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A theory of the Law and Policy of Intellectual Property

- Building a New Framework

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1. Justification for Intellectual Property Rights

1.1 Natural Rights Theory Versus Incentive Theory

Two conflicting theories explain and justify the foundation of intellectual property.[1] At one extreme, natural rights theory justifies the foundation of intellectual property rights to be based on the natural right that originates from the act of creation, as one owns one's own creation. At the other end of spectrum is the theory that allowing free-riding by the second runner who imitates would give the second runner an excessive advantage and provides a disincentive to the creator who invested in the intellectual creation as the first runner. Incentive theory explains that intellectual property is founded to prevent this free riding.

1.2 Two Strands of Natural Rights Theory

1.2.1 Lockean Labour Based Theory of Property

One strand of natural rights theory is based on Lockean labour theory of property, which claims that a person is entitled to own the fruits of his labour. However, the Lockean theory premises on the existence of the nature which the God has given to humans in common. The usage of the resources that becomes separated from the nature before it gets spoiled is justified. The spoilage justifies the claims of property on this fruits of one's labour does not require consents from the others of the community.[2] This aspect differs in intellectual property. As intellectual property is intangible and cannot be reduced to possession unlike the tangibles, intellectual property can be used without excluding the others. Further the spoilage does not exist in the intangibles. Thus, intellectual property starts from a different premise.

In addition, Lockean labour based property theory starts from the point that one holds a property right over ones own body(person), and as a corollary, one owns a property rights over ones labour and the fruits of the labour belongs to the same person. However, a flip side of the

[1] See Wendy J. Gordon, *Intellectual Property*, *in* THE OXFORD HANDBOOK OF LEGAL STUDIES 617, 623-624 (Peter Cane & Mark Tushnet eds., 2003). See also ROBERT P. MERGES ET AL, INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE 2-24 (4th ed., 2006). For a more detailed philosophical analysis, see PETER DRAHOS, A PHILOSOPHY OF INTELLECTUAL PROPERTY (1996); Li Yang (Translated to Japanese by Jin Xun), *Chitekizaisanken no Kan'nen ni tsuite: Hōteishugi oyobi sono Tekiyō [The concept of IPR: The Numerus Clausus and its application]*, 12 Intell. Prop. L. & Pol'y J. 35, 44-65 (2006).

[2] John Locke, Two Treatises of Government, 286, 288-289 (Peter Laslett ed., 1988) (1698), Drahos, *supra* note 1, at 43.

principle of owning one's own person is that one cannot claim a right over other persons.[3] If that is the case, intellectual property right becomes unacceptable, as intellectual property right is a right that directly restricts other persons freedom of action and to justify this right based on the labour based property theory becomes internally contradictory. Therefore, it is difficult to justify the foundation of intellectual property with labour based property theory.[4]

1.2.2 Hegelian Thesis of "Mental Property" (geistiges Eigentum)

Another strand of natural rights based theory is the personality thesis that intellectual property protection is based on the personal rights of the creator.[5] This is based on the Hegelian thesis (G. W. F. Hegel) who argues that authors own the expression of their will of freedom and the authors need to retain title over this even after the assignment of the tangibles (i.e. book) that embody the will. He further supplements this argument with the consideration of the users' liberty by arguing that this mental property will lead to the progress of science and arts, and that the act of borrowing the substance of creation is permissible as long as it is not a verbatim copying of the creation.[6]

In general, Hegel acknowledges a property right to be based on the expression of the free will. This is because of the fact that persons possessing free will in mental world still need to live in the external physical worlds, they need to make decisions in the external worlds. A property right can be understood as the first concretization of this free will, to claim that the external world as one's own.[7] From this, a property right needs to be recognised as a reflection of free

[3] LOCKE, *supra* note 2, at 287-288; DRAHOS, *supra* note 1, at 43-44.

[4] SUSUMU MORIMURA, LOCKE SHOYŪRON NO SAISEI [REVITALIZING LOCKEAN THEORY OF PROPERTY] 121, 241-261 (1997). For an application of the Lockean proviso to limit the scope of copyright, see Gordon, *supra* note 1 at 11-12, and see also Wendy J. Gordon, *A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property*, 102 Yale. L. J. 1533, 1538-39, 1556-72 (1993). See also Yoshiyuki Tamura, Efficiency, Diversity and Freedom - Challenges to the Copyright Institution Facing the Internet Age, *in* 9 TEOLLISOIKEUDELLISIA KIRJOITUKSIA 43 (Katariina Sorvari ed., 2008).

[5] On the development of mental property theory, see for example, HEINRICH HUBMANN, DAS RECHT DES SCHÖPFERISCHEN GEISTES 70-71 (1954). In general, mental property theory is distinguished from personality right and is contrasted to it. See DRAHOS, *supra* note 1, at 80, for the discussion on the right of the authors, contrasting the theories of Kant and Hegel. However, if one takes the view that the use of ownership is not a legislative technique but related to the origin of the protection, Hegel's theory may be contrasted to the labour based property theory that is based on the act of creation, as Hegel starts from the free will of a person.

[6] G. W. F. HEGEL, PHILOSOPHIE DES RECHTS NACH DER VORLESUNGSNACHSCHRIFT K. G. V. GRIESHEIMS 1824/25 209-211, 230-238, 240 (Karl-Heinz Ilting ed., 1974).

[7] *Id.* at 238; DRAHOS, *supra* note 1, at 76-77.

will, as a property becomes essential for the person who is the subject of this will to live in the social context. As a corollary, to deny a property right means also denial of free will.[8]

However, free will in the external world cannot be carried through in the external word in such form as it exists in the mental world. This is because in the external world, others property rights that are an embodiment of others free will exist. It is inevitable to restrict one's property right, as long as it is related to the others' property right. This coordination becomes one task of a social policy.[9]

It is generally believed that this consideration has a significant impact on intellectual property rights. This consideration would support the view that the excise of the property right should be confined to physical restrictions so that a person with a free will can live in a physical society and that the right need not to restrict others freedom beyond that is necessary to provide this property right. In other words, as intellectual property rights clashes with the exercise of others' property rights which are the embodiment of others' free will, it becomes difficult to justify the intellectual property as an absolute right, because it is an expression of free will. It is thus logically inevitable that Hegel justified copyright not just on the expression of free will, but also based on the incentives of promoting science and arts.[10]

1.3 Traits of Intellectual Property Rights and Welfare

While it is true that the intellectual property right is a right on the intangibles, it is needless to say that the subject matters of the intellectual property right, the "intellectual property" is different from the tangible objects. Thus it is correct to call it a right on the information, in this context. However, the meaning of "information" may be questioned. The information that is the subject matter of intellectual property right actually is a pattern of human action. As the intellectual property right restricts the patterns of human actions, it restricts the freedom of

[8] HEGEL, *supra* note 6, at 182, 184-185; DRAHOS, *supra* note 1, at 77.

[9] HEGEL, *supra* note 6, at 590-591.

