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Mobilisation of Intellectual Property in Secured Financing: Managing the Intersection between Territorialism and Globalism[1]

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1. Introduction

Secured credit is a well known and deep-rooted institution. The basic premise is straightforward. A debtor gives her creditor a proprietary interest in one or more of her assets on the understanding that if she defaults the creditor can look to the liquidated value of those assets to satisfy the debt.

Historically, land and luxury items were the principal objects of security. With industrialization, attention shifted to commercial movables – equipment, inventory, and receivables. In today's information and technology dominated economies,[3] intellectual property rights (IPRs) are an increasingly significant component of the asset base of many prospective borrowers. Yet financers are often reluctant to lend against their value. Reticence towards IPR financing is often ascribed to valuation difficulties.[4] Unlike an owner, the holder of a security right has no interest in the encumbered asset as such. Its

[1] This is a slightly revised version of a paper presented at the Meredith Memorial Lecture Series Conference on "Intellectual Property at the Edge: New Approaches to IP in a Transsystemic World" held at McGill University in March 2006. The original version was recently published in a book collection of the 2006 conference papers as part of the Meredith Memorial Lecture Series. I owe thanks to David Vaver - Director of the Oxford Intellectual Property Research Centre - for thoughtful comments on the Meredith version of the paper (his ideas are invariably illuminating even when he is in disagreement).
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[3]See for example T. Mandeville, *Understanding Novelty: Information, Technological Change, And The Patent System*, (Ablex Publishing Corporation, Norwood, New Jersey, 1996) at 3, cited by Peter Drahos, "Universality of Intellectual Property Rights: Origins and Development" (www.wipo.int/tk/en/hr/paneldiscussion/papers/pdf/drahos.pdf) in footnote 4 for the proposition: "Information is becoming 'the prime resource' in modern economic life."
[4]For recent empirical analyses of the valuation challenges, see: Shigeki Kamiyama, Jerry Sheehan and Catalina Martinez, *Valuation and Exploitation of Intellectual Property*, OECD (Organisation for Economic Co-operation and Development), DSTI/DOC WORKING PAPER 2006/5 (www.oecd.org); Iwan Davies, *Financing of Welsh SMEs and the Commodification of IP Rights*, IP Wales Research Report 2004

interest lies in the liquidated value it will yield on a sale to a third party should the debtor default. Yet determining the market value of IPRs poses particular challenges relative to other categories of assets. Since each IPR is unique by definition, it is often impossible to value it by reference to comparable transactions in the same market. If the owner of the IPR has granted licences to third parties, the licensing fees may offer a more objective basis for calculating market value. However, the current revenue stream may not be a reliable predictor of future income. New innovations and changes in popular taste mean that that what is cutting edge today can become obsolete even a matter of months especially in today's consumption driven economies. In any event, many IPRs are valued primarily for the monopoly protection they provide the owner-user rather than the fees generated from licensing to external users. Yet the more specialized or idiosyncratic the nature of the owner's business, the more difficult it will be to predict its market value in the hands of a different user.

IPRs also pose unique validation challenges owing to their inherent characteristics.[5] For example, copyright protects only the expression embodied in the work, as opposed to the idea behind it, and it is not always possible to predict in advance of a court ruling the precise dividing line between protected expression and the unprotected underlying idea or theme. There is also the threshold requirement of "originality" for copyright– low, but not non-existent.[6] Also, copyright may exist in an infringing work – for example, an unauthorized translation – which means the owner may have fewer remedies available against an infringer than where the work was authorized.[7] Similarly, the validity of a patent may be challenged at any time during its life for any of the substantive reasons that would have justified refusal to issue the patent in the first instance, notably, obviousness or lack of novelty. Invalidity is also a problem for trade-marks since continued protection depends on the owner's vigilance in ensuring that the mark retains its unique association with the owner's wares in the marketplace. If the mark loses its distinctiveness – for example if it is used by another company without challenge by the putative owner – it will become invalid. As with copyright and patent, there may be initial invalidity problems with registered marks – for example, if the mark is initially clearly descriptive or otherwise non-distinctive. Registration is only prima facie evidence of validity.[8]

While the valuation and validation issues are significant, an equally if not more important obstacle to IPR financing is the undeveloped and uncertain state of the applicable legal framework everywhere. The need for reform is documented by a still-growing body of critical literature and research, dating back more than fifteen years.[9] Yet no country has yet taken up the challenge.

(www.ipwales.com). See also Richard Punt and Mark Bezant, "The Use of Intellectual Property as Security for Debt Finance" (1997), I.P.Q. 1997, 3, 279-318.

[5] *Id*. (especially Punt and Bezant, Davies).

[6] See, e.g., *CCH Canadian Ltd. v. Law Society of Upper Canada*, [2004] 1 S.C.R. 339. Thanks to David Vaver for this point.

[7] Thanks to David Vaver for this observation.

[8] Thanks to David Vaver for this observation.

