

Review

Internet: A place for patent retrieval

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Countries design patent laws according to their respective economic interest. Before one files intellectual property one should know the regimes under which his intellectual property is placed. Intellectual properties are always of intense debate. The basic reason for the controversies is due to lack of transdisciplinary approaches to address patent concepts. In this present mini-review, we are presenting some web links that will help any researcher to get acquainted with the rules and regulation of filling an intellectual property of some countries as internet is now viewed as the place from where retrieval of information is possible with in seconds.

Key words: Biotechnology, intellectual property rights, Patents, Internet application.

INTRODUCTION

The principle objective of biotechnology is to produce commercial products for economic gain. However, any industry will not initiate long-term projects unless the results of its research efforts are legally protected from competitors in the form of patents. Patents are the most important form of intellectual property as it carries the name of its inventor and fortune (Lawerence, 2002). An invention is patentable if it satisfies three criteria; utility, novelty and non-obviousness. The requirement of utility includes some practical application with at least some initial evidence that the invention will work as stipulated. The essence of a patent is a *de jure* monopoly: a total control on all activities related to the invention.

Attitudes toward patenting in the research community have changed substantially since the late 1970s as protection of intellectual property rights has helped researchers and institutions to attract research funding. Patents have helped firms to raise investment capital and pursue product development. Intellectual property rights have been a recurring source of controversy periodically generated complaints and concerns about its effect on the progress of science and on the dissemination and use of new knowledge. The concerns have been particularly pressing for scientists when intellectual

property rights have threatened to restrict access to materials and techniques that are critical for future research. However commercial interest in the field, legal decisions that have clarified the availability of patent protection for a wide range of discoveries related to life forms and changes in federal policy have contributed to the increasing salience of intellectual property. Today, universities and academic scientists routinely pursue patent rights, often in competition with their counterparts in the private sector (Richard, 2002). Patenting discourages research, by suppressing publication. This delay of scientific publication can be avoided by proper planning (Heller and Eisenberg, 1998).

Countries design patent laws according to their respective economic interest. Most of the researchers do not patent their work due to lack of integrated, transdisciplinary methodology to understand and analyse the pattern of patenting. The complex nature of intellectual property rights and differences between intellectual property regimes of different countries and international trade laws has created extra problems. These methodological lacunae lead to shelving of many works (Gold, 2000; Sakakibara and Branstetter, 2001). Explosion of commercial interest in the scientific area over the past two decades has created a better and defined prospective for inventors. Researchers have just now begun to understand the links between the patent and financial investment in the research (Glass, 2000). The success of a technology lies not only in its contents

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Table 1. Web link to official IPR websites of various countries.

| Country | Official Web link |
|----------------|---|
| Africaine | http://www.dapi.wipo.net |
| Argentinian | http://www.mecon.ar |
| Austrian | http://www.patent.bmwa.gv.at |
| Argentinian | http://www.ipaustralia.gov.ac |
| Belgian | http://www.european-patent-office.org/patlib/country/belgium |
| Brazilian | http://www.ipi.gov.br |
| Canadian | http://cpo.gc.ca |
| Chile | http://www.proind.gov.ci/dpi/000_a_homepage.asp |
| China | http://www.cpo.cn.net |
| Croatian | http://jagor.srce.hr/patent |
| Czech | http://www.upv.cz |
| Danish | http://www.dkpto.dk |
| Estonian | http://www.eapo.ee/index.html |
| Eurasian | http://www.eapo.org |
| Espaniola | http://www.oepm.es |
| Finland | http://www.prh.fi |
| France | http://www.inpi.fr |
| Germany | http://www.dpma.de |
| Greek | http://www.obi.gr |
| Georgian | http://www.global-erty.net/saqpatent |
| Hong Kong | http://www.houston.com.hk/hkgipds |
| Hungarian | http://www.hpo.hu |
| Irsish | http://www.patentoffice.ie |
| Italian | http://www.minindustria.it |
| Japan | http://www.ipo.go.jp |
| Korean | http://www.kipo.go.kr |
| Luxemberg | http://www.etat.lu/Ec |
| Lithuania | http://www.isit/vpb/engl |
| Malaysian | http://www.kpdnhq.gov.my |
| Moldova | http://www.agepi.md |
| Monaco | http://www.european-patent-office.org/patlib/country/Monaco |
| Netherlands | http://www.bie.nl |
| New Zealand | http://www.moc.govt.nz |
| Norwegian | http://www.patentstyret.no |
| Peru | http://www.indecopi.gob.pe |
| Poland | http://www.uprp.pl |
| Portuguese | http://www.inpi.pt |
| Romanian | http://www.osim.ro |
| Russia | http://www.rupto.ru |
| Singapore | http://www.ipos.gov.sg |
| Slovenian | http://www.sipo.mzt.si |
| Spain | http://www.oepm.es/internet/enlaces/crinpat.html |
| Swedish | http://www.prv.se |
| Swiss | http://www.ige.ch |
| Turkish | http://www.turkpatent.gov.tr |
| United kingdom | http://www.patent.gov.dk |
| USA | http://www.uspto.gov |
| PTO | http://www.uspto.gov/web/menu/offices.html |