[10] In addition, Japanese patent law allows exercise of rights against the independent inventor and this makes it difficult to view the right as a natural right. Even if there is an original prior inventor, the applicant who files for patent would be prioritized. See Japanese Patent Law art. 39.1, first to file rule. Unless the prior inventor has prepared for production (Japanese Patent Law art. 79.1), the original inventor cannot even use his/her own invention, as it would infringe the right of the patent holder. See Yoshiyuki Tamura, *Tokkyoken no Kōshi to Dokusenkinshihō [Exercise of Patent Right and Anti-monopoly Law], in* SHIJŌ, JIYŪ, CHITEKIZAISAN [MARKET, FREEDOM AND INTELLECTUAL PROPERTY] 141, 143-144 (2003). Thus to explain patent right as a natural right, it has to be where the exercise against the independent creator or inventor has to be denied, in the manner similar to a copyright. See for example, ROBERT NOZICK, ANARCHY, STATE AND UTOPIA 182 (1974). However there is a room to justify this by using Lockean proviso and a positivistic verification of this possibility has to be explored. See Gordon, *supra* note 1, at 624.

human actions. When the thing-likeness of the object of this right is emphasized, the right may be simply viewed to exist for a thing, rather than information, and the fact that the right cuts out a pattern of human action may be disregarded. Intellectual property right is merely a privilege that artificially restraints patterns of human actions that human being otherwise would freely engage in, physically.[11]

As seen with the Lockean and Hegelian theses, if the intellectual property right is a right to restraint others freedom, the proposition of creation alone cannot justify the right that broadly restricts others` freedom. Thus, the justification for intellectual property right needs to be refocused on the fact that the right protects not only the interests of the individual right holder, but also the system of rights benefits the interests of the many. In other words, it is possible to bring the perspectives of welfare or efficiency, that the public suffers from the loss from the decreased intellectual creation, unless free riding is prevented to a certain degree.[12] [13] In this case, the proposition of creation becomes a passive justification for restricting others' freedom, based on intellectual property right system that actively implements the objectives of welfare and efficiency.[14]

[11] See Gordon, *supra* note 1, at 617, 619, 621-622. Gordon argues that the label of property is used in intellectual property to describe the relationship between a person and a person, not confined to a person and a thing, as is the case of the ownership right in the tangibles. Thus she stresses that intellectual property rights should be called a right over a similar patterns of human action. In addition to this, see DRAHOS, *supra* note 1, at 17-21, 32-33. Drahos starts from the philosophical question over the existence of the intangible thing and argues that intellectual property right is not a property right but a privilege to restrict the act of uses of others.

[12] SUSUMU MORIMURA, ZAISANKEN NO RIRON [THEORY OF PROPERTY RIGHT] 168-171 (1995).

[13] For Constitutional law based position of this argument, see Yoshiyuki Tamura, *Kyōsōchitsujo to Minpōgaku [Competitive Order and Civil Law]*, *in* KYŌSŌHŌ NO SHIKŌKEISHIKI [PERSPECTIVES OF COMPETITION LAW] 35, 50-52 (1999). Narifumi Kadomatsu, *Keizaiteki Jiyūken [Right to Economic Freedom]*, *in* 2 KENPŌ [CONSTITUTIONAL LAW] 213, 234-235 (Takayuki Andoh ed., 2001). A detailed explanation that uses the protection of fundamental right, duty to support may be criticized from the Constitutional law scholarship that is premised on the traditional indirect application theory of Constitutional law.

[14] YOSHIYUKI TAMURA, CHITEKIZAISAN HŌ [INTELLECTUAL PROPERTY LAW] 20 (4th ed., 2006).

Under the current Japanese patent law, the discovery of useful medicinal plant in an unknown regions will still be denied of patent protection categorically, as long as it remains a mere discovery (Patent Law 2.1.1). This is regardless of the assessment whether there is a need to provide incentives for these types of exploration. This may be explained using the natural rights theory in a passive manner. The origin of the Art. 2.1.1 of the Japanese patent law that distinguishes the discovery of the law of nature and patentable invention is based on the perspective of Josef Kohler who actually uses the natural rights theory. See JOSEF KOHLER, LEHRBUCH DES PATENTRECHTS 13-17 (1908). See also Yoshiyuki Tamura, *Tokkyohatsumei no Teigi [Definition of Patent Invention]*, *in* SHIJŌ, JIYŪ, CHITEKIZAISAN [MARKET, FREEDOM AND INTELLECTUAL PROPERTY], *supra* note 10, at 125, 128-129.

1.4 Difficulties in Assessing Efficiency and Legitimization by Democratic Process

At this juncture, it has to be stressed that the justification based on efficiency and the possibility of improving welfare, in and of itself does not automatically leads to the optimal allocation of resources. Information asymmetry in the market creates transaction costs, and actual market operates in a competitive condition that is far from perfect competition and to bring the market to a perfect competition is highly difficult. Furthermore, that an institution would optimally allocate resources may be illusory. In this context, it is more pragmatic to justify a specific intellectual property institutional arrangement would lead to an efficient result or a probable improvement of welfare, regardless whether such arrangement is optimal or wealth-maximizing.[15]

However, actively justifying the institution of intellectual property with efficiency perspectives raises the following question – that the assessment of efficiency is nearly impossible. Gains or loss in social efficacy in the adoption of a particular institutional arrangement of intellectual property is difficult to measure. This is because not only the definition of efficiency is debated, but also comparison of each individual utility is difficult. Moreover, as intellectual property right involves the trade off between the short term static efficiency against the improvement of long term dynamic efficiency, the assessment of its efficacy has the axis of time as well.[16]

These difficulties in the assessment of efficiency make it less convincing to use a consequential method to justify a specific institutional arrangement of intellectual property by looking at the degree of efficiency gains from its adoption. Thus the positive justification of intellectual property needs to be based on not merely the degree of efficiency, but from the fact that the *legitimacy of the process* of adopting each arrangement. For example, a typical example would be the democratic decision making process used by the legislature and the justification for the intellectual property right in this case is partially dependent on the political responsibilities of the legislature.

1.5 Pitfalls of Legitimization by Democratic Decision and the Legitimacy of Process

Democratic decision making alone does not legitimize every decisions. This is not just because the nature of intellectual property right which necessarily restricts other's freedom forces the

[15] Among the scholars, the incentive theory sometime understood as a theoretical ground to maximise wealth. See Naoki Koizumi, *Chosakuken Seido no Kihonriron [Normative Theory of Copyright Institution]*, *in* AMERICA CHOSAKUKEN SEIDO [US COPYRIGHT SYSTEM] 13, 25 (1996). It should be noted that even though the incentive theory is used in such manners by some, this is not always the logical conclusions from all of the incentive theories.

[16] See for details, Nari Lee, *Toward a Pluralistic Theory on an Efficacious Patent Institution*, 6 J. Marshall Rev. Intell. Prop. L. 224 (2007), also available as Berkeley Center for Law and Technology, Law and Technology Scholarship, Paper 35, at http://repositories.cdlib.org/bclt/lts/35.

trade offs between the freedom and efficiency. Even from the point of efficiency alone, democratic decision making process has an inherent limitation. This due to the limitation of political process in the sense that the process is more easily influenced by the aggregated minority interests that may easily be organised than the interests that are disaggregated thus difficult to organise. Despite this limitation of the political process, for example in the case of the ownership right of a tangible has a focal point where a use is connected to a specific tangible object, and the right is catered around this focal point. This does not mean that the ownership right over the tangibles does not regulate the person to person relationship, and that it simply regulates the person to an object relationship. Even when it regulates a person to person relationship, the focal point stops an ownership rights to expand indefinitely.

However, in the case of intellectual property where the patterns of human actions are regulated without any physical contact with a specific tangible object, a physical restriction against the expansion of a right does not exist. This is because there is no such focal point. Moreover, as this may regulate human action nearly without any geographical limit, the right may also be expanded beyond territorial borders.[17] With growth of economies, the value of the privileges reaches beyond the borders. In response to this, a rational choice of a company (especially MNEs) would be to strongly protect their own intellectual property rights both domestically and internationally. As a result, intellectual property right may become stronger than it is demanded by the societal conditions. In deed, intellectual property rights show the tendency to be internationally expanded and to be strengthened, as exemplified by international treaties such as TRIPS agreements, as well as bilateral agreements, as used unilaterally by the United States.[18]

Even within a national border, the legislative process is biased due to the fact that the process reflects the interests of the easily organizable few large companies, than the interests of the SMEs and individuals that are difficult to organize. The democratic decision made in this manner may be biased in terms of welfare aspect.[19] In addition, as argued in the above, the legitimization by the process cannot be sought from the legislative process alone, as freedom

[17] See DRAHOS, *supra* note 1. For a detailed discussion on the first connection thesis of Drahos, see also Nari Lee, *Patent Eligible Subject Matter Reconfiguration and the Emergence of Proprietarian Norms - The Patent Eligibility of Business Methods*, 45 IDEA 321, at 351-354 (2005).