[9] For a representative sampling of the reform literature, see: Davies, note 1 above; Law Commission of Canada, *Leveraging Knowledge Assets: Reducing Uncertainty for Security Interests in Intellectual Property*, 2004 (www.lcc.gc.ca/about/leverage_toc-en.asp); H. Knopf (ed.), *Security Interests in*

At the heart of the controversy is whether the kind of modern secured transactions regime that applies to movable assets generally should extend to IPRs. Resistance to that proposition is principally based on concerns that facilitating efficient access to IPR-based secured financing may undermine the territorially-defined policies and infrastructure of intellectual property law.[10]
This paper comes down solidly in favour of incorporating IPRs within the same secured transactions framework that applies to other categories of intangible movables. Indeed, I go further and advocate extension of that framework to outright assignments of IPRs by analogy to the approach taken in the area of receivables financing.

My thesis is, however, subject to two important caveats. The first concerns the need to separate the law applicable to the assignment of or grant of security in an IPR from the law applicable to the existence and attributes of the IPR itself. The latter is and should be the exclusive province of intellectual property law.[11]

The second caveat relates to IPRs for which a dedicated national IPR registry regime has been established. The principal issue here is whether the third party effectiveness and priority of the rights of secured creditors and assignees should be governed by registration in the IPR registry or whether registration in the general secured transactions registry is sufficient. I favour the latter at least pending radical structural and legislative improvements in the reliability of the ownership-disclosure function of the IPR registry regimes. Even if this were to happen, I conclude that the IPR registry regime should be relevant only where a competing claimant asserts a superior right by virtue of actual registration in that system.

2. The Receivables Financing Model Applied to IPR Financing

There is an emerging international consensus on the kind of legal framework that most effectively and efficiently facilitates secured financing against the movable assets of a debtor, both tangible and intangible.[12] First, the security agreement that creates the security right should be subjected to minimal evidentiary formalities, i.e. a writing or other authenticated record evidencing the consent of the debtor and a description of the encumbered assets. Second, a security right, including a security right in future and

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Intellectual Property (Toronto: Carswell, 2002); Ian Jay Kaufman, "International Laws on Security Interests in Intellectual Property" (1991) J.I.B.L. 1991, 6(3), 120-122; Harold R. Weinberg and William J. Woodward, Jr., (1991) "Easing Transfer and Security Interest Transactions in Intellectual Property: An Agenda for Reform," (1991) 79 Ky. L.J. 61.

[10] Raymond T. Nimmer and Lorin Brennan, "Modernizing Secured Financing Law for International Information Financing: A Conceptual Framework" (2005) 6 Hous. Bus & Tax L.J. 1. Compare Steven O. Weise, "The Financing of Intellectual Property under Revised UCC Article 9" (1999) 74 Chicago-Kent. L. Rev. 1077.

[11] David Vaver suggests this point should be qualified to the extent that analyzing the assignability principles of IPR law through the lens of broader assignment and secured transactions law may sometimes highlight inadequacies in the IPR system that are not necessarily inherent to it and that need to be cured.

[12] See the draft legislative guide on secured transactions under development by Working Group VI of the United Nations Commission on International Trade Law (UNCITRAL): www.uncitral.org/uncitral/en/commission/working_groups/6Security_Interests.html. The draft guide was approved in principle by UNCITRAL at the conclusion of its 39th session in New York on 7 July 2006.

generic bundles of assets, should be capable of being made effective against third parties by registration of a single simple notice in a public registry indexed and searchable according to the name of the grantor of the security. Third, priority among competing secured creditors should be determined, as a general rule, by a straightforward first-to-register rule. Finally, secured creditors should be given recourse to expeditious and flexible enforcement remedies designed to extract the highest value possible from the encumbered assets in the event of debtor default.
Where the encumbered assets take the form of receivables, international consensus has also been reached on two additional propositions of relevance here.[13] First, the creation, registration and priority rules that apply to the grant of security in receivables should also apply to their outright assignment. Second, the effectiveness and priority status of the assignee's or secured creditor's rights should be governed by the law of the jurisdiction where the debtor/assignor is located.

This approach offers obvious efficiency advantages for both the immediate parties and third parties. Transaction costs and legal risk are greatly reduced: a single security agreement combined with timely public registration of a simple notice in the debtor's home jurisdiction is sufficient to assure the secured creditor an effective first-ranking security right in the debtor's world-wide receivables, both present and future. The information needs of third parties - including prospective secured creditors and assignees as well as judgment creditors - are equally well served. They are bound by a pre-existing assignment or grant of security only if notice has been registered and need search the records of only one registry to make that determination.

Viewed purely from the secured transactions law perspective, the receivables model would equally well facilitate IPR financing. Timely registration of a simple notice in the secured transactions registry of the jurisdiction where the IPR owner is located would be sufficient to protect an assignee or secured creditor's rights in the owner's present and after-acquired global IPRs against competing claimants. Indeed, the benefits would be even more marked since a secured creditor will often wish to take security not just in the IPR itself, but also in the receivables generated by the owner's licensing arrangements. Under the suggested model, both the IPRs and the derivative income stream would be governed by the same legal framework.

