application."
- (ii) Where a complete specification filed in pursuance of an application for a patent or for an invention in respect of which directions have been given under Section 35 is found to be in order for grant of the patent during the continuance in force of the directions, then if, during the continuance in force of the directions, any use of the invention is made by or on behalf of, or to the order of the Government, the provisions of Sections 100, 101, and 103 of the Indian Patents Act shall apply in relation to that use as if the patent had been granted for the invention; and if it appears to the CG that the applicant for the patent has

suffered hardship by reason of the continuance in force of the directions, the CG may make to him such payment (if any) by way of solatium as appears to the CG to be reasonable having regard to the novelty and utility of the invention and the purpose for which it is designed, and to any other relevant circumstances.

- (iii) Where a patent is granted in pursuance of an application in respect of which directions have been given under Section 35, no renewal fee shall be payable in respect of any period during which those directions were in force.

3.1.4 Section 38

The Section 38 relates to the revocation of secrecy directions and extension of time. When any direction given under Section 35 is revoked by the Controller, then, notwithstanding any provision of this act specifying the time within which any step should be taken or any act done in connection with an application for the patent, the Controller may, subject to such conditions, if any, as he thinks fit to impose, extend the time for doing anything required or authorised to be done by or under this act in connection with the application, whether or not that time has previously expired.

3.1.5 Section 39

The Section 39 states that residents can not apply for patents outside India without prior permission of the controller. Some of the important subsections of Section 39 are:

- (i) No person resident in India shall, except under the authority of a written permit sought in the manner prescribed and granted by or on behalf of the Controller, make or cause to be made any application outside India for the grant of a patent for an invention unless an application for a patent for the same invention has been made in India, not less than six weeks before the application outside India; and either no direction has been given under subsection (i) of Section 35 in relation to the application in India, or all such directions have been revoked.

- (ii) Controller shall dispose of each such application within such period as may be prescribed "Provided that if the invention is relevant for defence purpose or atomic energy, the Controller shall not grant permit without the prior consent of the CG".
- (iii) Section 39 shall not apply in relation to an invention for which an application for protection has first been filed in a country outside India by a person residing outside India.

3.1.6 Section 40

The Section 40 of the act is concerned with the liability for contravention of Section 35 or Section 39. It states that without prejudice to the provisions⁸ contained in Chapter XX, if in respect of an application for a patent any person contravenes any direction as to secrecy given by the Controller under Section 35 or makes or causes to be made an application for grant of a patent outside India in contravention of Section 39, the application for patent under this Act shall be deemed to have been abandoned and the patent granted, if any, shall be liable to be revoked under Section 64.

3.1.7 Sections 41 and 42

As per Section 41, all orders of the Controller giving directions as to secrecy as well as all orders of the CG under this chapter shall be final and shall not be called in question in any court on any ground whatsoever.

As per Section 42, nothing in the act shall be held to prevent the disclosure by the Controller of information concerning an application for a patent or a specification filed in pursuance thereof to the CG for the purpose of the application or specification being examined for considering whether an order under this chapter should be made or whether an order so made should be revoked.

3.1.8 Sections 65 and 118

Section 65 and 118 of the Indian Patent Act also stipulate secrecy directions relating to inventions relevant for defence purpose. Section 65 of the Act, after the recent amendments reads as:

- (i) Where at any time after grant of a patent, the CG is satisfied that a patent is for an invention relating to atomic energy for which no patent can be granted under subsection (i) of Section 20 of the Atomic Energy Act 1962, it may direct the Controller to revoke the patent, and thereupon the Controller, after giving notice to the patentee and every other person whose name has been entered in the register as having an interest in the patent, and after giving them an opportunity of being heard, may revoke the patent.

- (ii) In any proceedings under subsection (i), the Controller may allow the patentee to amend the complete specification in such manner as he considers necessary instead of revoking the patent.

Section 118 is about penalties for contravention of secrecy provisions relating to certain inventions. It states, "if any person fails to comply with any direction given under Section 35 or makes or causes to be made an application for the grant of a patent in contravention of Section 39, he shall be punishable with imprisonment for a term, which may extend to two years, or with fine, or with both.

3.1.9 Protection of Security of India

Section 157A of the Indian Patent Act states that notwithstanding anything contained in the Act, the CG shall: (i) not disclose any information relating to any patentable invention or any application relating to the grant of patent under the act, which it considers prejudicial to the interest of security of India; (ii) take any action including the revocation of any patent, which it considers necessary in the interest of the security of India by issue of a notification in the Official Gazette to that effect. For the purposes of this Section, the expression "security of India" includes any action necessary for the security of India, which relates to fissionable materials or the materials from which they are derived; or relates to the traffic in arms, ammunition, and implements of war and to such trafficking in other goods and materials as is carried

on directly or indirectly for the purpose of supplying to a military establishment; or is taken in time of war or other emergency in international relations.