[18] For the discussions on the role of MNEs on the international trend of of strengthening of intellectual property right through TRIPS agreement and bilateral treaties, see PETER DRAHOS & JOHN BRAITHWAITE, INFORMATION FEUDALISM: WHO OWNS KNOWLEDGE ECONOMY? (2004); Peter Drahos, *Intellectual Property Industries and the Globalization of Intellectual Property: Pro-Monopoly and Anti-Development?*, 3 Intell. Prop. L. & Pol'y J. 65 (2004); Peter K. Yu, *The International Enclosure Movement*, 82 Ind. L. J. 827 (2007). See also Peter K Yu, *Five Disharmonizing Trends in the International Intellectual Property Regime*, *in* 4 INTELLECTUAL PROPERTY AND INFORMATION WEALTH 73, 96-97 (Peter K. Yu, ed., 2007).

[19] Dan L. Burk & Mark A. Lemley, Policy Levers in Patent Law, 89 Va. L. Rev., 1575, 1637-1638 (2003); DRAHOS, *supra* note 1, at 135-140. See also Jessica Litman, DIGITAL COPYRIGHT 35-69, 144-145, 192-194 (2000) (on the US copyright law and institution).

need to be ensured as well as the welfare. It follows from these perspectives that the theories on intellectual property institution need to consider four key elements and the division of their functions and roles - market (or market oriented decision making) surrounding the uses of intellectual property, the legislative, the administrative and the judiciary.[20] [21]

2. Division of Competence and Functions among Market, Legislative, Administrative, Judiciary as a Decision Making Process

2.1 Utilization of Market

A market based decision provides stimulus for improved goods and services through the process of competition. In addition to this, as market operates via price mechanism that is based on supply-demand information of the goods and services, trading of goods and services in the market would lead to a more efficient allocation of resources, although it may not be optimal.[22] Market excels in inducing a certain type of innovation, and discovering and distributing of private and individual information. This function cannot easily be replaced by authoritative decision making[23] by the legislative, administrative and the judiciary.[24] Moreover, the idea of liberty that essentially accompanies the market principle makes market oriented decision making more acceptable over the authoritative decision making.[25] When the market oriented decision making is functioning, the decision making is not done by a specific individual and thus an individual person is not controlled by another individual. In this sense, market oriented decision making may promote more freedom and liberty than an authoritative

[20] Yoshiyuki Tamura, *Tokkyoseido wo meguru Hō to Seisaku [Law and Policy over Patent System]* 1339 Jurist 124 (2007).

[21] DRAHOS, *supra* note 1, at 173-193, 199-223. See also Li, *supra* note 1, at 59-64.

[22] F. A. Hayek, *The Use of Knowledge in Society*, 35 Am. Econ. Rev. 519 (1945); KEIKO ISHIHARA, KYŌSŌSEISAKU NO GENRI TO GENJITSU [COMPETITION POLICY - PRINCIPLES AND REALITY] 22-24 (1997); PAUL MILGROM & JOHN ROBERTS, ECONOMIC ORGANIZATION AND MANAGEMENT 27-28 (1992).

[23] For the distinction between market based and authoritative decision, see YOSHIO HIRAI, HŌSEISAKUGAKU [THEORY ON LAW AND POLICY] 62-68 (2d ed., 1995).

[24] *Id.* at 121-125, 130; Hayek, *supra* note 22; ISHIHARA, *supra* note 22, at 6-7.

[25] HIRAI, *supra* note 23, at 123; ISHIHARA, *supra* note 22, at 3-5; Hitohiko Hirano, *1994-nendo Nihon Hōtetsugakkai Gakujutsutaikai Tōitsu Theme ni tsuite [On the Theme of Japan Legal Philosophy Conference of 1994]*, 1994 Hōtetsugaku Nenpō [Annals Legal Phil.] 1, 4 (1995).

decision making.[26] As a corollary, when questions concerning efficiency are raised, it may be sufficient to relegate it to market, as long as the market is functioning.

2.2 When Should Law Intervene? (Authoritative Decision)

2.2.1 Eligibility of Technological Determination

Law needs to intervene when the market does not function. However, it is important to note that it is nearly impossible to build an institution that is optimal from the point of efficiency through authoritative decision making. As a definitional problem, for example, when the comparison of individual utility is difficult, a gauge to assess efficiency cannot be assured. Even if the gauge can be obtained, assessing efficiency gains or loss from a specific decision is not far from easy.[27] As market has the advantages that are described in the above, this is the very reason why a functioning market needs to be utilized. Even when an authoritative intervention is considered, it is necessary to approach it functionally and ask if there is really a market failure, if the authoritative intervention could improve the situation, and which institution then would be most competent in making that decision. In this manner, it is possible to adopt efficiency based perspective to the construction of the institution.

Some administrative organization may be more competent than the legislature and the judiciary on observing market trends and may be better equipped to issue a speedy response that meets the market condition. For example, in intellectual property, patent and trade office is a typical example of such organisation.

2.2.2 Question of Political Responsibility

The difficulty in measuring efficiency makes it also difficult to legitimize the norm (rule) that is established through authoritative decision making, simply by the efficiency of the outcome alone. As a result, the legitimization of rule (norm) needs to be sought not just from the achievement of efficiency, but also from the process that has been employed to get there. In cases where there is uncertainty over the efficiency, the legitimization of the process becomes more desirable. In addition, these types of political responsibility need to be borne by the legislative, and not by the judiciary.

[26] When a good such as intellectual property where an authority need to interfere to produce it via the market, the freedom and liberty enjoyed as a result of this interference cannot be based on the market based decision. Rather, this is a restriction based on the authoritative decision making.

[27] See for an example of patent system and law, Lee, *supra* note 16.

2.2.3 Distortion in the Authoritative Decision Making Process

However, complexity still persists. SMEs and consumers interests are likely to the IP users' interests. As argued in the above, despite their aggregate sum of interests may be large, the interests that are difficult to be coordinated and organized may not be prioritized than the right holders interests, often represented and easily organized by a large companies, even when their aggregate interests is smaller. In this context, the judiciary may have a better competence to ensure their interests than other authorities.[28]

3. Conceptualising a Theory of Intellectual Property Law and Policy

3.1 Introduction

A process oriented perspective of intellectual property right provides important insights on the institution of law. I have earlier proposed the following three steps to be part of the interpretative and legislative theory in the construction of intellectual property institution.[29]

First is the perspective of market oriented intellectual property law. By focusing on the sharing of function between the market and law, the junction where the market stops and law need to intervene must be sought.

Secondly, when the law based decision is necessary, the next step should be to determine which organization would be best suit to exercise competence and actually make the decision. (institutional perspective) For example, a decision need to be done on whether the court based decision is sufficient, or whether an administrative organization such as the patent offices needs to intervene.

At this point, the selection on the concrete forms and substance of regulation need to be evaluated. For example, would a remuneration right (including compensatory damages) be sufficient or an injunctive relief is required; should the protection be such that a system of registration is adopted so that assignment of rights can be facilitated. In earlier work I called this *a functional perspective on intellectual property law.*

[28] Yoshiyuki Tamura, *Gijyutsukankyō no Henka ni Taiōshita Chosakuken no Seigen no Kanousei ni tsuite [On the Possibility to Limit the Scope of Copyright in response to the Technological Changes]*, 1255 Jurist 124 (2003).

[29] Yoshiyuki Tamura, *Chitekizaisan Hō Sōron [Introduction to Intellectual Property Law]*, *in* SHIJŌ, JIYŪ, CHITEKIZAISAN [MARKET, FREEDOM AND INTELLECTUAL PROPERTY], *supra* note 10, at 73; TAMURA, *supra* note 14, at 7-21.

Thirdly, the impact of the proposed rule as an outcome the above exercise on the individual freedom of thought and action need to be scrutinised. From this perspective of intellectual property law as system of law governing individual freedom, it needs to be examined whether the proposed rule would excessively control and restrict the individual freedom.

