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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 form 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
Espariola	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/crinfpat.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.www.aurigin.com/corproot.html
Esp@cenet	http://www.www.european-patent-office.org/espacenet/info/ access.html
Biotechnology patents	http://www.www.nal.usda.gov/bihc/Biotech.patents
Brivit database	http://www.www.brivit.com
Bunsan service	http://www.bunsan.patolis.co.jp
Candian	http://www.patentss1.ic.gc.ca
CASWEB	http://www.caseweb.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.fildata.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. ificlaimsa.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.micorpat.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 then 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 (Franccisco, 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" \l "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/jhcole/
IFLANET	http://www.nlc-bnc.ca/ifla/II/cpyright.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/f31l1.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	http://www.yahoo.com/Government/Law/Intellectual_Property/
Intellectual Property Rights	http://www.smartbiz.com/sbs/cats/ipr.htm
Intellectual Preservation	http://aultnis.rutgers.edu/texts/dps.html
Intellectual Property Issues	http://www.ladas.com/BULLETINS/1994/NAFTAGATT.html
Intellectual Property Resources	http://www.questel.orbit.com/patents
Intellectual Property Resources	http://mbhs.bergtraum.k12.ny.us/cybereng/nyt/ethics.htms
Internet Patents	http://elj.warwick.ac.uk/jilt/01-1/henderson.html
Lawless Net	http://www.businessweek.com/1996/19/b347472.htm
Laws, PETs	http://elj.warwick.ac.uk/jilt/01-1/borking.html
Legal Issues	http://www.internetnews.com/business/legal.shtml
New Technologies	http://elj.warwick.ac.uk/jilt/01-1/mountain.html
Patently Absurd	http://www.wired.com/news/print/0,1294,34695,00.html
Patently Absurd	http://www.forbes.com/asap/2002/0624/044.html
Patent Information	http://www.uspto.gov/web/menu/pats.html
Patent Problems	http://www.fplc.edu/tfield/aVoid.htm
Potential Pitfalls	http://www.oikoumene.com/oikoumene/nobomediarights.html
Pro Innovation	http://www.pro-innovation.org
Provisions of GATT	http://www.ladas.com/gatt.html
Software patents	http://www.opencascade.com/newsletter/31-05-2001_art_1.html
Surviving a War With Patents	http://www.upside.com/texis/mvm/opinion/story?id=382a24f90
Technology Law	http://www.kuesterlaw.com/
TIIP	http://www.researchoninnovation.org/tiip/
Thomson's online	http://www.thomson-thomson.com/
Trademark Information	http://www.uspto.gov/web/menu/tm.html
Trade Mark Protection	http://elj.warwick.ac.uk/jilt/01-1/hutchinson.html
Trade Mark Protection Trusted Systems	http://www.sciam.com/0397issue/0397stefik.html
Unnatural Monopoly	http://www.cato.org/pubs/journal/cjv14n2-6.html
US Patent History	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://osnome.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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