Table 2. Patent databases

| Country | Official weblink |
|--------------------------------|---|
| Aurigin system | http://www.aurigin.com/corproot.html |
| Esp@cenet | http://www.european-patent-office.org/espacenet/info/ access.html |
| Biotechnology patents | http://www.nal.usda.gov/bihc/Biotech.patents |
| Brivit database | http://www.brivit.com |
| Bunsan service | http://www.bunsan.patalis.co.jp |
| Candian | http://www.patentss1.ic.gc.ca |
| CASWEB | http://www.casweb.cas.org/chempat |
| Chiresearch | http://www.chiresearch.com |
| China | http://www.ixinfo.gov.cn |
| CNIDRUS | http://www.patents.cnidr.org |
| COSUS | http://patents.cos.com |
| Datastar | http://www.dialog.com.info/products/datastar-index.html |
| Delphion | http://www.delphion.com |
| Derwent | http://www.derwent.co.uk |
| Depatis | http://www.depatisnet.de |
| DNA patents | http://208.201.146.119/oshtml/ossearch.htm |
| Dolphin | http://www.current-patents.com/dolphin/index.html |
| European patents | http://www.coatings.de/patents.cfm |
| FILDATA | http://www.fldata.it |
| French | http://www.usc.es.citt |
| Fullerene patent database | http://www.godunov.com/bucky/patents.html |
| Germany database | http://www.patentblatt.de |
| Germany patent database | http://www.dpma.de/suche/suche.html |
| GPO Access Database | http://www.access.gpo.gov/su_docs/dbsearch.html |
| IFICLAIMSA | http://www.ificlaims.com |
| Intellectual Property Network | http://www.patents.ibm.com/ |
| IP search | http://www.ipsearchengine.com |
| IPR village | http://www.ipr-village.com/index-ipr.html |
| Japanese | http://www.paterra.com |
| JAPIO | http://www.japio.or.jp |
| Lexis | http://www.lexisnexis.com |
| Micropatent | http://www.micropat.com/o/newfulltext29809 |
| Pat cite | http://www.ozemail.com.au |
| PCT Gazette | http://www.pcgazette.wipo.int |
| Questel orbit | http://www.questel.orbit.com/index.htm |
| Qpat | http://www.qpat.com |
| PCT Database | http://pctgazette.wipo.int/ |
| Potolis | http://www.japio.or.jp/service.html#pat |
| Surfip.com | http://www.surfip.gov.sg |
| STN | http://www.fiz-karlsruhe.de |
| UBC library | http://www.library.ubc.ca/patscan |
| Univentio | http://www.univentio.com |
| U.S. Patent Bibliographic Data | http://patents.cnidr.org/ |
| U.S. Patent citation | http://www.us. patentcos.gdb.org |
| USPTO Patent Databases | http://patents.uspto.gov/index.htm |
| USITC trade database | http://dataweb.usitc.gov |

but also in its management. Third world countries are clearly lacking the strategy to put into use its patents for wealth creation. In the present scenario, it is best to get some returns from important patents by licensing them to foreign companies and earning royalties. Technological innovations do not create new materials but new resources. Hence, every researcher should now concentrate on more technology specific domain for patenting activity rather than trying to address different technological sectors (Sujit and Pradosh, 2002). Computer science has really transformed our life by

adding wings to our communications in the form of internet (Lawrences and Giles, 1998; Gardener and Spangler, 2000). The use of Internet in developing countries is now growing faster and it has become an indispensable part of human life (Francisco, 1998; Baxevanis, 2000). With the enormous expansion of internet the flow of information from one corner of world to the other has been speeded a million times. Among the enormous data on Internet it is important for researchers to know where, how and what to search to get valuable information. The easiest way is to obtain the

Table 3. Patent related articles.