This paper argues that a process oriented perspective needs to be added to these three steps in the construction of intellectual property law institution. The view to think about intellectual property law from three different aspects of market oriented, functional, and freedom governing institution of law aims to actualise an efficacious institution through division of the competences (market, legislative, administrative, and judiciary) and to ascertain individual freedom. It includes the process oriented perspective[30]. These two view points i.e. process and division of competence may be said to form the fabric of the theory of intellectual property to propose a system of intellectual property.

In the following, I would like to clarify how the process oriented perspective that is proposed in the above is applied to actual makings of intellectual property law.

3.2 Division of Functions in Market and Law

The institution of intellectual property functions through the market that creates by enabling the trading on entitlements. The entitlements that these transactions are based stem from the artificial restriction certain patterns of human actions which otherwise physically could be done freely. In this sense, intellectual property law utilises the market based decision making. At the same time, because of these market-based exchanges would not occur without the legal grants of rights, it should be viewed as a legal intervention, as it does not completely delegate the decision making to the market.

3.2.1 Determining the Necessity of Protection

The protection of an intellectual property right is not necessary if the market functions without the intervention of the intellectual property system. This position is justified from the incentive theory, and not from the natural rights theory as it has been argued in the above.[31] When a specific subject matter is not regulated explicitly in the intellectual property law, one may argue that there is a need to provide legal protection, and that further this legal deficiency calls for a

[30] On the foundation of the intellectual property, see YOSHIYUKI TAMURA, CHOSAKUKEN HŌ GAISETSU [COPYRIGHT LAW] 7-8 (2d ed., 2001).

[31] TAMURA, *supra* note 14, at 8-14. See also NOBUHIRO NAKAYAMA, MULTIMEDIA TO CHOSAKUKEN [MULTIMEDIA AND COPYRIGHT LAW] 4-5 (1996).

legislation (legislative reform). These types of arguments cannot be grounded on the incentive theories, but on the natural rights theory. For example, when relevant incentives are present, such as market lead time and the reputations, appropriate level of innovative production may be developed without the legal intervention of intellectual property. In this case, an artificially constructed right loses the ground to restrict physically "free" human actions. This in turn, means that a creation of intellectual right over this particular subject matter becomes groundless as well.

3.2.2 Distinguishing Market Oriented Approach from Market Driven Approach

Even when a market oriented intellectual property law is adopted, it is important to distinguish this from other market based approaches such as *a market driven approach*. A market driven approach views market as a universal solution, in the sense that law creates market based on the exclusive rights on intellectual property, and that market takes care of the rest.[32] The market driven approach is based on the optimistic view on the occurrence of efficient transaction, which underestimates the costs from the exclusive rights.[33] Needless to say, the Coasean world where the rational parties have perfect information, and where there is no transaction costs (and further no wealth effect), thus making the Coase theorem real, actually does not exist.[34]

[32] See Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. Chi. Legal. F. 207 (1996), applying Coase Theorem to intellectual property law. Compare, Hideaki Serizawa, *ProCD v. Zeidenberg no Bunseki [Analysis on ProCD v. Zeidenberg]*, 61 Hougaku 189, 231-243 (1997). A concrete application of these types of thinking is the prospect theory that argues the that patent law coordinate the uses surrounding the invention, by preventing the duplicative investment and rent seeking, by early grant of right. See Edmund W. Kitch, *The Nature and Function of the Patent System*, 20 J. Law & Econ. 265 (1977). See also I. Trotter Hardy, *The Proper Regime for Cyberspace*, 55 U. Pitt. L. Rev. 993 (1994) (utilising this argument to put forward a strict liability rule for copyright infringement by a third party). See also the opinion of Judge Easterbrook in ProCD, Inc. v. Zeidenberg, 86 F.3d 1447 (7th Cir. 1996); American Geophysical Union v. Texaco Inc., 60 F.3d 913, 930-932 (2d Cir. 1994). Against these applications, see Yoshiyuki Tamura, *Chūshōka suru Biotechnology to Tokkyoseido no Arikata (2) [Patent protection of Biotechnology in the Information Age (pt. 2)]*, 11 Intell. Prop. L. & Pol'y J. 65, 68, 73-78 (2006). See also Tamura, *supra* note 4; Maiko Murai, *Chosakuken Shijō no Seisei to Fair Use (1)(2) [Copyright Market and Fair Use (pts. 1 & 2)]*, 6 Intell. Prop. L. & Pol'y J. 155 (2005), 7 Intell. Prop. L. & Pol'y J. 139 (2005).

[33] Robert P. Merges & Richard R. Nelson, *On the Complex Economics of Patent Scope*, 90 Colum. L. Rev. 839, 877 (1990); Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 Tex. L. Rev. 989, 1048-51 (1997); Mark A. Lemley, *Ex Ante versus Ex Post Justification for Intellectual Property*, 71 U. Chi. L. Rev. 129, 148 (2004); Burk & Lemley, *supra* note 19, at 1648-1649.

[34] RONALD H. COASE, THE FIRM, THE MARKET AND THE LAW 114 (1988): See also Lemley, *Economics*, *supra* note 33, at 1048.

It is likely that the cost from the exclusive rights becomes greater, the earlier the rights are allocated.[35] In addition, the information (if it is not encoded) can be accessed and used by any body and as such, it has characteristics of public goods. When an exclusive right is granted on its use, it may create costs over the uses that would have remained unrestricted, without intellectual property.

3.2.3 Means to Identify the Original Right Holder

When incentive theory is used as a foundation for intellectual property rights, it may deny the axiom that the creator is always entitled to a right.[36] Of course, to incentivize creative activities, it may be necessary to return the benefits [of creations] to the creators themselves. However, if the rights are, for example, given to the persons who the creators trade with, then the benefit may be shared with the creators through this transaction. Further still, if there is a need to give incentive to those other than the creators, then an arrangement to allow the benefits to flow to these others may be sufficient. For example, it may recommendable to grant the rights to the organisations that distribute the benefits.[37] Moreover, to stimulate the use of the intellectual property, external users, it may be preferable to provide environment where the permission for use of intellectual property is easily obtainable by the external users. If these above considerations are prioritized, this would lead to a view that in the case of the creation which typically requires many producers, a uniform control by an organization and not the individual creator may be preferred. The number of the users needs to be considered in the determination to what degree should the utilisation of the intellectual property need to be prioritized. In this

[35] See for the similar argument against the scope of protection of the exclusive right, Merges & Nelson, *supra* note 33, at 877. An extremely large cost leads to the tragedy of the commons. See M. A. Heller & R. S. Eisenberg, *Can patents deter innovation? The Anticommons in Biomedical Research*, 280 Science 698 (1998). See also Nari Lee, *Patented Standards and the Tragedy of Anti-Commons*, 7 TEOLLISOIKEUDELLISIA KIRJOITUKSIA 1 (Ari Saarnilehto ed., 2006), also available at http://ssrn.com/abstract=881702; Kenji Yamamoto, *Gendai Fuhōkōi Hōgaku ni okeru 'Kousei' tai 'Kenri' [Welfare and Right in Contemporary Tort Law]*, 133 Minshōhō Zasshi 875, 903-904, 912-921 (2006).

[36] Under the current law, there are several variation. As the case of copyright on works made for hire (Japanese Copyright Law art. 15.1), there is no established principle that the right belongs to the creator. See Tamura, *supra* note 29, at 388-390. Moreover, the case of employee invention, the Japanese patent law provides for a system where the employer could claim the right as their own. See for the policy discussion on this, Yoshiyuki Tamura & Noriyuki Yanagawa, *Shokumu Hatsumei no Taika ni kansuru Kisorironteki na Kenkyu [On the Theoretical Foundation for Evaluating the Remuneration for an Employee Invention]*, 128 Minshōhō Zasshi 447, 448-451 (2003). Also Yoshiyuki Tamura, *Shokumu Hatsumei no Arikata [On Employee Invention]*, *in* SHOKUMU HATSUMEI [EMPLOYEE INVENTIONS] 2, 9-13 (Yoshiyuki Tamura & Keizo Yamamoto eds., 2005). See also Yoshiyuki Tamura, *Sōsakusha no Hogo to Chitekizaisan no Katsuyō no Sōkoku [Reconciling Protection of Creator with Utilization by Third Party in Intellectual Property Law]*, 29 Nihon Kōgyōshoyukenhō Gakkai Nenpō [Ann. Indus. Prop. L.] 95, 97-98 (2006).

