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INTELLECTUAL PROPERTY AND THE CONSUMER INTEREST:

ISSUES IN CANADIAN IP LAW FROM THE CONSUMER PERSPECTIVE

by

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March, 1993

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I. INTRODUCTION

Intellectual property policy, like almost all other government policy, has a consumer aspect. Therefore, an assessment of the consumer interest in this important area of public policy would be useful. In order to produce a reasonable overview of the main issues each area of IP law is dealt with separately.

Section II of the paper provides a brief but very important assessment of the manner in which IP policy is developed in Canada and the role that consumers play in this process. The purpose here is to point out the problems associated with incorporating the consumer interest into the IP policy development process.

In Section III the societal value of the patent system is briefly examined. This is done both in a general sense and with examples of sector specific IP policy (drugs and biotechnology). With regard to biotechnology, the concerns of consumers about the ethics and morality of patenting "life" are outlined and studied in the context of the economic value of allowing such innovation to be rewarded by the state. The IP/consumer interest interface in the pharmaceutical industry centers on the competing goals of affordable medicines versus adequate rewards for the development of new medical therapies.

The next section of the paper deals with those aspects of trademark law which pertain directly to consumer welfare. The value of trademarks to consumers is presented, along with the possible problems that might arise when these marks are used improperly. Second, the exhaustion of IP rights (grey market goods) is reviewed. The potential advantages and disadvantages for consumers of allowing parallel imports is briefly discussed. In addition, there is an overview of the economic and international trade implications of exhaustion. Finally this section also looks at the interaction between trademark and patent law and the implications of such interactions for consumers.

Section V focuses on some specific areas within Canadian copyright law. The consumer aspect of retransmission rights, home taping and other proposed amendments to Canada's copyright law are looked at. Given the limited economic analysis of this area of IP law it is somewhat more difficult to come to any firm conclusions on how the more general changes in copyright law will affect consumers. However, the implications of retransmission rights and home taping are more quantifiable.

The paper concludes with a summary of the key elements of IP policy that affect consumer welfare - both in an economic as well as a social sense. The findings point out the strong connection and relationship between these two important areas of public policy.

II. THE CONSUMER INTEREST AND IP POLICY DEVELOPMENT

The interests of consumers are very diffuse and are, in general, poorly represented in the governance process when compared to the concerns of special interest groups. This is not the case by design, rather it is simply very difficult to take the disparate views/goals of the populace and transform them into action (laws,regulations) by the government.

The reasons behind this general problem of representation were outlined quite clearly by Forbes (1984). As he stated, the five characteristics which best represent this problem are:

1 Diffusion of interests
2 Intensity
3 Organizational difficulties
4 Conflicting interests
5 Specificity of special interests

The area of intellectual property is a prime example of this type of problem. The consultation process set up by CALP in the IP area (the IP Advisory Council) is a collection of working groups. Each group focuses on a particular area of IP, addressing issues that the members raise. Unfortunately, only special interest groups are involved at that level. IP lawyers, major users of IP and bureaucrats make up these working groups. There is only consumer representation on the council itself which meets once per year.

This should not be interpreted as a criticism of the mechanism that has been developed by CALP. It simply reflects the difficulties associated with enabling consumers to play an active role in the policy development process. Given this general lack of representation consumers, consumer advocates, and consumer groups tend to react to policy proposals after they are announced/implemented rather than being able to play a strong role in their development.

How this problem can be addressed is outside of the scope of this paper. Nevertheless, it is important to take note of this fact when looking at policy issues that focus on the needs/desires of special interest groups. The remainder of this paper deals with the consumer interest in the area of patents, trademarks and copyright protection.[1]

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[1]Other forms of IP protection for things like industrial designs and integrated circuits have no substantive impact on consumers. Therefore, they will not be discussed in this paper.

III. PATENTS

1 Value of Innovation to Society

It is often assumed that the existence of a patent system provides net benefits to society. This assertion about the patent system rests upon three basic propositions:

1 it induces more invention and innovation than in its absence;
2 it encourages the development and the commercial use of inventions; and
3 it encourages inventors to disclose their inventions publicly.

As suggested by Scherer (1980), in order to assess the value of the patent system, one must compare

> "the net benefits associated with inventions that would not have been available without patent protection against the net social losses associated with inventions that would be introduced even if no patent rights were offered."

In many instances, this measurement - no matter how rough it may be - will not automatically turn out to be positive. The following review of research on the relationship between innovation and patent protection will provide some evidence that supports this assertion.

It is argued that patent protection stimulates the innovative effort of small inventors who have been, historically, responsible for many important inventions. Taylor and Silberston (1973) and Mansfield(1981) found that industries which rely heavily on patent protection are dominated by large firms. In areas where small inventors have made the greatest contributions patent protection was found to have, in general, a marginal impact on innovative activity. Accordingly, Taylor and Silbertson argue that

> "the assistance given by the patent system to the exploitation of the small man's inventions may be therefore something of an illusion on the whole."

Other arguments used to justify the existence of a patent system do make sense in the context of pure and perfect competition where inventors would lose their return on investment to the hands of imitators as soon as their product is introduced on the market. However, there are a number of market imperfections

which bring such a conclusion into doubt. According to Mansfield et. al. (1981) imitation can be both costly and time consuming. In a sample of firms in four industries, average imitation costs totalled 65% of innovation costs and imitation time equalled about 70% of innovation time.