| Information | Hyperlink |
|--|---|
| Adam Knott | http://www.praxeology.com/index.cfm/document/21.htm |
| Alex Tabarrok | http://www.mail-archive.com/armchair@gmu.edu/msg00612.html http://www.arvic.com/ |
| ARVIC | http://www.bepress.com/bejeap/contributions/vol1/iss1/art9 |
| Basic U.S. Patent | http://www.fplc.edu/tfield/ipbasics.htm |
| Benjamin tucker | http://flag.blackened.net/daver/anarchism/tucker/tucker43.html |
| Bust home page | http://www.bustpatents.com |
| Bugroff license | http://www.geocities.com/SoHo/Cafe/5947/bugroff.html |
| Barlow | http://www.eff.org/pub/Publications/John_Perry_Barlow/idea_economy.article |
| Chris Rasch | http://www.mail-archive.com/armchair@gmu.edu/msg00613.html |
| Copyright Protection | http://www.cli.org/Caching.html |
| David Dobbs | http://www.harvard-magazine.com/issues/ja99/right.patent.html |
| Emerging Law and Electronic Frontier | http://www.usc.edu/dept/annenberg/vol2/issue1/cover2.html |
| Frédéric Bastiat | http://www.econlib.org/library/Bastiat/basHar10.html \ "Chapter%2010 |
| François | http://fare.tunes.org/articles/patents.html |
| Holger Blasum | http://www.oekonux-konferenz.de/dokumentation/texte/blasum.html |
| George Monbiot | http://www.guardian.co.uk/Print/0,3858,4372463,00.html |
| Gordon Irlam | http://lpf.ai.mit.edu/Patents/quotes.html |
| James Bessen | http://lpf.ai.mit.edu |
| James Gleick | http://www.researchoninnovation.org/patent.pdf |
| Jeffrey D. | http://www.nytimes.com/library/magazine/home/20000312mag-patents.html |
| Ullman | http://www-db.stanford.edu/~ullman/pub/focs00.html |
| John Perry | http://www.wired.com/wired/archive/2.03/economy.ideas.html |
| Julio H. Cole | http://www.economia.ufm.edu.gt/Catedraticos/jcole/ |
| IFLANET | http://www.nlc-bnc.ca/ifla/II/copyright.htm |
| Ilana Mercer | http://www.mises.org/fullstory.asp?control=641andFS=Patent+Wrongs |
| Intellectual | http://techweb.cmp.com/iw/572/72mtco4.htm |
| Property Law Iusmentis | http://www.iusmentiscom/patents/ |
| Liman | http://www.limanlaw.com |
| Markus Krummenacker | http://www.n-a-n-o.com/ipr/extro2/extro2mk.html |
| Patents rules | http://inventors.about.com/cs/patents |
| Pierre Desrochers: | http://www.acton.org/publicat/m_and_m/2001_spring/cole1.html |
| Phil Karn Richard | http://www.quebecoislibre.org/000902-3.htm |
| Stallman Roderick | http://people.qualcomm.com/karn/patents/patent-comments.html |
| T. Long | http://linuxtoday.com/news_story.php3?ltsn=2000-05-26004-04-OP-LF |
| Simson | http://libertariannation.org/a/f3111.html |
| Garfinkel | http://www.wired.com/wired/archive/2.07/patents_pr.html |
| Scientific information | http://www.elsevier.com/locate/worpatin |
| Thomas Jefferson | http://odur.let.rug.nl/~usa/P/tj3/writings/brf/jefl220.htm |
| U.S. Copyright Law and Related Resources | http://www.law.cornell.edu/topics/copyright.html |
| UK patent | http://www.sweet and maxwel.co.uk |
| Wendy McElroy | http://www.mmsweb.com/eykiw/pf/contra.txt |
| Werner website | http://www.wernerpubl.com |
| William Fisher | http://eon.law.harvard.edu/property99/history.html |
| World wide patent | http://www.patents.com |

Table 4. Online journal list .

| Journal name | Hyperlink |
|---|---|
| Berkeley Technology Law Journal | http://server.berkeley.edu/BTLJ/index.html |
| Federal Communication Law Journal | http://www.law.indiana.edu/fclj/fclj.html |
| Harvard Journal of Law and Technology | http://www.law.harvard.edu/home/jolt |
| Journal of Online Law | http://warthog.cc.wm.edu/law/publications/jol/ |
| Journal of Information Law and Technology | http://elj.warwick.ac.uk/jilt/ |
| Intellectual Property News | http://www.ljx.com/practice/intellectualproperty |
| National Archives Gopher | http://www.nara.gov |

Table 5. Interesting links about patents.