[37] See Yoshiyuki Tamura, *Aoiro Hakkō Diode Jiken Kōsoshin Wakaikankoku ni tsuite [Blue LED Case and Reasonable Remuneration for Employee's Invention]*, 8 Intell. Prop. L. & Pol'y J. 1, 5-6 (2005).

manner, the allocation of the intellectual property right needs to be based on diverse policy considerations.[38] [39]

3.3 Division of Competences among the Legal Decision Making Bodies

Protection of intellectual property right is called for, when the legal intervention is called for in terms of the division of functions of the market and the law. When an intellectual property right is selected over the market, the next questions would include which authority (among legislative, administrative, and the judiciary) would make the decisions on the types of rights, the scope of rights, and the available remedies through which a right of exclusion could be enforced, for example whether a remunerative right is sufficient or a separate regulation is required.

3.3.1 Division of Competence based on Organizational/Technical Proficiency

The choice of the decision making body among the legislative, the administrative and the judiciary, should be based on the consideration on the each organisation's competence for expert decision making and stability of decision. This perspective of technical proficiency may be applied widely through various legislative and interpretative theories of intellectual property, in the ranges of the regulation of verbatim industrial copying,[40] definition of patent eligible invention,[41] doctrine of equivalents,[42] defence of invalidity in patent infringement,[43] file

[38] For details, see Tamura, *Reconciliation*, *supra* note 36. See for the warning against the romantic authorship that does not take a strictly incentive based theory, JAMES BOYLE, SHAMANS, SOFTWARE, AND SPLEENS: LAW AND THE CONSTRUCTION OF THE INFORMATION SOCIETY 42, 56-59, 121-143, 155, 168-173, 177-179, 183-184 (1996).

[39] Furthermore, an interpretation that aims to allow fragmented allocation of the right may not be wise. For example, if a new type of right that is acknowledge by law after the assignment of the original copyright, it is possible to reserve the new right on the original right holder (assignor). When one considers the impact on the third party of the transaction, after the right has been originally allocated, this fragmented allocation of rights may not be desirable policy direction. For an opposing view to this position, see Tadashi Fujino, *Chosakurinsetsuken Jōtokeiyaku no Teiketsugo ni Hōteisareta Shibunken no Kizoku [Who owns the right of Public Transmission newly legislated after the assignment of neighbouring rights?]*, 19 Intell. Prop. L. & Pol'y J. 313 (2008).

[40] Yoshiyuki Tamura, FUSEI KYŌSŌ HŌ [UNFAIR COMPETITION LAW] 282-287 (2d ed., 2003).

[41] Tamura, *supra* note 14. On biotechnology, see also Yoshiyuki Tamura, *Chūshōka suru Biotechnology to Tokkyoseido no Arikata (1-3) [Patent protection of Biotechnology in the Information Age (pts. 1-3)]*, 10 Intell. Prop. L. & Pol'y J. 49, 11 Intell. Prop. L. & Pol'y J. 65, 12 Intell. Prop. L. & Pol'y J. 91 (2006). On business method patents, see Lee, *supra* note 17.

[42] Tamura, *supra* note 29, at 104-106.

wrapper estoppel,[44] scope of enquiry for cancellation of trial decision,[45] binding power,[46] scope of the double jeopardy principle,[47] protection of applied arts,[48] interface of exercise of intellectual property right and anti-monopoly law[49] and the like.

3.3.2 Window on Legitimacy and Correction of the Bias - A New Proposal for the Decision of the Legislative and the Judiciary

Two more distinctive perspectives need to be added to this perspective of technical proficiency. On one hand, as intellectual property institution temporarily restricts freedom, its active justification need to be founded on the efficiency gains from the adopting of the intellectual property. However as argued in the above, it is difficult to verify the efficiency gain and thus instead, it becomes necessary to justify the institution by legitimization of the democratic process through which the institution is adopted. However as noted in the above, the process of the policy making is structured in such manner that it reflects easily the interests that may be easily organised (ex. large companies) and that the interests of the individuals or SMEs whose interests are relatively difficult to organise. This structural bias needs to be corrected.

[43] Yoshiyuki Tamura, *Tokkyoshingai Soshō ni okeru Kōchigijutsu no Kōben to Tōzenmukō no Kōben [Defence of Prior Art and Invalidity in Patent Infringement Litigation]*, *in* KINŌTEKI CHITEKIZAISAN HŌ NO RIRON [FUNCTIONAL THEORY OF INTELLECTUAL PROPERTY] 58 (1996). For a detailed discussion, see Makiko Takabe, *Tokkyohō 104-jō-no-3 wo Kangaeru [Consideration on Patent Law Article 104-3]*, 11 Intell. Prop. L. & Pol'y J. 123 (2006).

[44] Yoshiyuki Tamura, *Handankikan Bunka no Chōseigenri to shiteno Hōtaikinhangen no Hōri [Reconsidering Filewrapper Estoppel]*, 1 Intell. Prop. L. & Pol'y J. 11 (2004). See also Hiroshi Yoshida, *Saikin no Saibanrei ni miru Kinhangen no Kenkyū: Shinpan [A Study of Estoppel in recent case: New Edition]*, 1 Intell. Prop. L. & Pol'y J. 41 (2004); Yasuyuki Echi, *Shinsakeika Kinhangen no Rirontekikonkyo to Handan Wakugumi (1)-(5) [The Doctorine of "Prosecution History Estoppel" (pts. 1-5)]*, 155-6 Hōgakuronsō 1 (2004), 156-1 Hōgakuronsō 37 (2004), 156-2 Hōgakuronsō 112 (2004), 157-1 Hōgakuronsō 20 (2005), 157 Hōgakuronsō 28 (2005).

[45] Yoshiyuki Tamura, *Tokkyomukōshinpan to Shinketsutorikeshisoshō no Kankei ni tsuite [Relashionship between Trial for Invalidation of a Patent and Suit against Trial Decision]*, *in* KINŌTEKI CHITEKIZAISAN HŌ NO RIRON [FUNCTIONAL THEORY OF INTELLECTUAL PROPERTY], *supra* note 43, at 138, 138-162.

[46] KAZUO MASUI & YOSHIYUKI TAMURA, TOKKYO HANREI GUIDE [PATENT CASE LAW GUIDE] 281-287 (3rd ed., 2005). See also Hiroaki Murakami, *Torikeshi Soshō ni okeru Shinri no Han'i to Hanketsu no Kōsokuryoku [Scope of Examination and Binding Force of Judgment in Administrative Litigation]*, 10 Intell. Prop. L. & Pol'y J. 145 (2006).

[47] MASUI & TAMURA, *supra* note 46, at 289-294; Ayumu Iijima, *Tokkyomukōshinpan ni okeru Ichijifusairi [Double Jeopardy in Patent Invalidation Proceedings]*, 16 Intell. Prop. L. & Pol'y J. 247 (2007).

[48] Tamura, *supra* note 29, at 31-36. See also Liu Hsiao-Chien, *Jitsuyōhin ni Fusareru Design no Bijutuchosakubutu Gaitōsei (1)(2) [Copyrightability of Functional Designs (pts. 1-2)]*, 6 Intell. Prop. L. & Pol'y J. 189 (2005), 7 Intell. Prop. L. & Pol'y J. 177 (2005).