3. The Variable Nature and Content of IPRs

Facilitation of IPR financing must be balanced against the need to preserve the intellectual law policies of each country in which the owner claims to enjoy rights. It is true that since the TRIPS agreement,[14] the institution of intellectual property has become

[13] Id. And see *The United Nations Convention on the Assignment of Receivables in International Trade*, 2001 (www.uncitral.org/pdf/english/texts/payments/receivables/ctc-assignment-convention-e.pdf), articles 2(a), 22, 30.
[14] The TRIPS Agreement (*Agreement on Trade-Related Aspects of Intellectual Property Rights* (April 15, 1994), 1869 U.N.T.S. 299)) is binding on all members of the WTO (World Trade Organization) and, as a practical matter, on all countries who seek to become members. For an overview, go to: www.wto.org/english/tratop_e/trips_e/intel2_e.htm. Generally, see Carlos M. Correa & Abdulqawi A.

truly global for the first time in history. However, globalization has occurred without a concomitant international consensus on the nature, scope, and content of IPRs.[15] Neither the TRIPS agreement – nor the various intellectual property conventions that preceded it – attempt to force IPRs into a uniform mould. Rather, they merely impose a common core of minimal legal standards.[16] Outside and beyond that common core, states remain free – and have exercised that freedom – to decide their own rules.[17]

In the area of copyright, for example, national variations exist on such fundamental issues as the duration of copyright protection,[18] limitations on or exceptions to (called "user rights in Canada) protection,[19] the treatment of moral rights,[20] the assignability of reversionary interests,[21] and the relationship between the assignees of the author of a pre-existing work and the owners of the copyright in a derivative work.[22] Attribution of original ownership may also vary from one state to the next owing to differences in national approaches to the ownership of commissioned works and works created by an employee within the scope of employment.[23]

Yusuf (eds.), *Intellectual Property and International Trade: The TRIPS Agreement* (London: Kluwer Law International, 1998).

[15] See, for example, Drahos, note 1 above; Paul Edward Geller, Conflict of Laws in Copyright Cases: Infringement and Ownership Issues" (2004) 51 J. Copyright Soc'y U.S.A. 315; Donald S. Chisum, "Normative and Empirical Territoriality in Intellectual Property: Lessons from Patent Law," (1997), 37 Va. J. Int'l L. 603.

[16] *Id*. And see J. H. Reichman, "Universal Minimum Standards of Intellectual Property Protection" in Correa & Yusuf (eds.), note 7 above at 21.

[17] See, for example, Drahos, note 1 above, and Geller, note 9 above. And see Melvin Simensky, Lanning Bryer and Neil J. Wilkof, *Intellectual Property in the Global Marketplace*, Vol. 2, *Country-by-Country Profiles*, 2d ed. (Wiley, 1999).

[18] The Berne Convention requires contracting states only to offer a minimum term of protection of fifty years plus the life of the author. The U.S. has increased the term to the life of the author plus seventy years: see 17 U.S.C.A. § 302(a) (1976). Belgium, Denmark, Finland, Germany, Ireland, Italy, Spain, Sweden, and the United Kingdom have enacted an equivalent extension pursuant to the E.C. Directive on Harmonizing the Term of Protection of Copyright and Certain Related Rights, Council Directive 93/98/EEC of 29 October 1993. When a copyrighted work is exploited in a territory other than its country of origin the default rule under Berne is that the term of protection for that work "shall be governed by the legislation of the country where protection is claimed." While Article 7(8) of Berne permits countries with longer terms to limit protection of foreign works to a shorter term of protection granted in the country of origin, the shorter term has to be affirmatively adopted by the country in which protection is claimed. On these points, see Geller, note 9 above, at 330.

[19] See, for example, Geller, note 9 above, at 336 (observing that countries vary in their treatment of the 'first-sale' or exhaustion limitation and the scope of the fair use exception).

[20] While civil law and particularly French civil law jurisdictions have a time-honored tradition of giving strong protection to moral rights (*droits moral*), the U.S., Australia and the U.K. are far more restrictive in their observation of the moral rights provisions of the Berne Convention. See Geller, note 9 above, at 341, 375-79. See also Jane C. Ginsburg, "Moral Rights in a Common Law System" (1990) Ent. L.R. 1990, 1(4), 121-130.

[21] See, for example, Geller, note 9 above, at 368-69.

[22] Seth M. Goldstein, "Hitchcock's 'Rear Window' & International Copyright Law: An Examination of *Stewart v. Abend* and its Effect on International Copyright Renewal and Exploitation (Note)" (2006)14 Cardozo J. Int'l & Comp. L. 247.