3.2 Designs

The expression Design means only the features of shape, configuration, pattern or ornament or composition of lines or colours applied to any article by any industrial process or means whether manual, mechanical or chemical, separate or combined, which in the finished article appeal to and are judged solely by the eye. It means the features of shape, etc. applied to an article and not the article itself. By registration under the Designs Act, the features are protected as design. A design can not be registered if it is not new or original, or has been disclosed to the public anywhere in India or in any other country by publication in a tangible form or by use or in any other way prior to the filing date for registration or is not significantly distinguishable from known designs or comprises or contains scandalous or obscene matter. Though not directly related to security considerations, the Controller may refuse to register a design of which the use would, in his opinion, be contrary to public order or morality (Section 35). The Design Act 2000 contains the security related provisions with respect to the protection of designs as below⁹.

3.2.1 *Specific Security-related Provision (Section 46)*

Notwithstanding anything contained in the act, the Controller shall: (i) not disclose any information relating to the registration of a design or any application relating to the registration of a design under the Act, which he considers prejudicial to the interest of the security of India; and (ii) take any action regarding the cancellation of registration of such designs registered under the Act which the CG may, by notification in the Official Gazette, specify in the interest of the security of India. The expression security of India means any action necessary for the security of India, which relates to the application of any design registered under this Act to any article used for war or applied directly or

indirectly for the purposes of military establishment or for the purposes of war or other emergency in international relations.

3.3 Integrated Circuits

The semiconductor integrated circuit means a product having transistors and other circuitry elements, which are inseparably formed on a semiconductor material or an insulating material or inside the semiconductor material and designed to perform an electronic circuitry function. The layout-design means a layout of transistors, and other circuitry elements and includes lead wires connecting such elements and expressed in any manner in a semiconductor integrated circuit. A layout-design shall not be registered, which is not original or which has been commercially exploited anywhere in India or in a Convention country or which is not inherently distinctive or which is not inherently capable of being distinguishable from another registered layout-design. The Semiconductor Integrated Circuits Layout Design Act 2000 includes following security-related provisions¹⁰.

3.3.1 *Security-related Provision*

Notwithstanding anything contained in the act, the Registrar shall: (i) not disclose any information relating to the registration of a layout design or any application relating to the registration of a layout-design under the act which the CG considers prejudicial to the interest of the security of India; and (ii) take any action for including the cancellation of the registration of a layout-design registered under the Act, which the CG may by notification in the Official Gazette, specify in the interest of the security of India. The expression "interest of the security of India" means any action necessary for the security of India which relates to the use of a layout-design or a semiconductor integrated circuit incorporating a layout-design or an article incorporating such semiconductor integrated circuit and which relates to fissionable materials or the materials from which they are derived; or relates to the trafficking in arms, ammunition and implements of war and to such traffic in other goods and materials as is carried

on directly or indirectly for the purpose of supplying to a military establishment; or is taken in time of war or other emergency in international relations.

3.4 Plant Varieties

The plant variety means a plant grouping, except microorganism, within a single botanical taxon of the lowest known rank, which can be: (i) defined by the expression of the characteristics resulting from a given genotype of that plant grouping; (ii) distinguished from any other plant grouping by expression of at least one of the said characteristics; and (iii) considered as a unit with regard to its suitability for being propagated, which remains unchanged after such propagation, and includes propagating material of such variety, extant variety, transgenic variety, farmers' variety and essentially derived variety. A new variety is registrable if it conforms to the criteria of novelty, distinctiveness, uniformity, and stability. The registration confers exclusive right on the breeder to produce, sell, market, distribute, import or export the variety. The unique features of this Act are the farmer's and the researcher's rights.

A farmer who has bred or developed a new variety is entitled for registration and other protection in like manner as a breeder. The researcher's right provide for the use of any variety registered under the Act to be used for conducting experiment or research or the use of a variety by any person as an initial source of variety for the purpose of creating other varieties. The Protection of Plant Varieties and Farmer's Rights Act 2001 has the following security-related provisions¹¹:

3.4.1 Security-related Provision

The Article 78 of the act states that notwithstanding anything contained in the Act, the authority or the Registrar shall: (i) not disclose any information relating to the registration of a variety or any application relating to the registration of a variety under this Act, which it considers prejudicial to the interest of the security of India; and (ii) take any action regarding the cancellation

of registration of such varieties registered under this Act, which the central government may by notification in the Official Gazette specify in the interest of the security of India.

The expression "security of India" means any action necessary for the security of India, which relates to the use of any produce of any variety registered under this Act directly or indirectly for the purposes of war or military establishment or for the purposes of war or other emergency in international relations.