Apparently, the advantage of competitive product leadership, and the importance of know-how in the innovation process enables firm's to maintain their position in the marketplace. Thus, even without a patent system, inventors can be expected to benefit greatly from their innovations for some years, which may be enough time in many sectors of the economy to earn a positive net return on investment.

In addition, Mansfield (1986) found that only the drug and chemical industries considered patents as essential, in the sense that more than 30% of their inventions would not have been developed without patent protection. Other industries felt that patents were moderately important or of no value at all.[2] With respect to the drug industry, Comanor found that competitive research has led to the development of a large number of products which had therapeutic effects comparable to those already existing. This led him to conclude that society would lose relatively little if fewer resources were devoted to this duplicative R&D.

The third argument, listed above, in support of a patent system centers on the value of public disclosure. One should not necessarily assume, however, that public disclosure provides significant benefits to society. According to Kahn (1962) "companies presumably keep secret whatever they can and patent what they cannot." Hence, the argument that patents allow a greater disclosure of information to the public might be seen as having limited relevance.

If we add these arguments to the social costs of the patent system resulting from the administrative costs incurred by the government and patent recipients, the misallocation of resources, through higher prices and lower output, one could argue that the existence of patent protection has imposed a net cost on society.

The interpretation of these issues from the consumer perspective leaves some doubts about the net value "to society" of a patent system. Nobody would argue that patents are not economically beneficial - if they weren't no one would bother with them - but economic benefits don't necessarily translate into social benefits. Even the World Intellectual Property Organization recognizes this fact. As was stated in one WIPO study(1983):

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[2] Other studies have produced similar results at different points in time [Taylor and Silberston (1973), Mansfield (1981)].

> "A well-balanced industrial property system does not concern itself only with the interests of the suppliers of goods and services,..., but also with the interests of consumers of goods and services, mindful that economic development is generally not an end in itself but a means to improve the quality of life, to which consumer protection is closely linked."

In other words, the costs which consumers bear as a result of the monopoly rights associated with a patent (limited supply and high prices) may not, in summation, be less than the benefits that patents provide to their right holders. Some issue specific examples of these costs and benefits are provided in the following two sections.

2 La propriété intellectuelle et les biotechnologies

Les questions liées à la propriété intellectuelle (PI) se sont complexifiées avec l'arrivée de la biotechnologie et du génie génétique. Quoique traitées ici superficiellement, nous tentons d'illustrer les conséquences et les implications des questions de PI engendrés par la biotechnologie.

A. Transgression des symboles traditionnels

Depuis près de trente années, des changements foudroyants surviennent au sein même des sciences de la vie. Quoiqu'il soit trop tôt pour qualifier d'une manière définitive la nature de ces changements, plusieurs observateurs utilisent les termes de «paradigme bioéthique» pour marquer l'avancée exponentielle des progrès des sciences de la vie, en particulier dans le domaine de la biologie moléculaire. Les progrès techniques et la technologie ont contribué à éliminer les distinctions entre produits naturels et les produits fabriqués, entre la vie et la chimie, entre les organismes vivants et non-vivants, sans compter la démarcation de plus en plus ténue, sinon disparue, entre recherche fondamentale et développement technologique.

Cela a des conséquences des plus fondamentales: la science donne accès à des phénomènes auxquels l'expérience ne donne plus aucun accès (microscope et télescope ruinent la sensibilité pure de l'être humain). Les instruments, donc la technique, non seulement surpassent les organes sensoriels humains mais ils laissent en même temps derrière eux l'être humain naturel. Si bien que l'approche actuelle de la nature, qui prévaut dans le domaine des sciences et de la technologie, et devenue identique au domaine délimité par les instruments mis en place. Le progrès technique établit la vie humaine toujours sur des bases qui s'éloignent de façon croissante de l'existence naturellement donnée.

Les retombées de ces changements ne sont pas confinées que dans des laboratoires; la commercialisation de produits issus de la nouvelle technologie des sciences de la vie est imminente. La tomate transgénique Flavr Savr (tomate à saveur rehaussée avec plus de pulpe, dont le processus de mûrissement lors de la cueillette est quasi arrêté) pourra en principe être mise en marché pour l'été 1993. D'autres produits agricoles attendent, d'ici la fin de la décennie, les approbations de certification pour l'exploitation à grande échelle. Existent également à titre expérimental des traitements ou thérapeutiques géniques contre certaines formes de cancer.

La biotechnologie, en particulier le génie génétique, suscitent de nombreuses controverses. Si certains la condamnent, d'autres la louangent, la biotechnologie sera pour de nombreuses années au coeur de bien des débats sinon au cœur d'un clivage social et politique. La protection conférée par des brevets sur des organismes vivants soulève à l'heure actuelle bien des questions et semble cristalliser en une finalité individualiste et égoïste de la propriété intellectuelle. Le débat public qui s'impose n'a pas encore eu lieu.

En dépit de ces questions, la biotechnologie et les promesses qu'elle engendre stimulent les investissements. Et pour investir, il faut évidemment pouvoir compter sur une garantie de rentabilité, garantie qui prend la forme d'une protection de la PI. Pour l'industrie de la biotechnologie, l'investissement est dans la recherche et le développement dont l'objet principal porte désormais sur un nouveau matériau à breveter des plus prometteurs: le vivant.