[23] See, for example, Geller, note 9 above, at 360-66, 392-93; Graeme W. Austin, "Intellectual Property Politics and the Private International Law of Copyright Ownership" (2005) 30 Brook. J. Int'l L. 899; Holly K. Towle and Shankar Narayan, International Intellectual Property Licensing: Ten Points to Consider" (2004) 806 PLI/Pat 1119. Complicating the matter further are national divergences in the choice of law

In the area of patents, the TRIPs agreement brought about a uniform term of protection of twenty years from the date of filing.[24] However, differences remain on a wide range of significant issues including the subject matter for which protection is available,[25] whether prior publication precludes patentability,[26] and whether ownership carries with a duty to licence.[27] As with copyright, attribution of patent ownership can also differ between states. Although protection is dependent on filing in the patent registry everywhere, the U.S. uniquely grants protection to the first person to conceive of the invention or reduce it to practice.[28] Everywhere else in the world, protection is granted on a first-to-file basis.[29] Structural differences can also lead to variations in result. An important example that has spawned a growing reformist literature is the strong protection that U.S. law gives to *invalid* patents relative to Europe owing to differences in the procedures and incentives for challenging the validity of a registered patent between the two jurisdictions.[30]

Trade marks are the third internationally significant category of IPRs. Here again, one encounters national variations on important points. For example, countries differ on

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approach for determining the law applicable to initial ownership in such cases. The better view seems to be that the law of the country of origin applies: Geller, note 9 above, at 360-61

[24] Compliance with TRIPs required a number of states to change their laws. In the U.S. for instance, the term of protection under the former law was seventeen years from the date of grant. In Europe, the filing date already was the effective date, but the terms differed from country to country. Germany, for example, used to have an eighteen-year term whereas it was sixteen years in the United Kingdom. See Michael Guntersdorfer, "Software Patent Law: United States and Europe Compared" (2003) Duke L. & Tech. Rev. 0006 at

[25] As Somers has observed, uniformity of treatment is particularly absent with respect to life forms, pharmaceuticals, medical devices, plant varieties, business methods, and software: Andrew R. Sommer, "Trouble on the Commons: A Lockean Justification for Patent Law Harmonization" (2005) 87 J. Pat. & Trademark Off. Soc'y 141 at 165.

[26]Some countries, including European countries, impose an absolute novelty requirement: any prior disclosure by anybody anywhere of the subject matter of a patent application forecloses patentability. Other countries, including the U.S., allow the inventor a grace period (12 months in the case of the U.S.) following disclosure to validly file a patent application. See Sommer, note 19 above, at 160-161.

[27]While in the U.S. the exercise of a patent monopoly is only limited by antitrust laws, at least some European countries including the UK, France, and Germany have compulsory license statutes: see Michael Guntersdorfer, "Software Patent Law: United States and Europe Compared" (2003) Duke L. & Tech. Rev. 0006, citing in footnote 85, for the U.K., the *Patent Act* of 1977, § 48, in footnote 86 for France, *Code de la Proprieté Intellectuelle*, § L.613-12 (1996), and in footnote 87 for Germany *Patentgesetz* § 24.

[28] 35 U.S.C. §101 ("whoever invents . . . may obtain a patent." Generally, see Sean T. Carnathan, "Patent Priority Disputes - A Proposed Re-Definition of 'First-to-Invent'," (1998) 49 Ala. L. Rev. 755; Peter A. Jackman, "Adoption of a First-To-File Patent System: A Proposal," (1997) 26 U. Balt. L. Rev. 67; Holly K. Towle and Shankar Narayan. "International Intellectual Property Licensing: Ten Points to Consider" (2004) 806 PLI/Pat 1119..

[29] For Europe, see E.P.C. §60(2) (http://www.european-patent-office.org/legal/epc/e/ar60.html).

[30] See: Rochelle Dreyfuss, "Pathological Patenting: The PTO as Cause or Cure" (2006)104 Mich. L. Rev. 1559; Adam B. Jaffe and Josh Lerner, *Innovation and Its Discontents: How Our Broken Patent System Is Endangering Innovation and Progress, and What To Do About It* (Princeton and Oxford: Princeton University Press, 2004); Michael Guntersdorfer, "Software Patent Law: United States and Europe Compared" (2003) Duke L. & Tech. Rev. 0006; Stuart J. H. Graham et al., Post-Issue Patent "Quality Control: A Comparative Study of US Patent Re-examinations and European Patent Oppositions," National Bureau of Economic Research, working paper no. w8807, 11 (Feb. 2002), available at http://emlab.berkeley.edu/users/bhhall/bhpapers.html;

whether protection of the mark is granted on a first-to-use or a first-to-file rule.[31] A related issue on which differences exist is whether ex ante use is a pre-requisite to registration or whether the right is secured by initial registration and maintained by later use.[32] Bilateral trade agreements are also creating complex layers of relative harmonization. Consider, for example, the United States-Singapore Trade Agreement which expands the scope of trademark protection to include unconventional marks such as scents and sounds on the basis of an ex ante first-to-file (in the national trademark registry) basis.[33]

Even within the common core of internationally agreed standards, interpretative variations exist from one country to the next owing to the open-ended language in which these standards are often formulated in the service of diplomatic compromise.[34] For example, while non-obviousness is a criterion for patentability everywhere, TRIPS countries have adopted a wide variety of singular approaches to determining obviousness.[35]

4. The Lex Protectionis Principle in Choice of Law for IPRs

The localized complexion of intellectual property law is reflected in the baseline rule for determining the applicable law. Under the *lex protectionis* principle, the validity, nature and scope of the "same" IPR are governed by and vary with, the law of each state where the right to protection is claimed, regardless of the nationality of the owner or the state of origin of the IPR.[36]