| Site names | Web links |
|---------------------------------------|---|
| Abolish IP | http://www.contre.com/abolish-ip/index.php |
| Bernard Lang | http://pauillac.inria.fr/~lang/ecrits/terminal/p.html |
| Biomedical Research Brevets | http://www-inst.eecs.berkeley.edu/~eecsba1/s98/reports/eecsba1f/Final.html |
| Brevets | http://www.sciencemag.org/cgi/content/full/280/5364/698 |
| Biomedical Research Brevets | http://195.5.213.54:9080/law/situation.html |
| Brevets | http://www.isoc.asso.fr/presse/ce-brvt.htm |
| Copyright and Fair Use | http://fairuse.stanford.edu/articles/ |
| Copyright Law | http://www.acm.org/crossroads/xrds2-2/weblaw.html |
| Copyright and the Internet | http://elj.warwick.ac.uk/jilt/01-1/waelde.html |
| Defend IP claims | http://www.infowarrior.org/articles/2001-05.ht |
| Digital Dilemma | http://elj.warwick.ac.uk/jilt/01-1/mccullagh.html |
| Digital Dilemma | http://www.nap.edu/books/0309064996/html/ |
| Domain Names and Trademarks | http://www.ll.georgetown.edu/lc/internic/domain1.html |
| Electronic Publishing Copyright | http://www.nolo.com/COHA_2/index.html |
| Haas School of Business | http://www.haas.berkeley.edu/~shapiro/ |
| History of Software Patents | http://www.bitlaw.com/software-patent/history.html |
| Intellectual Properties | http://publish.aps.org/EPRINT/KATHD/okerson.html |
| Intellectual Property | http://intellectual.property.really.fuckingsucks.net |
| Intellectual Property | http://swissnet.ai.mit.edu/6805/readings-ip.html |
| Intellectual Property | http://www.upside.com/texis/features/know?UID=9706011002 |
| Intellectual Property | http://www.fplc.edu/ipmall.htm |
| Intellectual Property Rights | http://www.yahoo.com/Government/Law/Intellectual_Property/ |
| Intellectual Preservation | http://www.smartbiz.com/sbs/cats/ipr.htm |
| Intellectual Property Issues | http://aultnis.rutgers.edu/texts/dps.html |
| Intellectual Property Resources | http://www.ladas.com/BULLETINS/1994/NAFTAGATT.html |
| Intellectual Property Resources | http://www.questel.orbit.com/patents |
| Internet Patents | http://mbhs.bergtraum.k12.ny.us/cybereng/nyt/ethics.htm |
| Lawless Net | http://elj.warwick.ac.uk/jilt/01-1/henderson.html |
| Laws, PETs | http://www.businessweek.com/1996/19/b347472.htm |
| Legal Issues | http://elj.warwick.ac.uk/jilt/01-1/borking.html |
| New Technologies | http://www.internetnews.com/business/legal.shtml |
| Patently Absurd | http://elj.warwick.ac.uk/jilt/01-1/mountain.html |
| Patently Absurd | http://www.wired.com/news/print/0,1294,34695,00.html |
| Patent Information | http://www.forbes.com/asap/2002/0624/044.html |
| Patent Problems | http://www.uspto.gov/web/menu/pats.html |
| Potential Pitfalls | http://www.fplc.edu/tfield/aVoid.htm |
| Pro Innovation | http://www.oikoumene.com/oikoumene/nobomediarights.html |
| Provisions of GATT | http://www.pro-innovation.org |
| Software patents | http://www.ladas.com/gatt.html |
| Surviving a War With Patents | http://www.openg cascade.com/newsletter/31-05-2001_art_1.html |
| Technology Law | http://www.upside.com/texis/mvm/opinion/story?id=382a24f90 |
| TIIP | http://www.kuesterlaw.com/ |
| Thomson's online | http://www.researchoninnovation.org/tiip/ |
| Trademark Information | http://www.thomson-thomson.com/ |
| Trade Mark Protection | http://www.uspto.gov/web/menu/tm.html |
| Trade Mark Protection Trusted Systems | http://elj.warwick.ac.uk/jilt/01-1/hutchinson.html |
| Unnatural Monopoly | http://www.sciam.com/0397issue/0397stefik.html |
| US Patent History | http://www.cato.org/pubs/journal/cjv14n2-6.html |
| | http://www.ladas.com/USPatentHistory.html |

Table 6. Organisation's fighting for free patents.