B. Brevetabilité du vivant

i. Protection des obtentions des végétaux (POV): de l'utilité sociale de la PI

En différents lieux et à différentes époques, la nourriture, les médicaments et les produits agricoles ont été exclus de la protection du brevet afin principalement de maintenir des prix bas (pratiques toujours en cours dans les pays en voie de développement facilitant l'imitation et l'adaptation à bon marché). Toutefois, il existe depuis plusieurs années des protections pour les végétaux, telle la Convention internationale pour la protection des obtentions végétales (POV). Le Canada a adopté la *Loi sur la protection des obtentions végétales* en juin 1990 permettant au Canada d'adhérer à l'Union pour la protection des obtentions végétales. C'est un système de protection spécifique aux végétaux et aux droits des phytosélectionneurs qui se démarque du système de protection conférée par les brevets.

Les brevets et les droits des phytosélectionneurs ont en effet des répercussions différentes en ce qui concerne l'étendue de la protection et l'utilisation du matériel protégé lors de recherches subséquentes, comme du matériel de propagation ou comme produits agricoles mis en vente. L'émission des brevets incite le secteur privé à rendre publics les résultats de ses travaux de recherche, car les brevets accordent une exclusivité entière sur l'exploitation de l'invention. Les droits des phytosélectionneurs consacrent le secret de l'information sur un produit; cela permet l'exploitation d'une plante hybride afin d'assurer un contrôle sur la lignée et d'empêcher le dédoublement inutile de recherches. Toutefois, la plante hybride peut être utilisée par des tiers pour effectuer des recherches afin d'améliorer de façon continue des nouveautés protégées. Si la plante est brevetée, il faut alors obtenir la permission du titulaire du brevet qui exigerait le paiement de redevances. Ainsi, le National Institute of Health (NIH)a déposé en 1992 une demande de brevets sur un processus permettant le séquençage de gènes humains spécifiques qui ne sont par encore identifiés. Si cette demande est acceptée, toute découverte de gènes sur cette séquence par d'autres chercheurs nécessitera l'autorisation des «inventeurs». Il est important de noter que les lois sur les brevets des pays prévoient des exceptions pour la recherche. Or, depuis cette demande de brevets du NIH, la recherche pourrait se trouver amputée de la liberté essentielle menant à la découverte. En fait, il s'agit ni plus ni moins de la protéger de futures découvertes au profit d'intérêts particuliers; la question de l'utilité sociale des brevets, contrairement aux principes qui prévalent pour la POV, est remise ici en question.

En principe, n'importe quel produit ou procédé peut être breveté, mais seuls les végétaux sont couverts par les droits des phytosélectionneurs. Cependant, des amendements apportées à la Convention en 1991, lève l'interdiction de bénéficier de la double protection du brevet et du droit de phytosélection.

ii. Des brevets sans limites

Il est possible de breveter des procédés reliés à la modification d'organismes ou à la production de produits biologiques, comme des cultures cellulaires. Il faut noter que les brevets n'ont pas été conçus pour les organismes vivants et les juges se voient forcés d'interpréter des textes de loi que l'évolution des sciences de la vie a rendu caduc.

C'est en 1980 que les États-Unis, par une décision de la Cour suprême *Diamond* v. *Chakrabarty*, adoptaient une nouvelle approche en acceptant de breveter des micro-organismes. Les brevets n'avaient servi jusqu'alors qu'à protéger des inventions inanimées. Le Canada accorde des brevets d'invention sur les micro-organismes et même pour des lignées cellulaires humaines. En 1987, le *U.S. Patent and Trademark Office*, à la suite de

jugements de la Cour suprême en 1985 (plantes et graines) et 1987 (les animaux, affaire *Ex parte Allen*), a annoncé qu'il accorderait désormais des brevets industriels sur des formes de vie plus avancées, y compris les petits animaux et le bétail.

Dans l'affaire *Ex parte Allen*, le cour américaine consacre un principe: "anything under the sun that is made by man is patentable". Cette assertion anthropocentrique a induit un mouvement indubitable menant à l'octroi, en 1988, d'un brevet pour un animal supérieur transgénique: la souris de Havard, l'*OncoMouse*. Cette souris contient des gènes humains et est particulièrement vulnérable au développement du cancer et utile en recherche. Depuis, près de 5500 brevets portant sur des gènes humains et d'animaux ont été octroyés aux États-Unis et dans le monde.

On assiste donc présentement à une extension du droit des brevets au vivant. Elle s'inscrit dans la tendance historique de l'érosion des domaines techniques ne pouvant être brevetés. La recevabilité des inventions génétiques est la traduction juridique du saut technique en matière d'artificiliasation du matériel biologique.

Si le génie biologique est perçu comme une panacée pour améliorer la production et dégager des surplus dans les secteurs de l'industrie, de l'agriculture, de l'environnement et la santé, plusieurs trouvent inacceptable que le descendant de tous les descendants d'un organisme modifié appartienne à la personne qui lui a fait subir cette modification et d'autres ont un sentiment étrange quant on invoque la propriété d'une plante ou d'un animal quoique nous soyons exposés à une commercialisation abusive.

iii. De nouveaux enjeux

Les arguments à l'encontre de la brevetabilité du vivant se regroupent autour de deux pôles : le caractère sacré de la vie sous toutes ses formes et l'appropriation privée du vivant.

a. Redéfinition du vivant

Pour plusieurs observateurs, l'attribution de brevets sur des formes de vie dévalorise cette dernière. Actuellement, on accorde des brevets sur des organismes vivants alors que nos sociétés distinguent encore le vivant du non-vivant, les animaux des machines. Même si pour certains breveter la vie procède de la même logique que la commercialisation d'animaux et de plantes, nombreuses sont les confusions sur le concept de propriété physique, l'achat et la vente d'animaux individuels et le prolongement de cette idée qui accorde des droits d'exploitations exclusifs sur un organisme et ceux qui en sont issus par reproduction à l'«inventeur» qui a «modifié» cet organisme. Si la finalité de la biotechnologie pose en soi un série de problèmes

et le fait de breveter un être vivant a quelque chose de répréhensible pour certains.