The *lex protectionis* principle is frequently justified by reference to the national treatment principle embedded in intellectual property conventions. If a foreign owner is entitled to the benefits of the law of each state where the IPR is used or exploited, it must also be subject to the burden of any limitations on the subject matter or scope of protection.[37] The national treatment principle, in turn, can be seen as an expression of the belief underlying the general lex situs rule for property that if extraterritorial effect is given to

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[31]Generally, see Karol A. Kepchar, "Protecting Trademarks: Common Law, Statutes and Treaties" (2006) SL082 ALI-ABA 39.
[32]Id.
[33] Generally, see: David Vaver, "Unconventional and Well-Known Trade Marks" 2005 Sing. J. Legal Stud. 1; Kenneth Chiu, "Harmonizing Intellectual Property between the United States and Singapore: The United-States-Singapore Free Trade Agreement's Impact on Singapore's Intellectual Property Law" (2005) 18 Transnat'l Law. 489.
[34] Geller note 9 above, at 388. And see e.g. Thomas K. McBride, Jr., "Patent Protection in London – Local Internationalism: How Patent Law Magnifies the Relationship of the United Kingdom with Europe, the United States, and the Rest of the World" (2004-05) 2 Loy. U. Chi. Int'l L. Rev. 31 (describing a situation where the English and German appellate courts reached contrary conclusions while each claiming to have followed the same provision of European patent law).
[35] See Amy Nelson, "Obviousness or Inventive Step as Applied to Nucleic Acid Molecules: A Global Perspective" (2004) 6 N.C. J. L. & Tech. 1;
[36] See Austin, note 17 above, at 46-47; Geller note 9 above, at 328-331.
[37] See Geller, note 9 above, at 328-331.

foreign property rights it can only be at the expense of local law affecting the same subject matter.[38]
The traditionalist conception of IPRs as territoriality defined – and confined – comes at a cost to efficiency. If an IPR is to be used or exploited – or assigned or given as security – in multiple markets, its validity and scope of protection must be established and monitored in each and every territorially defined market.

The resulting tension between efficiency and respect for state sovereignty has led analysts to a search for a single governing law alternative to the *lex protectionis* principle.[39] The difficulty of course is that the acceptability of any single governing law alternative depends on a global consensus that one and only one state has the primary claim to regulate the issue at hand. Only a very small number of issues – and these primarily in respect of copyright which is the most internationalized of IPRs – potentially qualify. For example, an arguable case can be made for applying the law of the country where the author is located to issues relating to the allocation and waivability of moral rights, or the law of the country where the employment relationship is centred to issues relating to the ownership of copyright arising from that relationship.[40]

These few and still controversial exceptions aside, it seems that efficiency will continue to yield to the political and policy concerns with preserving state autonomy over IPRs that underpin the lex protectionis principle. Indeed, the constant pressure from industry to broaden the subject matter and scope of protection is more likely to impede than to accelerate prospects for global uniformity.[41]

Consider, in this light, the recent ruling by a majority of the Supreme Court of Canada on the patentability of the Harvard "oncomouse" (a mouse that was genetically engineered to readily develop tumours).[42] The oncomouse had been declared patentable in Europe, Japan, the U.S. and indeed every other jurisdiction in which the issue had arisen.[43] There was nothing unique about the Canadian statutory language to invite a different ruling. Nonetheless, a majority of the Court ruled that the mouse as a “higher life form” fell outside the definition of a patentable “invention” in s. 2 of the Canadian Patent Act.

Athough the majority believed that the Commissioner of Patents had gone beyond his powers in ruling against the patent for public policy reasons, it relied on those same policy concerns to justify its interpretive ruling. Writing for the majority, Justice Bastarache concluded that since “the “patenting of higher life forms is a highly contentious and complex matter that raises serious practical, ethical and environmental concerns,” the drafters could not have intended higher life forms to fall within the scope

[38] See Austin, note 17 above, at 8.
[39] See e.g. Geller, note 9 above, and Austin, note 17 above.
[40] Id.
[41] As David Vaver has observed, “the history of all of intellectual property law . . . has been one of expanding subject-matter and scope of protection: what is protected, how deep protection should run, and where and against whom it should run.” David Vaver, note 27 above, at 2-3.
[42] *Harvard College v. Canada (Commissioner of Patents)* [2002] 4 S.C.R. 45, 2002 SCC 76.
[43] Id. para. 35.

of the Canadian legislation.[44] Only the legislature, not the courts, possessed the institutional competence to provide the necessary detailed guidance on the deep policy issues at stake.