[49] Tamura, *supra* note 10. See also TADASHI SHIRAISHI, GIJUTSU TO KYŌSŌ NO HOUTEKIKŌZŌ [LEGAL STRUCTURE OF TECHNOLOGY AND COMPETITION] (1994); Tadashi Shiraishi, *Chitekizaisanken no License Kyozetsu to Dokkinhō [Refusal to License an Intellectual Property and Antimonopoly Law]*, *in* 21-SEIKI NI OKERU CHITEKIZAISAN NO TENBŌ [PROSPECT OF INTELLECTUAL PROPERTY IN THE 21ST CENTURY] 229 (Institute of Intellectual Property ed., 2000); Toshifumi Hienuki, *Chitekizaisanken to Dokusenkinshihō [Intellectual Property Rights and Antimonopoly Law]*, *in* SHIJŌ, CHITEKIZAISAN, KYŌSŌHŌ [MARKET, INTELLECTUAL PROPERTY, COMPETITION LAW] 1 (2007)

These two perspectives can be applied to the division of the competence of the legislative and the judiciary, in the context of intellectual property law.

First, when the judiciary faces an interpretation of law to create an intellectual property right or to strengthen it, the judiciary need to respect the political responsibility borne by the legislative branch concerning the efficiency determination. This means that the judiciary need to adopt a means of interpretation according to the objective of the law, derived from the structure of the law. One reason behind this is because the court is a suitable institution to deal with political responsibility. In addition to this, a comprehensive decision or a decision that requires a specific expertise, the court may have a limited competence. This is the problem of technical proficiency. Moreover, if the right holders' interests are easily reflected in the policy making process, due to the structural bias, a correction of this bias via the route of legislation is required. Thus the determination on this aspect may have to take a cautiously path.

An example of this in Japan is the question surrounding the copyright infringement liability, especially on the third party liability. Recently the courts in Japan has applied a direct infringement liability to those who provide means and services to induce large scale private copying or non-commercial use of copyrighted material, through a type of vicarious liability doctrine known as the "Karaoke doctrine".[50] As a result, the courts allowed claims for injunction against these third parties.[51] Originally, the doctrine was applied to an area where there is a personal control over the act of physical uses and users. However when this doctrine is applied to the provision of means [of physical uses], an ironical conclusion may occur. This is because when the actual uses that are tied to the finding of the infringement liability might be allowed non infringing uses that are under the exceptional provisions in the copyright law. When the court is allowed to interpret the law in this manner, this amounts to the judicial creation of infringement. This would require a separate debate on the questions such as - whether to regulate such type of conduct at all (ex. a conduct of providing a system that induces

[50] Karaoke doctrine is based on the Japanese Supreme Court Decision of 15 Mar. 1988, 42 Minshū 199 <Club Catseye>. See Tamura, *supra* note 30, at 149-153. This case dealt with the liability of the Karaoke bar proprietor over the singing conduct of customers. The decision is understood to have established two requirements for Karaoke bar proprietor's third party liability, that is, (i) the bar proprietor manages (management) the conduct of the customers and (ii) derives the benefits from this (benefit). These two conditions are generally understood to form the basis of the third party liability for copyright infringement in Japan. See for the applicability and critique on the decision, Tatsuhiro Ueno, *Iwayuru 'Karaoke Hōri' no Saikentō [Reexamining So-called Karaoke Doctrine]*, *in* CHITEKIZAISANHŌ TO KYŌSŌHŌ NO GENDAITEKITENKAI [RECENT DEVELOPMENT OF THE ACADEMIC DISPUTES ON THE INTELLECTUAL PROPERTY LAWS AND THE COMPETITION LAW] 781 (2006).

[51] See Tokyo D. Ct. Decision of 9 Apr. 2002, 1780 HANREI JIHŌ 25 <File Rogue Neighbouring Right Provisional Order>; Tokyo D. Ct Decision of 29 Jan. 2003, 1810 HANREI JIHŌ 29 <same, interim decision>; Tokyo D. Ct Decision of 11 Apr. 2002, 1780 HANREI JIHŌ 25 <File Rogue Copyright Provisional Order>; Tokyo D. Ct Decision of 29 Jan. 2003, Heisei 14 (wa) 4249 <same, interim decision>. See for the detailed case commentary, Yoshiyuki Tamura, *Kensaku Site wo meguru Chosakukenhōjō no Shomondai (3) [Copyright Issues on Search Engines (pt. 3)]*, 18 Intell. Prop. L. & Pol'y J. 31 (2007).

a non commercial uses and private copying in large scale); if regulated, should it entitle a right holder a pecuniary remuneration right similar to the rights provided by the private audio-visual recording levy system, or should it include also injunctive relief. These questions are best considered to be within the mandate of the legislature.[52]

Needless to say, this does not mean that the judiciary should not interpret the law in such ways to create or strengthen an intellectual property right. However, what this paper argues is that such interpretation should also consider the structure of the law and objectives of the institution that can be deduced from it. For example, a claim based patent system creates a principle that the alleged infringing technology in the patent infringement litigation will fall outside the scope of the patent protection, if the claim does not literally read on the alleged infringing technology. (Japanese Patent Law art. 70.1) However, if claiming system aims to ensure the predictability among the interested parties, the court may affirm the infringement even when the claim does not read on the allegedly infringing devise, if a specific element in a patent claim can be easily substituted. (Doctrine of Equivalents).[53] This interpretation is one implementation of legislative objective and naturally, is within the purview of the judicial mandates.

In addition, under the current laws, there should be cases where an affirmative intervention from judiciary may be allowed. This would be case when it is obvious that where it is against the efficiency and there is no obvious risk to inadvertently provide overlapping regulation, as there may be no problem of conflicting technical proficiency.

An example of this is the application of the general tort principle under the Japanese Civil Code Art 709 to a type of conduct that is not explicitly regulated in the intellectual property law. As long as this is an interpretation that creates an intellectual property right, it has to be cautiously considered, in principle. However, an exception does exist. This is because the decision that the law should regulate a type of free riding conducts could have been made

[52] For this reason, a joint tort liability may be utilised for those who provide a physical means, tied to the infringement of the physical users. See Sup. Ct Decision of 2 Mar. 2001, 55 MINSHŪ 185 <Night Pub G7 Appellate Decision>. See also for case commentary, Yoshiyuki Tamura, *Karaoke Sōchi Lease Gyōsha no Kyōdōfuhōkōisekinin no Seihi [The Liability of Karaoke Device Lease Business Proprietor]*, 694 NBL 14 (2000). In this case, I argued elsewhere that the scope of the injunctive relief to be equivalent to that of the scope of indirection infringement in patent law. See Tamura, *supra* note 51; Yoshiyuki Tamura, *Takinōgata Kansetsushingai Seido ni yoru Honshitsutekibubun no Hogo no Tekihi [Is it Proper to Protect Essential Part of the Invention under the Doctrine of Contributory Infringement?]*, 15 Intell. Prop. L. & Pol'y J. 167 (2007). See also Katsumi Yoshida, *Chosakuken no 'Kansetsushingai' to Sashitomeseikyu ['Indirect Infringement' of Copyright and Injunction]*, *in* SHINSEDAI CHITEKIZAISANHŌSEISAKUGAKU NO SŌSEI [ESTABLISHING LAW AND POLICY OF INTELLECTUAL PROPERTY] 253 (Yoshiyuki Tamura ed., 2008).