Le brevet entérine une approche qui se veut matérialiste et utilitariste du vivant, ce qui a comme conséquence une approche réductionniste de la vie. Il n'y a plus de distinction entre l'objet inerte et le vivant. tout est ramené à sa plus simple expression. En effet, pour les tenants de la brevetabilité des formes de vie, les animaux et le êtres humains sont des compositions de matière, des amas de molécules.

Sont donc posées des questions relatives à la définition de ce qu'est le vivant, de l'éthique de normes régulatrices et d'une manière spécifique, de la finalité de la PI.

b. L'appropriation privée du vivant

Sachant que le brevet est un monopole accordé à son propriétaire pour un temps limité, la brevetabilité du vivant risque alors d'entraîner l'appropriation et la centralisation du patrimoine génétique collectif aux mains de particuliers (individus, instituts et centres de recherche et compagnies). Cette concentration de pouvoir accentuera, par exemple, la vulnérabilité et la dépendance des agriculteurs. Elle favorisera ceux disposant de moyens suffisants pour payer les redevances exigées en échange de matériel génétiquement amélioré. Or, dans une perspective historique, il faut prendre en considération que le patrimoine naturel appartient à la fois aux générations actuelle et futures.

iv. Conséquences socio-économiques

Comme on l'a vu ci-haut, la course vers un monopole d'exploitation peut aussi affecter le comportement du chercheur, ce dernier pressé à rentabiliser sa recherche en mercantilisant la recherche biologique ne serait pas enclin à divulguer de l'information. La concurrence entrave la libre circulation de l'information.

La brevetabilité du vivant est susceptible d'accentuer la réduction de la diversité biologique. L'essor des biotechnologies a un effet pervers: celui d'uniformiser les caractéristiques génétiques des plantes et des animaux. On ne retient que celles qui sont économiquement rentables. Les lois du marché incitent alors les agriculteurs à limiter leur culture à ces variétés sélectionnées. La monoculture comporte des risques non seulement pour la pérennité des variétés cultivées, mais pour l'écosystème. L'apport économique de la diversité biologique est indéniable, en particulier pour la pharmacopée; ainsi la compagnie Merck a

conclu un accord avec le Costa Rica pour la concession d'une permis de prospection dans ses forêts tropicales afin d'en évaluer le potentiel.

La brevetabilité du vivant soulève une série de questions dont l'ampleur est parfois incommensurable. Si pour plusieurs observateurs, nos sociétés disposent de concepts et de notions pour y apporter quelques réponses, il n'en demeure pas moins qu'un débat public doit avoir lieu et que la concertation tant sur le plan national qu'international se fait de plus en plus pressante.

3 **Pharmaceutical Issues**

A Previous and Proposed Changes in Drug Patent Law

In 1987, amendments to the Patent Act were enacted (Bill C-22). The major implication of these amendments was the increased patent protection available to pharmaceutical firms. In 1992, further changes to the Patent Act were developed that would see the complete elimination of compulsory licensing for pharmaceuticals. To see how these changes in patent protection will affect consumers a brief review of compulsory licensing, and what it did for Canadian consumers, is in order.

Compulsory licensing in Canada began in 1923 as a result of British amendments to their patent legislation. From that time until 1969, compulsory licenses were only available for the purpose of manufacturing a particular medicine in Canada.

In the 1960s the federal government felt that it was necessary to foster price competition in the industry, and to assist in the creation of a "Canadian" drug industry. This was accomplished by altering the Patent Act so that companies could import, for the purpose of manufacture, the active ingredient of patented drugs, provided they paid a four percent royalty to the "inventing" company. This form of compulsory licensing brought more competition to a field dominated by multinational firms.

A small number of Canadian-owned drug firms grew out of the opportunity this legislation provided. Typically, companies applied for licenses to produce "best-selling" drugs, and as a result, consumers gained access to high quality, yet inexpensive medications. By the mid-1980s a significant generic drug sector emerged in Canada. The Eastman Commission estimated that the total value of the savings in drug costs resulting from the creation of that industry was approximately $211 million per year prior to the pre-1987 regime.

The changes in patent law that were instituted in 1987, gave producers of newly patented drugs up to ten years' freedom from competition from generic drug manufacturers. In return, the drug

industry promised to double its investment in Canadian R&D, thereby protecting existing jobs and creating new ones. Consumer organizations, convinced that the end of compulsory licensing would mean higher drug prices, lobbied the federal government to abandon the bill. The federal government created the Patented Medicine Prices Review Board (PMPRB) to monitor and review prices and allay consumer concerns regarding price increases.

B Impact on Innovative Drug Companies

Drug companies claim they need exclusive rights to a drug in order to recover the enormous development costs, and to act as an incentive to do further research. However, that claim may be challenged in at least three areas. First, when the innovative drug companies say that it costs, for example, $150 to $250 million to develop and market a drug, they are not referring to Canadian costs, but to worldwide costs. Since Canada represents roughly 2 percent of the world market, the Canadian share of R&D costs that needs to be recouped is $3.0 to $5.0 million, not the full $150 to $250 million.