The strongly-worded dissent, delivered by Justice Binnie, was dismissive of the statutory interpretation reasoning on which the majority based its decision: "one looks in vain for a difference in definition to fuel the . . . contention that, *as a matter of statutory interpretation*, the oncomouse is not an invention."[45] On the contrary, Justice Binnie observed, all of the other countries in which the oncomouse had been declared patentable had similar legislation, including the United States from where the language of the Canadian definition of "invention" originated.[46] In his view, the benefits of international harmonization, including the preservation of Canadian competitiveness, demanded the same response from Canada: "the global mobility of capital and technology makes it desirable that comparable jurisdictions with comparable intellectual property legislation arrive . . . at similar legal results."[47] Moreover, both TRIPS and NAFTA, each of which "presupposes a general rule of patentability,"[48] supported an expansive interpretation of the subject matter and scope of intellectual property protection.

The majority opinion all but rejects the relevance of global harmonization to the interpretive exercise. No reference is made of the contrary foreign authorities with the single exception of the U.S. Supreme court decision in which the patentability of the Harvard mouse was recognized, and then primarily to express implicit agreement with the dissenting opinion that the policy issues at stake were better settled by Congress than the Court.[49] As for the presumption under TRIPS and NAFTA that higher life forms are patentable absent explicit legislative exclusion, the majority engages in some interpretive cherry-picking. On the one hand, the provisions of NAFTA and TRIPS cannot be used to interpret status quo ante legislation. On the other hand, the fact that both agreements allow for an explicit exception demonstrates "that the distinction between higher and lower life forms is widely accepted."[50]

The weaknesses of the judicial reasoning aside, the majority opinion may have greater international resonance than the minority concedes. As David Vaver has noted, the Biotech Directive in Europe continues to be controversial, and has led to inconsistent national implementations in, for example, France & Germany.[51] However, what is important about the Harvard mouse case for present purposes is that it illustrates the persistence of state sovereignty in the development of intellectual property law in the face

[44] Id. para.
[45] Id. para. 3.
[46] Id. para. 35.
[47] Id. para. 13.
[48] Id. para. 90, citing TRIPS, above note 8, art. 27(2); NAFTA (*North American Free Trade Agreement Between the Government of Canada, the Government of the United Mexican States and the Government of the United States of America* (1992), Can T.S. 1994 No. 2 (entered into force January 1, 1994)), art. 1709(2).
[49] Id. para. 190.
[50] Id. para. 205.
[51] David Vaver, "The Problems of Biotechnologies for Intellectual Property Law" in Les Cahiers de Propriété Intellectuelle: Mélanges Victor Nabhan Hors série (2004) 375.

of demands for expanded protection. If the highest appellate court in a G8 country sees harmonization with its principal trading partners as less important than preserving room for a locally-crafted legislative response to the public policy issues posed by expanded protection, how much less the likelihood of consensus between the very difference economic and cultural contexts of west and east, of emerging and developed economies. In the absence of international agreement on an appropriate counterbalancing principle – some see international human rights law as a possible hope – we can expect intellectual property law standards to continue to evolve differently from one state to the next.[52]

5. Reconciling the Lex Protectionis Principle with the Single Governing Law Approach of Secured Transactions Law

Under the receivables financing model, recall that the validity, third party effectiveness and priority of an assignee's or secured creditor's right are governed by a single law – the law of the state where the grantor or assignor is located.[53] If this model is to be extended to IPR financing, some means must be found of reconciling the single governing law idea that underlies it with the territorial orientation of the lex protectionis principle that informs choice of law for IPRs.

The solution lies in carefully separating the law applicable to the assignment or secured transaction from the law that governs its object, the IPR. Consider the grant of security by an owner located in Country A in IPRs used and exploited in Countries B and C. Under the proposed approach, the validity and property effects of the transaction would be governed by the law of Country A but the law of Countries B and C would determine whether the IPRs which are the object of the transaction are entitled to protection, and if so, the nature and scope.

Bifurcation of the applicable law – a phenomenon called dépeçage - is not unprecedented in movables financing law. On the contrary, while having rights in the encumbered asset is a necessary pre-requisite to a valid security right, secured transactions law leaves it to the applicable body of property law to determine the validity and content of the grantor's rights in the object itself. For tangible immovables and movables, the conflicts implications of this point are obscured because both the validity of the security right or assignment and the validity of the grantor's rights in the encumbered object are generally governed by a common law: the law of the situs. When it comes to the financing of receivables, however, depecage is accepted. The law of the assignor/debtor's location governs the property and priority rights of the assignee or secured creditor against competing claimants.[54] However, issues relating to relations between the secured creditor or assignee and the debtor on the receivable – including the assignability of the receivable, the effect of any contractual limitations on assignability, the conditions under

[52] See generally Drahos, note 1 above.
[53] See section 2 of the paper above.
[54] *The United Nations Convention on the Assignment of Receivables in International Trade*, 2001, note 7 above, arts. 22,30.

which the assignment or security right can be invoked, and the availability of any defences or rights of set-off – are all determined by the law that governs the receivable. [55]

The receivables financing model shows that the locally defined nature of the object of a security right or assignment - be it a receivable or an IPR – does not necessitate a concomitant localization of the assignee's or secured creditor's rights. Splitting the choice of law rules reduces transaction costs by subjecting the secured transactions or assignment aspects of a transaction involving global receivables or IPRs to a single governing law while still respecting the claim of the state with the strongest interest in the object of the security right or assignment to have its law applied to the nature and attributes of that object.