[53] Together with other requirements, see Sup. Ct. Decision of 24 Feb. 1988, 52 MINSHŪ 113 <Ball-splined Shaft Bearing Decision>. See TAMURA, *supra* note 14, at 224-237.

through a democratic decision making process, as long as the regulation is not an excessive intervention. This may be the case of intellectual property laws, where there is an obvious efficiency based value judgement behind the entire system of laws.[54] For example, before the enactment of art. 2.1.3 of the Law on Prevention of Unfair Competition in Japan, the courts used tort to regulate a verbatim commercial copying (of external design, features and shapes of commercial products). (Tokyo H. Ct. Decision of 17 Dec. 1991, 23 CHISAISHŪ 808 <Mokumekeshōshi>)[55] Similarly, the court used tort principle to protect a comprehensive data base which fell outside the scope of copyright protection for lack of originality (creativity). (Tokyo D. Ct. Decision of 25 May 2001, 1774 HANREI JIHŌ 132 <Super Front Man>) Mainly these are the cases where there is obvious need to decide without having to wait for the legislation. When it is believed that a separate legislation is required to provide the conditions for protection, the court need to avoid sole judicial creation of intellectual property right. Some of the recent Japanese court cases show a tendency to apply the general tort based liability on the free riding conducts, while holding that the act is outside the copyright protection, without considering specific factors why copyright law shall not cover these conducts. (For example, IP H. Ct. Decision on Tsūkin Daigaku Law Course case.[56]) These decisions are questionable in light of the perspectives of the above. This is because if there is a problem in the law, it needs to be corrected through legislative process and the interests of those who would benefit from the creation of intellectual property right would be reflected in this process. In principle, the decision whether such protection of their interests is necessary or not should be mandated to the democratic decision making process.[57]

Secondly, a limiting interpretation of an intellectual property right need to be considered as a judicial breathing room to reflect the users' interests, and sometimes, irrespective of the

[54] Yoshiyuki Tamura, *Chitekizaisanken to Fuhōkōi [Intellectual Property Rights and Torts]*, *in* SHINSEDAI CHITEKIZAISANHŌSEISAKUGAKU NO SŌSEI [ESTABLISHING LAW AND POLICY OF INTELLECTUAL PROPERTY], supra note 52, at 3. See also Atsumi Kubota, *Fuhōkōihōgaku kara mita Publicity [A note on the role of tort law in the protection of the rights during the publicity building process: a tort law perspective]*, 133 Minshōhō Zasshi 721, 741 (2006); NOBUHIRO NAKAYAMA, CHOSAKUKENHO [COPYRIGHT LAW] 209 (2007). In this case, to acknowledge the tort liability, it is believed that the interests in suit is socially acknowledged as an interest that merits legal protection. See Kubota, *supra*, at 741-743. However, this paper argues that at least in Japan, there is a general value judgment embodied in the intellectual property that allows law to regulate the free riding to the extent that there are insufficient incentives for research and development. This is a competitive prosperity theory, pointed out by Hasegawa, *supra* note 21, at 18-24. The reason why the judiciary has to take a reserved approach is not because there is no social acknowledge for the need but because the technological decision making is so complex that it makes it difficult to take the political responsibility. Thus the premise that Kubota requires may not be necessary.

[55] Yoshiyuki Tamura, *Tanin no Shōhin no Deddo Copy to Fuhōkōi no Seihi [Verbatim and Slavish Imitation and Tort]*, 14 Tokkyokenkyū [Patent Studies] 32 (1992).

[56] Takakuni Yamane, Case Note, IP H. Ct. Decision of 15 Mar. 2006, Heisei 17 (ne) 10095 et. al., 18 Intell. Prop. L. & Pol'y J. 221 (2007).

[57] Tamura, *supra* note 54.

legislative objectives. This is because of the bias in the policy making process. When one considers the structural difficulties to reflect the interests of the intellectual property users in the legislation, the correction of this bias should not be relied on the legislation, and in this context, the court need to ensure the freedom of the users. This is particularly so in the case where the interpretation is not based on the efficiency gains, but on the ground of freedom. This requires neither technical proficiency nor political responsibility and thus calls for an active intervention of the judiciary.

For example, a general exception of fair use does not exist in the Japanese copyright law.[58] In this context, the Japanese courts have freely adopted various means to limit copyrights. [59]Even in cases where such existing doctrine or limiting provisions cannot be applied, it is believed that the courts should be allowed to generally limit a copyright to ensure the freedom of the users.[60] [61]

3.3.3 Adjusting a Traditional Model of Rechtstaat /Rule of Law Principle - Adoption of a New Perspective on the Division of Competence by the Administrative and the Judiciary

In the context of the Japanese patent law, the majority of commentator view that the there is no discretion in the patent office as the patent grant is based on an "entitlement" perspective (i.e.

[58] Yoshiyuki Tamura, *Kensaku-site wo meguru Chosakukenhōjō no Shomondai (1) [Copyright Issues on Search Engines (pt. 1)]*, 16 Intell. Prop. L. & Pol'y J. 73, 96-99 (2007).

[59] There are several examples. See for example, Tokyo H. Ct. decision of 18 Feb. 2001, 1701 HANREI JIHŌ 157 <Setsu-Getsu-Ka>. The court ruled that the copyright of the calligraphy artwork included in the advertising catalogue for lighting equipment is not infringed as the size of the reproduced calligraphy in the catalogue, 3-9 mm per letter, was such that the creative expression in the calligraphy is not reproduced. In another decision, Tokyo D. Ct. decision of 25 Jul. 2000, 1758 HANREI JIHŌ 137 <Hataraku Jidōsha>, the court ruled on the act of including the photograph of the municipal bus in a book. The bus in question had a painting art work on the body of the bus and the infringement of the painting artwork was alleged. The court utilised the Japanese Copyright Law art. 46 that provides copyright exception to the use of the work that is constantly displayed in the open and accessible outdoors, and denied the copyright infringement of the painting work. For the commentaries, see Maiko Murai, *Access-kanōna Chosakubutsu ni taisuru Kōshū no Riyō no Jiyū [Freedom of Use in the Publicly Accessible Copyrighted Work]*, 10 Intell. Prop. L. & Pol'y J. 247 (2006). See also Toshiaki Iimura, *Chosakuken Shingaisoshō no Jitsumu [The Practice of Copyright Infringement Litigation]*, *in* CHOSAKUKEN SEIDO GAISETSU OYOBI ONGAKU CHOSAKUKEN [COPYRIGHT SYSTEM AND MUSIC COPYRIGHT RIGHT] 207, 211-212 (Meiji Univ. Law Sch. ed., 2006).

[60] Tamura, *supra* note 28.

[61] To deal with the bias in the policy making process, the correction is expected not only by the judiciary but also through the governance of the policy making process on the intellectual property so that the interests of the minorities - users and the developing countries is reflected in this process. This governance approach is exemplified by cooperation among the developing countries patent offices. See Peter Drahos, *Trust me: Patent offices in developing countries*, (Austl. Nat'l U. CGKD Working Paper, Nov. 2007), available at http://cgkd.anu.edu.au/menus/workingpapers.php. Another governance based approach is NGO based movement such as creative commons. See CREATIVE COMMONS - DIGITAL JIDAI NO CHITEKIZAISANKEN [CREATIVE COMMONS – INTELLECTUAL PROPERTY RIGHTS IN DIGITAL AGE] (Creative Commons Japan ed., 2005).

the applicant is entitled to a right, as long as the application meets the patentability requirement) of a patent right and patentability.[62] If this "entitlement" view is held as an anti-these of the view that a patent right is a sovereign privilege based on the discretion of a king, this is a correct description of the current Japanese patent law as it does not allow arbitrary operation. However, as argued in the above on the intellectual property rights in general, and as clearly exemplified by the changes with product patents, in particular,[63] patent right is clearly not a natural right, but an instrumentalist right based on an industrial policy, for a purpose of encouraging technological creations and the utilization. In addition, it is indubitable that the patent office as an expert organization is better equipped to decide which types of technology should be granted with patent rights, than the courts. It is needless to say that under the sovereignty of the people, the discretion of the patent office need to be bound by the law. However, it would be erroneous to think that there is no discretion whatsoever for the patent office, (i.e. the concept of non-discretionary administrative acts in the administrative law) in relation to the courts, in case where there is a difference between the interpretation of the text of law.

This is most visible in the new subject matter area where there is lack of (at least temporary) international consensus, such as computer program and biotechnology. For example, the examination guideline of the Japanese patent office on computer program related inventions has been through many revisions, and the court does not scrutinize every revision.[64] In this context, the most recent revised examination guideline on computer software related invention was adopted on Dec. 28th 2000 (H12), but it was inapplicable to the application filed before the Jan.10th 2001 (H13). Confusion may occur, when the courts examine individual cases. An arbitrary or non- transparent change in the operation would be against the egalitarianism and deprive an opportunity of administrative governance by the people. However, examination guidelines are revised through coherent and transparent process. One may argue that the courts need to respect the discretion of the patent office through this type of operational changes.[65]

[62] See 1 NOBUHIRO NAKAYAMA, KŌGYŌSHOYŪKEN HŌ [INDUSTRIAL PROPERTY LAW] 60-61 (2d appended ed., 2000), where the entitlement perspective is used in contrast to the discretionary grant of patent as a favouritism sovereign. But it is not clear whether this entitlement perspective denies any discretion of the patent office.