| Organisation | Web links |
|---------------------------------------|---|
| LPF | http://lpf.ai.mit.edu |
| Cyberspace Law Institute | http://www.cli.org/ |
| EFF | http://www.eff.org/pub/Intellectual_property |
| EuroLinux | http://petition.eurolinux.org |
| Eurorights | http://eurorights.org |
| FFII | http://swpat.ffii.org/ |
| FFII | http://swpat.ffii.org/archive/mirror/impact.en.html |
| Free Patents | http://www.freepatents.org |
| Free-Market.net | http://www.free-market.net |
| Free Nation | http://www.freenation.org |
| Free Software links | http://russell.flora.org |
| Free Software page | http://danny.oz.au/free-oftware/index.html |
| Free Software philosophy | http://www.geocities.com/RainForest/Vines/8695/philosophy.html |
| Information sources on Patents and IP | http://pauillac.inria.fr/~lang/reperes/patents |
| Intellectual Property | http://www.free-market.net/spotlight/iproperty |
| IP | http://www.koek.net/ip |
| Mark Koek's | http://www.freenation.org/b/intprop.htm |
| Mauro J. Cavalcanti's | http://www.koek.net |
| O'Reilly Net on Patents | http://www.maurobio.cjb.net |
| Software Patents | http://osname.che.wisc.edu/~epperly/patents.html |
| Stephan Kinsella | http://www.free-market.net/spotlight/iproperty |

Table 7. Search engines.

| Search engines | Hyperlink |
|-------------------------|---|
| Google | http://www.google.com |
| Yahoo | http://www.yahoo.com |
| Excite | http://www.excite.com |
| MSN | http://www.msn.com |
| Infoseek | http://www.infoseek.com |
| Lycos | http://www.lycos.com |
| Alta vista | http://www.alta vista.com |
| Looksmart | http://www.looksmart.com |
| Hot bolt | http://www.hotbolt.com |
| India search | http://www.indialinks.com/links/links.html |
| Indian home page search | http://indiatime.com/urls/indiaurls.htm |
| 123 India | http://www.123.india.com |

exact Uniform Resources Locator or URL. If the URL is unknown, then for an efficient searching of literature, powerful search engine are there to help the user. Search engines act as interface between Internet and user life (Rolinson, 1995). Immediate access to all scientific literature has long been a dream of scientists and the web search engines' has made a large growing body of scientific literature and other information resources accessible within seconds (Sanjoy, 2001a).

The amount of patent information and the number of electronic journals available on the World Wide Web is unimaginable. Internet offers a number of resources to various researchers (Sanjoy, 2001b). In our present review, we are aiming at providing hyperlinks (Tables 1 to 7) to databases related to patents and intellectual property rights, which could be used to gather information

and perform analyses by spending minimum amount of time.

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REFERENCES

Baxevanis AD (2000). The Molecular Biology Database Collection: an online compilation of relevant database resources. Nucleic Acids Res 28:1.

- Franccisco M (1998). Toxicology resources on the internet. *Nature biotech*, 16:302.
- Gardener R, Spangler F (2000). Overcoming the pit falls of web search engines-toxicology abstract. *Toxicology* 43: 209.
- Glass AJ (2000). Costly RandD and intellectual property rights protection. *Int. J. Tech. Manag.* 61: 179.
- Gold E (2000). Finding common cause in the patent debate. *Nat Biotechnol*, 18: 1217.
- Heller MA, Eisenberg RS(1998). Can patents deter innovations? The Anti commons in biomedical research. *Science*, 280:698.
- Lawerence LI, Leodegario MI, Leodevico LI (2002). From patenting genes to proteins: the search for utility via function. *TIBS* 20:197.
- Lawrences S, Giles CL (1998). Searching the world wide web. *Science* 280: 98.
- Sakakibara M, Branstetter L (2001). Do stronger patents induce more innovations? Evidence from 1998 Japanese law reforms. *RANDJ Econ*, 32: 77.
- Sanjoy KP, Aamir N, Indranil M, Saxena DK Chowdari DK (2001a). Internet : A major resource for toxicology. *Ind J Exp Biol*, 39: 1207.
- Sanjoy KP, Mahendra KS, Pandey GS, Balraj M (2001b). Internet resources for geneticist. *Ind J Exp Biol*, 39: 503.
- Sujit B Pradosh N (2002). Using patent statistics as a measure of technological assertiveness: A China –India comparison. *Curr Sci*, 83: 23.
- Richard GE, David C, Martin LC, Abdallah SD, Pamela JS (2002). Needed: models of biotechnology intellectual property. *TIBS* 20:329.
- Rolinson J, Meadows AJ, Smith H (1995). Use of information technology by biological researchers. *J. Information Sci.* 21: 133.