6. The Role of the National IPR Registries?

The feasibility of the dépeçage approach proposed in the preceding section raises somewhat more complex challenges when it comes to IPRs for which states have established a dedicated IPR registry. Under the dépeçage model, the appropriate registration venue for an assignment or security right relating to an IPR would be the law of the jurisdiction where the grantor or assignor is located and that law would also determined the priority effects of registration. Specialized IPR registries, however, follow the lex protectionis principle and are strictly territorial in scope. Thus, for example, a French patent holder whose patent is registered in the French patent registry must apply to register in the U.S. registry if it wishes to enjoy U.S. patent rights and so forth.

The interrelationship between registration in a specialized IPR registry and registration in a general secured transaction registry is undoubtedly the most significant and contentious issue in IPR-financing.[56] It is helpful at the outset to distinguish cases where registration in the IPR registry is relevant to the existence or scope of protection granted by national law. For example, registration in the national patent registry is a pre-requisite to the validity of a patent everywhere. In the case of trade marks, initial registration prior to use is a pre-requisite to protection in some countries and is determinative of territorial scope in others.[57] It is self-evident that the issues at stake in these examples go to the nature and scope of the IPR, rather than the security right in it, and are appropriately governed by the *lex protectionis* principle.

However, the legislative framework for IPR registries typically also allow for the registration of a subsequent assignment or security transaction that transfers or

[55] Id.art 29.
[56] See Nimmer and Brennan, note 5 above. And see the sources listed in note 50 below.
[57] There may be unregistered common law rights in trade marks as well – certainly in common law Canada and other Commonwealth jurisdictions - sufficient to give the holder an action in passing-off against someone who assumes, even unknowingly, a confusingly similar trade mark. The right is considered to be a proprietary interest in the goodwill attaching to the mark. However, registration settles the territorial scope of the common law right, giving it protection throughout the state which establishes the registry, even in regions where it is not known or not recognized in law and therefore might not be entitled to protection under the common law passing off approach.

encumbers the title of the initial registered owner. Indeed, IPR registries are sometimes established for primarily this purpose. For example, while copyright ownership and protection is not dependent on registration, a number of states have established copyright registries to facilitate public disclosure not just of the copyright but of the chain of assignments from the original owner. It is here that the controversy begins.

At the centre of the debate is the issue of whether the third party effectiveness and priority of a security right in (or assignment of) an IPR depends (or should depend) on registration in the relevant IPR registry in each country or on registration in the general secured transactions registry in the owner's home jurisdiction.

Efficiency considerations would seem to favour the single governing law approach of secured transactions law. IPR registries are organized on a specific asset basis. It follows that a separate registration must be made against each and every IPR on an ongoing basis as and when they are acquired by the debtor or assignor. Where different types of IPRs are involved, the registration burden is multiplied by the number of discrete registries. And, since IPR registries are organized on a territorial basis, separate registrations and searches must be conducted in each country where the debtor holds or expects to hold IPRs. In contrast, under the secured transactions approach, timely registration of a single notice indexed by the name of the owner in her home jurisdiction is or would be sufficient to protect the rights of an assignee or secured creditor in the owner's worldwide portfolio of IPRs of any kind, both present and after acquired.

On the other hand, the secured transactions registry system may be less efficient where the IPR owner is an assignee in what may be a long chain of assignments. In contrast to the asset-indexed IPR registries, name-based indexing is not designed to disclose assignments or security rights granted by predecessors in title which may cloud the title of the current owner. Even if the names of predecessors in title are known, they may have been located in different countries in which event the secured transactions registries in these other jurisdictions will also have to be searched.

The superior chain of title disclosure potential of the IPR registries suggests that they should continue to be an available venue for the registration of assignments and security rights (since the latter implicate a potential change of ownership). Registration of assignments and security rights also serves the purposes of intellectual property law independently of financing issues. For example, a searcher may wish to verify the name of the current owner of a particular IPR for the purposes of determining who to contact to obtain a licence or to challenge validity.

On the other hand, the issue need not be resolved on an either-or basis. Deference to the IP registry record and priority regime is necessary only if there has been reliance on that regime by a competing claimant. In the absence of reliance, there is no policy reason why secured creditors and assignees should not enjoy the efficiency advantages of being able to protect their rights through a single registration in the secured transactions registry in the owner's home state.

Moreover, a competing registration in the IPR registry should prevail only if the competing assignee or secured creditor was legally entitled to rely on that registration to give it superior rights, as opposed to having relied on it as a factual matter. The distinction between legal and factual reliance is a necessary one here, in view of the absence of clear legislative guidance on the effects of registering assignments and security rights in many national law regimes.[58] Although the problems vary from one state to the next, the following list is representative of the kinds of uncertainties faced by assignees and secured creditors in assessing whether they must or should register in the relevant IPR registries:

- There may be uncertainties as to transactional scope. Does an IP registry regime that provides for the registration of "assignments" extend to "exclusive licenses" insofar as these are the functional equivalent of a partial assignment? Does it apply only to assignments in the strict sense or also to the grant of security? Does this latter question depend on whether the parties have cast their transaction in the form of an assignment or are all security rights, however nominated, included?