The second point that needs to be examined is the extent to which development costs can actually be attributed to any particular drug. Simply put, drug companies cannot reasonably claim that they need a certain period of time to recover the costs of developing a particular new drug because these costs cannot be determined. Research by the Center for the Study of Drug Development in Rochester, New Mexico, calculated that, on average, it takes about 8.8 years to recoup development costs (Lexchin, 1984). Under the current patent laws the average time that a company has a monopoly on a drug in Canada is about 8.5 years. In Canada, drugs stay on the market for at least fifteen years and even after competitors bring out their own versions the original drug still retains a significant share of the market. Therefore, a drug company is still in a monopoly position for a long enough period of time to recover development costs.

The drug industry also contends that patents are one of the most important incentives for research and are "an internationally accepted instrument for the transfer and sharing of technology." (PMAC, 1973) It has been argued that from a scientific point of view, patents are a foreign concept. They were developed not because of anything within the nature of science, but purely for *commercial* reasons. In fact, patents can be said to impede the free flow of ideas, which is, in essence, the lifeblood of science. Once a discovery is patented, other scientists can use it only with the permission of the patent holder. According to Klass (1975), "it was only when the corporate interest became dominant that the right of a party claiming a patent for the discovery became prominent. Patents serve the industry much more than the individual discoverer and certainly much more than society."

C Impact on the Generic Drug Industry

The Canadian-owned segment of the generic industry will be faced with a difficult situation. Since they will now have to wait 20 years (term of patents in Canada) before introducing generic copies there may not even be a product to genericize. After 15 years, the life cycle of a pharmaceutical product begins a downward trend because there are newer chemical entities that come on the market. In many instances, there would not be much economic incentive to develop a generic copy of a drug that has a small market share (even if it has not outgrown its usefulness). This will probably cause down-sizing and rationalization of the Canadian generic pharmaceutical industry.

D Impact on Consumers

Consumers are starting to feel the full impact of delays in the introduction of generic products due to the seven or ten years of market exclusivity that C-22 provides for innovative pharmaceuticals. This delay in the introduction of generics may affect the ability of provinces to reimburse their citizens for the medicines they purchase if counterbalancing policies are not put in place at that level. These policies could include increased concern over costs and benefits of drug therapies; more stringent criteria for listing in provincial drug formularies; or more rigid price control mechanisms. As the costs of health care soar in Canada, the added strain as a result of these factors can only add to the problems of the provinces.

Bill C-91 simply lengthens the time between the innovative introduction of a drug and the first entry of generic competition. Therefore, consumers can expect greater upward pressure on the price of medicines for longer periods of time before a cheaper alternative becomes available.

The downward pressure on drug prices that has resulted from the PMPRB may very well be outweighed by the increase in the introductory prices of new medicines and the greater delay that generic products face prior to being allowed onto the market. Given the manner in which the changes to compulsory licensing were implemented, the full impact of this second factor on the generic sector, and eventually on consumers, has not yet occurred so it is difficult to say what the final outcome will be. The total elimination of compulsory licensing, as set out in Bill C-91, further strengthens this upward pressure on prices.

The real losers are Canadian consumers. Although 85% of Canadians currently have the cost of their prescription drugs at least partly covered by provincial or private drug plans, that leaves 15 % of the population who are, effectively, at the mercy of the pharmaceutical industry. It is important to note that we, as Canadians, now spend more on drugs than on physician salaries.

IV. TRADEMARKS

1 The Function of TradeMarks

The basic theoretical construct underlying trademark law has been the requirement that consumers must be able to distinguish one product from another. The primary benefit of trademarks to consumers is the reduction of their search costs. Trademark law also encompasses the concept of goodwill. Protecting the firm's goodwill is presumed to motivate the company to invest in maintaining and improving the quality of its products. In turn, this provides consumers with an important basis for choosing among competing goods/services, particularly in the case of items whose quality cannot be determined until after use (WIPO, 1983).

Trademarks also protect businesses from lost sales and reduced product reputation through unauthorized use of their marks (Cohen, 1991). Additionally, the trademark provides a recognizable and legally protected basis on which advertising may be based with a view to creating and maintaining a demand for the brandname product, rather than for competing goods or services.

In general, trademarks are useful to consumers, as long as they are used by firms in an appropriate manner. Unfortunately, this is not always the case. Whenever, a firm uses a mark that it does not have the rights to (infringement), or uses its mark in a confusing or misleading way, consumers will be affected negatively. Therefore, enforcement and compliance are important consumer issues in the area of trademark law. Another key issue in the trademark field centers on the doctrine of international exhaustion of rights.

2 The Relationship between Trademarks & Patents

It has been suggested that trademarks, and other forms of IP rights, are an instrument to facilitate product differentiation. In this regard, trademarks can contribute to the sales strength of a product after the expiry of patent protection. A trade-mark enables a manufacturer to advertise a product separate from any sales negotiations.

Trademarks can also be used to differentiate products from competing goods since the appearance of the item may be important in consumer preference. Additionally, IP rights are important in segmenting national markets. Product differentiation can have a variety of functions including creating a valuable product image, enabling price discrimination, evasion or avoidance of price regulations, allowing segmentation and price discrimination between geographic markets, and creating barriers to entry (eg advertising expense).