3.5 The Competition Act

The Competition Act 2002 has been enacted¹² to provide for the establishment of a commission to prevent practices having adverse effect on competition, to promote and sustain competition in markets, to protect the interests of consumers and to ensure freedom of trade carried on by other participants in markets, in India, and for matters connected therewith or incidental thereto. The Section 54 of the Act gives power to exempt to the CG in respect of the application of the act in the interest of the security of India.

The CG may, by notification, exempt from the application of this Act, or any provision thereof, and for such period as it may specify in such notification: (i) any class of enterprises if such exemption is necessary in the interest of security of the state or public interest; (ii) any practice or agreement arising out of and in accordance with any obligation assumed by India under any treaty, agreement or convention with any other country or countries; and (iii) any enterprise which performs a sovereign function on behalf of the CG or a state government: Provided that in case an enterprise is engaged in any activity including the activity relatable to the sovereign functions of the government, the CG may grant exemption only in respect of activity relatable to the sovereign functions.

3.6 Information Technology Act

The Information Technology Act 2000 of India has been enacted¹³ to provide legal recognition for transactions carried out by

means of electronic data interchange and other means of electronic communication. Commonly referred to as "electronic commerce", involves the use of alternatives to paper-based methods of communication and storage of information, and to facilitate electronic filing of documents with the government agencies.

The Section 69 of the Act includes directions in the interest of the security of India as given below:

- (i) If the Controller is satisfied that it is necessary or expedient so to do in the interest of the sovereignty or integrity of India, the security of the state, friendly relations with foreign states or public order or for preventing incitement to the commission of any cognisable offence, for reasons to be recorded in writing, by order, direct any agency of the government to intercept any information transmitted through any computer resource.
- (ii) The subscriber or any person incharge of the computer resource shall, when called upon by any agency, which has been directed under subsection (i), extend all facilities and technical assistance to decrypt the information.
- (iii) The subscriber or any person who fails to assist the agency referred to in subsection (ii) shall be punished with an imprisonment for a term, which may extend to seven years.

The Clause 33 of the Information Technology (Amendment) Bill 2006¹⁴ introduced in the Lok Sabha on December 15, 2006 seeks to substitute Section 69 so as to empower the CG to issue directions to an agency for interception or monitoring or decryption of any information transmitted through any computer resource. The bill has been referred to the Standing Committee on Information Technology for consideration. The proposed substitution is given below:

- (a) Where the CG is satisfied that it is necessary or expedient so to do in the interest of the sovereignty or integrity of India, defence of India, security of the

state, friendly relations with foreign states or public order or for preventing incitement to the commission of any cognisable offence relating to above or for investigation of any offence, it may subject to the provisions of subsection (ii), for reasons to be recorded in writing, by order, direct any agency of the government to intercept or monitor or decrypt or cause to be intercepted or monitored or decrypted any information transmitted through any computer resource.

- (b) The CG shall prescribe safeguards subject to which such interception or monitoring or decryption may be made or done, as the case may be.
- (c) The subscriber or intermediary or any person incharge of the computer resource shall, when called upon by any agency which has been directed under subsection (i), extend all facilities and technical assistance to provide access to the computer resource containing such information; intercept or monitor or decrypt the information; provide information contained in computer resource; and subscriber or intermediary or any person who fails to assist the agency referred to in subsection (iii) shall be punished with an imprisonment for a term, which may extend to seven years."

3.7 Confidential Information

A lot of information that is of commercial importance has to be kept confidential. Know-how is another important form of intellectual property generated by R&D institutions that may not have the benefit of patent protection¹⁵. This could be in the form of an aggregation of known processes/procedures, an accumulation of data, a secret formulation, or a combination of any of these. In defence, a lot of such information may be obtained as part of the contracts from the original manufacturer and may have to be shared or used such as drawings and maintenance manuals. There is no separate law in India to protect such information, which is nevertheless protected under the civil laws of contracts.

4. MANAGEMENT OF IPRS IN DEFENCE

The security-related exceptions are made in IPRs laws of many other countries¹⁶. Protection of IPRs is increasingly getting linked to national security in view of organised crimes of counterfeiting and piracy¹⁷. There are issues in dealing with IPRs in the context of defence procurements and the business¹⁸. These include the protection of confidential information and third party rights. The other important issues include defining of ownership of IPR in case of extramural contracts when getting the specific tasks accomplished by the involvement of other research institutions or private vendors¹⁹, and IPRs arrangements in international collaborations in joint R&D²⁰, joint development and transfer of technology²¹.

The use of patent information is equally important for scientists when beginning a new project²². It can also help in the assimilation of new technology, and knowing the actual owners of the patented technologies, and obtaining licences for them.