- Registration is often provided for in purely permissive terms. While an assignment or security right "may" be registered, registration is not explicitly made a pre-requisite to third party effectiveness or priority.

- Even when explicit priority guidance is given, it is not comprehensive. For example, is may be left unclear whether the rules operate to the exclusion of all other law, including general secured transactions law. Or registration may operate only to prevent a prior unregistered assignee from prevailing against a subsequent assignee who registers without actual knowledge of the prior assignment. Under this approach, the record is unreliable since it may turn out that a registered assignee or secured creditor somewhere in the chain of title took with knowledge of an intervening unregistered transaction.

7. Prescriptive Conclusions

[58] On the grave deficiencies of the legislative framework governing national IPR registries virtually everywhere, see, among others: Davies, above note 1; Susan Barbieri Montgomery, "Security Interests in Intellectual Property" (2005) SK090 ALI-ABA 349; Jacqueline Lipton, "Intellectual Property in the Information Age and Secured Finance Practice" in H. Knopf (ed.), above note , at 247–68; D.M.R. Townend, "Using Intellectual Property as Security in the UK: Current Practice, Difficulties and Issues" in H. Knopf (ed.), above note at 417–53; Catherine Walsh, "Federal or Provincial Regulation of Security Interests in Canadian Intellectual Property: The Conflict of Laws Dimension" in H. Knopf (ed.), above note at 651-68; Thomas Ward, and William J. Murphy, "Security Interests in Intellectual Property under U.S. Law: The Existing Dissonance and Proposed Solutions" in H. Knopf (ed.), above note at 455–507; Roderick Wood, "Security Interests in Intellectual Property: Rationalizing the Registries" in H. Knopf (ed.), above note at 669–97; John Swinson, Intellectual Property Security Interests in Australia, October 31, 2001 updated April 18, 2002 (http://www.bond.edu.au/law/blr/vol14-1/Swinson.doc); Steven O. Weise, "The Financing of Intellectual Property under Revised UCC Article 9" (1999) 74 Chicago-Kent. L. Rev. 1077; Alistair Orr and Tom Guthrie, "Fixed Security Rights over Intellectual Property in Scotland" (1996) E.I.P.R. 1996, 18(11), 597-603.

The preceding analysis demonstrates that the potential conflict between secured transactions law and the territoriality principle that underpins intellectual property law should not be exaggerated. Indeed, with one exception, the problem disappears once it is recognized that issues relating to the rights of secured creditors and assignees are distinct from issues relating to the property that is the object of their security right or assignment. While the former are regulated by secured transactions law, the latter are the province of the body of property law that applies to the particular object, in this case the intellectual property regime in effect in each country where the assignor or debtor purports to "own" IPRs.

Under the proposed approach, IPR financing, as a general rule, would be governed by the same general secured transactions rules that apply to the creation, third party effectiveness, priority and enforcement of the rights of assignees and secured creditors in other categories of intangible rights such as receivables. The only possible exception is with respect to the third party effectiveness and priority of an assignment or security right in an IPR that falls within the ambit of a national IPR registry. The potential title disclosure function performed by the national IPR registries cannot be completely absorbed by the secured transactions registry system because its name-based indexing system is not designed to facilitate title searching. A workable solution – that fairly meets the policies of both areas of the law – would require deference to the IPR registry regime only where an assignee or secured creditor has registered in that system and the applicable legislative framework explicitly grants priority on the basis of that registration. Otherwise, general secured transactions law – including its choice of law rules – would apply.

Implementation of the proposed solution would require changes to both secured transactions and intellectual property law. The secured transactions reforms would be relatively simple: extension of the registration, priority and conflict of law rules that apply to security rights in intangibles to the outright assignment of IPRs in line with the receivables financing model. The reforms needed to intellectual property law for it to fully realize its title disclosure potential are far less straightforward in view of the pervasive and serious uncertainties about the legal effects of registration of an assignment or security right in an IPR registry.

It is difficult to have confidence that the world of intellectual property law is up to the reform challenge. Despite a stack of critical articles and research proposals, the governmental departments responsible for intellectual property policy and structures have shown little concrete interest in improving the commercial dimension of the IPR registries. The problem is not simply a reluctance to allocate scarce resources to the rather peripheral issue – from an intellectual property perspective – of IPR financing. There is also a political and ideological dimension. Industry demand for an ever more expansive level of intellectual property protection level has ignited something of a civil war within the world of intellectual property.[59] For critics, reforms aimed at facilitating IPR financing may well be seen as yet a further example of the commodification of knowledge and loudly resisted on that symbolic ground alone.

Optimal reform strategies must often give way to implementability. If serious reform of the IPR registry framework is not realistic in the immediate or medium term, legislatures

[59] On the politics of intellectual property, see e.g. Austin, note 17 above.

everywhere would do a great service by confirming that IPRS come within the scope of their general secured financing laws and that filing in their IPR registries is neither a necessary nor a sufficient condition for third party effectiveness and does not confer any priority advantage.