It seems that in some markets the net impact on consumers can be negative. The simple fact that the price of a brand name pharmaceutical generally goes up when the patent(s) for that product expire(s) clearly indicates that consumers are not benefitting from the IP protection system.[3] A transfer of consumer surplus to producers occurs when something like this occurs. Clearly, the synergistic effects of various forms of IP protection can lead to a reduction in consumer welfare.

3 The Exhaustion Principle (a.k.a. Grey Marketing)

In most countries the domestic sale of goods or services bearing a registered trade mark is exhausted by the first act of putting the product on the market: subsequent sale of this product within the same country cannot be controlled by the registered holder of the mark. This is usually referred to as the exhaustion of rights for that good or service. However, the extension of this generally accepted IP right from the domestic to the international level is a contentious issue.

The controversy arises out of the potential economic gains and losses that this change in policy would produce. Those who hold IP rights tend to think of these rights as being derived from "natural law" and the sole purpose of their existence is to allow for the collection of maximum economic rewards: international exhaustion would reduce a right holders ability to earn a profit from his/her subject matter. Those who do not hold IP rights (parallel importers) may tend to view IP law as a method utilized by the state to provide economic incentives that will lead to inventive and creative activity: international exhaustion would represent a necessary limitation on the power of right holders to earn monopoly rents (Knopf, 1991).

From the consumer perspective this issue is important since it is directly related to the price that consumers will pay for goods/services in the marketplace. As a consumer issue, the principal of exhaustion is also much easier to understand. As Knopf (1991) put it:

> "Can it be determined whether it is acceptable, from a public policy standpoint, for consumers of similar goods in different countries to be charged different prices on the sole basis of protection conferred by intellectual property in a manner that amounts to international price discrimination?"

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[3]Another way in which consumers are worse off due to IP protection can be found in the practice by drug companies of bringing new patented versions of existing drugs onto the market in an (effective) attempt to limit the market penetration of cheaper generic products.

A Advantages of International Exhaustion of IP Rights

Simply stated, the principal advantage of exhaustion for consumers is lower prices for the same goods. Clearly, this is a significant benefit but there are two caveats which must be presented.

1 The price of grey market goods may not be lower if the importer pockets the price difference.

2 The impact of exhaustion on consumer prices depends on whether current domestic prices are, on average, higher or lower than foreign prices (Anderson et al, 1990).

Overall, the impact on consumer prices will depend on the market, the firms and the countries involved in the parallel importation process. Therefore, it is difficult to state that, in all instances, exhaustion will benefit consumers.

B Disadvantages of International Exhaustion of IP Rights

Parallel importation may confuse consumers since products may be introduced into a country bearing the authentic trademark that are different in their characteristics or quality from the domestic version because they were produced for another market. Furthermore, grey market goods are usually not covered by the corresponding guarantees and after-sales maintenance arrangements, and the consumer might not know this at the point of purchase. These problems do not mean that parallel importation should not be allowed, rather it points out the need for consumer protection of one form or another in this area.

Finally, grey marketers are, in essence, free-riding on the investments made by registered trademark owners. If this free-riding problem is extensive, trademark owners will perceive such activity as a disincentive to invest in trademarks. Therefore, there will be fewer trademarked goods in the marketplace, which translates into fewer choices for consumers. In the long run, this might reduce both consumer and producer welfare. However, this is not a likely outcome since there is a distinct lack of evidence that supports the free-riding argument (Staaf, 1989).

C Measures to Protect Consumers

In an attempt to reduce the negative aspects of grey marketing for consumers the state could impose an obligation on parallel importers to provide:

1 clear, explicit information on the grey market good which notifies consumers as to the country of origin and any possible differences vis-s-vis the local product

2 the same guarantees for after-sales service, supply of spare parts, etc., as those extended by the trademark owner, or

3 notice of the absence of guarantees for after-sales service, supply of spare parts, etc. (WIPO, 1983).

D The Economic Impact of Exhaustion

In the United States, the estimated value of grey market transactions is somewhere between $7 and $10 billion per year. Many top-of-the-line stereó components and luxury automobiles are now commonly found on the grey market. Sales of grey market computers account for almost 5 percent of total computer sales in the United States. In Canada, grey market activity is more modest, existing on the fringe of Canadian retailing. (allow for it but no definitive jurisprudence except for special cases like heinz)

In the EC the free movement of goods between member states is of greater importance than any provisions of member state intellectual property laws. The Treaty of Rome does not provide for this explicitly in its competition provisions (articles 35, 36 & 86). Instead, this viewpoint has evolved out of decisions by the European Court of Justice (ECJ). This means that when the owner of an IP right, or a licensee, has put a product on the market in a member state, he may not use his right to prevent its importation into another member state: there is exhaustion within, but not beyond, the EC community.

The overall economic impact of this policy is impossible to quantify. The current practices have been arrived at after a lengthy process of evolution. Therefore, little economic data is available which could be used to determine the impact that exhaustion has had on the EC economy. However, some market specific anecdotal examples can be provided in order to get some sense of the economic impact that increasing levels of exhaustion will have on the European economy.

A prime example of the significant economic effect that exhaustion can have comes from the EC pharmaceutical market. Because national governments tend to play a strong role in the determination of domestic drug prices there is a great deal of variance between EC member states for the price of a single medicine. Research indicates that the sale of grey market drugs in 1990 represented about two percent of the EC pharmaceuticals market ($600 million US).