Most scientists and the functionaries in the government and defence are ignorant about intellectual property rights and, most often, find legal language to be confusing. However, they have a responsibility to protect the research work and inherent intellectual property in their respective functional domain or else the opportunities could be unduly lost to others. They must learn to manage protection of their IPRs within day to day activities and practices.

5. CONCLUSIONS

IPRs are significant in the protection of the results of research arising out of the domestic research and development system. In India, the IPRs laws relating to patents, designs, integrated circuits, and plant varieties have specific provisions keeping in view the interests of national security. The Competition Act and the Information Technology Act have also relevant provisions in the context of the national security. The essential feature of these provisions is to stipulate and give

effect to the secrecy directions while providing protection or revoking of such protections. In the Competition Act the government acquires rights to exempt from application of the Act if such exemption is considered necessary in the interests of the national security. In case of the Information Technology Act, the government acquires relevant rights to direct interception of information being transmitted through computer resource. There are several other issues in the management of IPRs in defence like protection of confidential information, use of patent information in R&D, and sharing of IPRs during collaboration and the joint development of technology. The awareness of the scientists and the functionaries in the government needs to be enhanced on IPRs for effectively managing such issues.

REFERENCES

1. Military critical technologies. <http://www.dtic.mil/mctl/DSTL.html> (Accessed on January 2, 2007).
2. Rajan, Y.S. Trade, technology, foreign policy and national security: Growing nexus. *In Seminar on Globalisation and India*, School of International Studies, Jawaharlal Nehru University, New Delhi, 14-17 January 1999.
3. DRDO policies. <http://www.drdo.org/drdocpolicies.htm> (Accessed on January 2, 2007).
4. Convention establishing the World Intellectual Property Organisation (WIPO), 1967 and amended 1979. (http://www.wipo.int/treaties/en/convention/trtdocs_wo029.html (Accessed on January 2, 2007)
5. The Copyright Act 1957 with amendments in 1999. Universal Law Publishing Co Pvt Ltd, Delhi, 2005. 91p.
6. The Trademarks Act 1999. Universal Law Publishing Co Pvt Ltd, Delhi, 2005, 249.
7. The Geographical Indications of Goods (registration and protection) Act 1999. Gazette of India, Extraordinary, Part II-Section I, 1999.

8. The Patents Act 1970 and Patents Rules 2003 as amended by The Patent Amendment Rules 2006, Universal Law Publishing Co Pvt Ltd, Delhi, 2006. 185p. Attorney Axel H Horns' Blog on Intellectual Property (Lawhttp://www.ipjur.com/2003/09/patents-state-secrets-and-threat-of.php3 Accessed on January 4, 2007)
9. The Designs Act 2000. Universal Law Publishing Co Pvt Ltd, Delhi, 2005. 70p.
10. The Semiconductor Integrated Circuits Layout-design Act, 2000. Government of India, 2000.
11. The Protection of Plant Variety and Farmers' Rights Act, 2001. Government of India, 2001.
12. The Competition Act 2002 (No.12 of 2003), The Gazette of India, 14 January 2003, Ministry of Law and Justice, Government of India.
13. Information Technology Act of India, 2000 (No.21 of 2000), The Gazette of India, 9 June 2000, Ministry of Law and Justice, Government of India.
14. The Information Technology (Amendment) Bill, 2006 (Bill No. 96 Of 2006), A Bill Further To Amend The Information Technology Act, 2000. Government of India.
15. Gupta, V.K., Protecting confidential R&D information. *Asia and Pacific Tech. Monitor*, 1999, **17**, 37-42.
16. Patents, state secrets, and the threat of terrorism (6 September 2003). Patent
17. Intellectual property rights linked to security, US Dept of State. <http://usinfo.state.gov/ei/Archive/2004/Mar/24-488795.html> (Accessed on January 4, 2007)
18. The Ministry of Defence Guide to Intellectual Property, September 2003, UK.
19. Siddhartha, V. Some salient issues relating to IPR in S&T agreements, MOUs and other arrangements. A presentation made to the Inter-departmental Standing Working Group on Intellectual Property Rights (IPRs) issues in international S&T cooperation, DST, Government of India, New Delhi, 24 April 1990.
20. Gupta, V K. Negotiating IPR in international science and technology cooperation. *J. Intell. Prop. Rights*, 2000, **5**, 61-71.
21. Gupta V.K., intellectual property rights in commercialisation of R&D and transfer of technology, *J. Intell. Prop. Rights*, 1997, **2**, 181-90.
22. Gupta V.K. Use of patent information in R&D. *In Intellectual Property Rights (IPR) Information for R&D Scientists in CSIR*, Department of Studies in Library and Information Science, University of Mysore, Mysore, March 2006 (Thesis).

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