The drugs targeted by parallel importers are those with international prices that differ by more than 20 per cent, according to industry analysts. Six of the world's seven top traded drugs were parallel traded in the EC last year. As much as 30 percent of the sales of these drugs in EC member states with high drug prices (UK, Germany, Denmark) are grey market sales. Clearly, the impact on consumers is quite significant in situations such as this.

For the industry, however, the long term economic impact of grey market drug sales is more difficult to estimate. Firms are beginning to seek uniform pricing for new products throughout the EC to avoid competition from parallel imports. Given the significant differences in price control regimes it is unclear how well this new business tactic will work. This will probably erode the benefits for consumers in terms of the availability of less expensive supplies of brand name drugs.

E Exhaustion in the Context of GATT and NAFTA

There are no specific provisions within the draft GATT or NAFTA text which calls for - makes it legal to engage in - parallel importing. The United States is firmly opposed to the principal of exhaustion, as is the EC for trade outside of the community. In addition, there is not much opportunity for any change given the state of trademark law in the United States. The Lanham Act in the U.S. has provisions which allows the government to stop the exportation of American grey market goods. Overall, the United States will fight exhaustion all the way at the treaty level as well as the enforcement level: efforts to halt the spread of grey market products that originate at home or abroad will be undertaken.

Another factor which reduces the likelihood of exhaustion being a part of NAFTA is the absence of a document like the Treaty of Rome for North America. In other words, there is no multilateral agreement between countries in this region about competition policy. Therefore, it is not possible to override IP law in order to make parallel importing legal.

V. COPYRIGHT

1 Retransmission

In conformity with the 1987 Canada-U.S. Free Trade Agreement (FTA), our *Copyright Act* was amended in 1988 to provide compulsory licences allowing cable retransmission companies to communicate to the public by telecommunication any literary, dramatic, musical or artistic work via the retransmission of a distant signal. Cable retransmission companies must pay copyright owners royalties approved by the Copyright Board.

The 1990-91 rates were set by the Board's first retransmission decision on October 2, 1990. The CRTC decided that cable companies should not pass this royalty on to consumers. Instead, the royalty came out of the profits of the cable retransmission companies. This decision prevented any direct impact on consumers as a result of the retransmission royalty.

The 1992-94 rate for television retransmitters is essentially the same as set for 1990-91 with two important exceptions. A 50% lower rate for newly defined "francophone markets" is established because most of the distant signals carry English-language programming which is less attractive to francophone viewers. There is also a new 75% discount for educational uses. After these and other discounts, royalties are estimated to yield 1992-94 payments of $42 million per year as compared with an average of $45 million per year for 1990-91.

With regard to radio broadcasting the Copyright Board endorsed an agreement between retransmitters of radio signals and affected collecting bodies representing rights holders. This inter-party deal will result in the 1992-94 radio royalties increasing by 20%.

Largely comprised of the U.S. motion picture and television industry, the Copyright Collective of Canada (CCC) receives 60% of the overall tariff. Most other collectives also include substantial U.S. membership. Canadian creators are expected to receive only 15% of the total royalties.

Overall, there appears to be little or no impact on consumers as a result of this new copyright royalty for the retransmission of distant signals. However, this is only due to the fact that the CRTC has decided that the companies involved in the retransmission of such signals must pay this royalty out of their profits: the expense cannot be passed on to consumers. If this decision were ever changed then consumers might face an additional charge for cable services. Therefore, this matter could result in a negative economic impact on consumers in the long term.

2 Home Taping

The home copying of sound recordings, without prior authorization from the copyright holder(s), is an infringement of the Copyright Act. Although the reproduction right has been recognized in the Copyright Act for many years, copyright owners have been unable to collect these royalties because it is virtually impossible to prove that their rights have been violated. According to Statistics Canada, in 1990 roughly two thirds of Canadian homes were equipped with devices that could be used to copy sound recordings in the home. Research has indicated that home copying results in significant losses to authors, performers and producers of sound recordings.

In response to this problem the Department of Communications (DOC) and CCA have proposed a regime to ensure that right holders are compensated for the home copying of sound recordings. The main elements of the scheme are as follows:

* there would be a 3 per cent royalty on the wholesale price of both analog and digital tapes/discs to be paid by manufacturers and importers
* there would be no royalty on the recording equipment itself
* the initial royalty rate specified in the Copyright Act would be reviewed after three years by the Copyright Board
* foreign composers/lyricists and producers would receive national treatment while performers would receive reciprocal treatment
* 20 per cent of fund would be needed for administrative purposes

Overall, it does seem necessary to compensate rights holders for home re-recording. Therefore, the main thrust of issues related to consumers focuses on how this compensation scheme should be set-up and administered.

The latest version of the proposal for a home taping royalty scheme, as set out above, appears to have the potential to cause distortion in the marketplace due to the fact that there will be a royalty on both digital and analog re-recording. This is not good for consumers since analog home recordings currently make up the bulk of all home taping activity. If the royalty were placed only on digital technology the impact would, in essence, be phased in over many years since people are switching over to digital equipment slowly.

Additional concerns relate to the manner in which the regime is to be administered. Consumers should be informed about who would be collecting the royalties and how they would be distributed. Second, they will need to understand how administrative costs could total 20 percent. This seems unreasonably high. If there are good reasons for these high administrative costs they should be explained. Third, they will need to be informed about whether the scheme will be administered on a reciprocal basis or on the basis of national treatment.

Given that a majority of the monies collected under this scheme will leave the country it is very important to know if all other countries (signatories of the Berne and Rome Conventions) will be treating Canadian products in a similar manner. It will be hard to obtain broad public support for a regime that will result in a significant net outflow of monies from Canada. In relation to the concept of public support it seems quite likely that consumers will view this royalty as a tax.

A final issue that is of some importance is the question of how those people who are exempt from the royalty will avoid this charge. It is important to ensure that consumers who are exempt can avoid the charge in a relatively simple manner. Otherwise the opportunity cost of being exempt from the royalty will be outweighed by the cost (in time and money) of receiving the exemption.

3 Phase II Copyright Revisions

The Copyright Act will be revised in the near future. The modifications will be extensive but consumers will only be affected significantly by two of the proposed changes. First, certain groups will be exempt from paying the royalty which is generally due once copying has occurred. The main new groups that will be exempt are:

1. Broadcasters
2. Schools
3. Libraries

The second major revision involves neighbouring rights.[4] At this point in time, only songwriters are paid a royalty each time their work is performed. Under Phase II this will be changed to include performers and producers. In addition, the owners of sound recordings and computer software will have the option of allowing their work to be rented if they so desire. It is expected that only software owners will accept this rental right.

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[4]Copyright law only protects the author of a work while neighbouring rights (to the copyright) protects those associated with the work - performers and producers.

The possible impact these changes would have on consumers is unclear. To date, there has been very little economic analysis of Canada's copyright law. Therefore, it would be difficult to say how changes in this law would affect consumers. Nevertheless, it is very important from a social and economic standpoint that schools and libraries have been given an exemption. The savings to the educational system will be quite significant.

4 Bill C-88

This is a bill which is currently in the house (it could be passed before the house recesses for the summer break) which deals with the activities of the pay-per-view channels in Canada.[5] This legislation would require these companies to pay a royalty each time they communicate to the public by telecommunication any literary, dramatic, musical or artistic work via the retransmission of a distant signal.

At this point in time these stations are not paying royalties. While this might lead to increased expenditures for such services by consumers at some point in the future the CRTC currently feels that the cost of the royalty should not be passed along to consumers. If the CRTC ever changes its stance on this matter and its views on retransmission royalties consumers could see significant increases in the cost of cable TV services.

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[5]Specifically, this bill will affect MuchMusic, YTV and the Nashville Network.

VI. CONCLUSION

This paper has shown that many forms of IP protection have a significant and direct relationship to consumer welfare. Yet consumers play a limited role in the development of these policies. The consultation process set up by CALP in the IP area (the IP Advisory Council) is a collection of working groups that focuses on a particular area of IP, addressing issues that the members raise. Unfortunately, there is consumer representation on the advisory council itself but none on any of these working groups.

With regard to the patent system, it is clear that it directly affects the types of products and services in the marketplace, and the price that we have to pay for them as consumers. However, there is no clear evidence that the patent system provides net benefits to society. While it does induce innovation and commercial development of inventions, it is more difficult to say that the patent system induces socially beneficial innovation.

Les brevetabilité du vivant en constitue le cas le plus manifeste. Stimulante, la recherche en biotechnologie engendre des idées qui dépassent les limites d'une imagination fertile. Elle promet de générer des produits de qualité supérieure à ce que l'on connaît pour une fraction du prix. Aucun par contre ne peut dire avec certitude quels en sont les avantages sociaux; cela est d'autant plus difficile que la pertinence du système actuel des brevets semble être désuet face aux avancées prodigieuses de la biotechnologie. Seul un débat d'envergure apporterait un éclaraige minimal sur ce qui pourrait constituer le bien-etre en ce domaine.

Recent changes in Canadian drug patent legislation will produce significant changes in consumer welfare. Although there have been many discussions about the impact this legislation will have on consumers there has been little agreement about the probable impact. Regardless of magnitude of change it seems fairly clear that the effect will be negative in the long term.

With regard to trademarks, consumers are faced with a mixed bag. As long as companies follow the law trademarks are useful to consumers, but this does not always happen. Therefore, enforcement and compliance become quite important. Furthermore, the potential positive and negative effects that grey market goods would have on consumers is difficult to quantify. Although it must be said that greater consumer choice, along with some form of protection/information for consumers, should raise consumer welfare. Finally, there are potential negative externalities related to the the use of two or more forms of IP for one product/service (the example given was from the pharmaceutical industry).

In the area of copyright, several issues related to consumers were identified. First, retransmission rights, which are now recognized in Canada, should have no impact on consumers. However, this is only due to the CRTC which stated that consumers should not bear the cost of this new royalty. Second, the proposal for a home taping scheme will affect the cost of analog and digital recording material but the impact will be fairly limited (a 3% royalty on a $5 blank tape is only $0.15). The Phase II revisions of Canada's copyright law will exempt schools, libraries and broadcasters from making royalty payments. This appears to be a reasonable approach that is socially beneficial. On the other hand, it is unclear what additional costs consumers may bear as a result of incorporating neighbouring rights into our copyright law. Finally, the proposed implementation of Bill C-88 should have no affect on consumers. Once again, this is due to a decision by the CRTC which states that the increased costs should be borne by the cable companies and not consumers.

Overall, these examples of the economic, moral and ethical relationships between IP protection and consumers points out the importance of considering the consumer interest when IP policy is being developed. Furthermore, this paper has demonstrated that a better understanding of the economic impact that changes in IP policy have on consumers is needed.

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