[63] In Japan, patent law allowed only the process invention claims even when the invention was for the new chemical substances, out of the concern for domestic industry. This has changed when Japanese chemical technology reached an internationally advanced level and the patent law revision of the 1975 introduced a product patent over chemical substances.

[64] On the historical changes in Japanese patent examination guidelines, see KAZUHIKO TAKEDA, TOKKYO NO CHISHIKI [KNOWLEDGE ON PATENT] 31-41 (8th ed., 2006).

[65] See Tamura, *supra* note 14, at 131-132.

Traditional "Rechtstaat" model relies on the "laws" that gives a binding authority to a legislative decision at a specific time, and at the same time subjects it to a full judicial review, and thereby provide a one-track governance model to administration. However, it is questionable whether this one track model can be applied uniformly to the administration of industrial and technological policies. This is because industrial policy regulates economic matters that constantly change that create relevant knowledge at every turn. Similarly, technological policy regulates subject matters which are understood, differently at different times, such as computer programs and biotechnology. In these cases, it is necessary to propose an interactive model to divide the competence and function of the legislative, the administrative, the judiciary or other institutions. An interactive mode would follow the axis of time that feed the changes in the subject matter back to the substance of regulation[66] and at the same time would utilise the knowledge that the administration has gained over time, to influence the judiciary, and not just simply prioritise the judiciary between the law (judiciary) and the administration.

3.4 Governance of the Process by Consequentialist Approach

So far, I have argued that ultimately, a political responsibility has to be relied on, as a complete analysis and verification of efficiency is difficult, and that in case where there is a structural bias in the policy making process, the emphasis on the political responsibility would lead to a fine tuning by the judiciary. However, a just intellectual property institution cannot be constructed by the means suggested in the above.

To a degree that is possible, it is desirable to clarify the types of institution would improve or would not improve the efficiency, so that a framework can be set to discourage inefficient policy decisions. In addition to this, the scope of freedom that must be ensured by the legislation or the judiciary has to be clearly presented. As concrete examples of this consequentialist exercise, we examine two theories - a policy lever theory in the context of patent institution and policy and third wave theory in the context of copyright law.

3.4.1 Theory of Patent Policy Levers[67]

A patent institution has three functions. First it promotes inventions and its disclosure and secondly, by early grant of patent rights, it prevents duplicative investments on the inventive

66 See for an risk administration model with the example of environmental policy, Ryūji Yamamoto, *Risk-Gyōsei no Tetsuzukitekikōzō [A procedural structure of risk management]*, *in* KANKYŌ TO SEIMEI [ENVIRONMENT AND LIFE] 3, 9-15 (Hideaki Shiroyama & Ryūji Yamamoto eds., 2005).

67 Burk & Lemley, *supra* note 19.

activities, and thirdly this early grant promotes commercialisation of the products that are related to the particular patent.

All of these functions are related to efficiency. However, the patent problem ultimately relates to the question of the rights and obligations of the two interested parties, as it is operated as judicial norms. Thus this creates a standard that judging a case according to a certain set of rule would lead to efficiency, in total, even in case where an individual case specific efficiency is doubted. Several theories generally approach this framework differently.[68] For example, a prospect theory supports earlier patent grants to prevent rent seeking on the same invention and to provide additional incentivisation of investment for related invention.[69] A competitive innovation theory proposes innovation occurs by high competition, and not by the stagnation from monopolistic position.[70]

A cumulative innovation theory explains that there is a need to provide incentives for both basic patents and improvement patents and thus patent rights need to be granted to both, but as a default rule, it allows a mutual check and balance. As a result, patent promotes the transaction, as the parties need to enter into contracts with each other.[71] Anti-commons theory points out that innovation may be prevented by multiple, fragmented, and heterogeneous patents over one subject matter such as DNA fragment.[72] Similarly, when the scope of a patent protection is too broad, and complex, the patent thickets theory argues that it would lead to a problem.[73]

[68] Following the categories in Burk & Lemley, *supra* note 19. For detail, see Tamura, *supra* note 32. See also on the co-relation among the prospect theory, competitive innovation theory and cumulative innovation theory, Noboru Kawahama, *Gijutsu Kakushin to Dokusenkinshihō [Innovation and Antimonopoly Law]*, 20 Nihon Keizaihō Gakkai Nenpō [Ann. of Japan Ass'n Econ. L.] 50, 51-57 (1999).

[69] Kitch, *supra* note 32. See for criticism, Lee, *supra* note 35, at 18-20.

[70] Kenneth J. Arrow, *Economic Welfare and the Allocation of Resources for Innovation*, *in* THE RATE AND DIRECTION OF INVENTIVE ACTIVITY 609 (Richard R. Nelson ed., 1962). This paper put emphasis on the comparison with other theories and thus used Arrow as understood by Burk & Lemley, *supra* note 19. For a more correct understanding of Arrow in Japan, see the introduction by Kawahama, *supra* note 68, at 51-53.

[71] Merges & Nelson, *supra* note 33.

[72] See Heller & Eisenburg, *supra* note 35. See also the texts accompanying the note 35.

[73] Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools and Standard Setting*, *in* 1 INNOVATION POLICY AND THE ECONOMY 119 (Adam Jaffee, Josh Lerner & Scott Stern eds., 2001). Patent thickets can be distinguished from the anticommons theory, as pointed out by Burk & Lemley, *supra* note 19, at 1613. The patent thicket is used to describe the situation the use is prevented because not only there are multiple right holders but also the scope of protection is too broad and overlapping. Anticommons problem may be alleviated if the number of the rights is reduced, but patent thickets cannot be removed by reducing the number of the patents alone, but also by narrowing the scope of the patent protection.

At a glance these five theories seem to be conflicting with each other. However, a policy levers thesis of Burk and Lemley propose that each of these theories applies to different industries and thus patent policies need a change of gear depending on the field of its application.[74]

According to Burk and Lemley, the prospect theory is applied to the pharmaceutical industry. In this industry, acquisition of patent could lead to a high profit and thus the probability of rent seeking is also very high. In addition, the commercialization of the products after the patent grant involves large investment costs, such as clinical tests. Furthermore in case of medicines, one patent is likely to cover one product and the early grant of patents may have less negative impacts. Thus prospect theory that proposes early grant of patent seems to be convincing.

The second theory of competitive innovation is applicable to business method patents. Before the decision of State Street Bank & Trust Co. v. Signature Financial Group, Inc., 149 F.3d 1368 (Fed. Cir. 1998),[75] a business method patent was believed to be ineligible for patent protection in the USA. In other words, business methods have developed without the patents and maybe the need to grant patent protection also is also believed to be minimal.

Burk and Lemley apply the third cumulative theory to software industry. At least in Japan, this may apply to electronics industry. Despite the fact that many patents are granted in the electronics industry, majority of the Japanese electronics companies are homogenous and often do not rashly enforce their patents, in fear of retaliation. As a result, negotiations for license agreements are promoted and often they enter into comprehensive cross licensing agreement.[76]

The anticommons theory and the patent thickets theory are proposed in the context of biotechnology and semi-conductor industry and in practice, they apply these fields. The contribution of the Burk and Lemley's thesis is in noting that as each field is supported by different theories, and thus an ideal patent institution for each industry is different. Different industry conditions make it unnecessary to paint a uniform picture of an ideal patent institution. While the five theories are not conflicting but comprehensively networked, a desirable policy goal would be to treat each field differently, for example, by utilizing tools such as non-obviousness standard and scope of protection.[77] Further, Burk and Lemley examines the

[74] See Burk & Lemley, *supra* note 19, at 1615-1630.

[75] Ryūta Hirashima, *Beikokutokkyohō ni okeru Hogotaishō no Hen'yō – Iwayuru "Business Method Exception" wo meguru Dōkō ni tsuite [The changes in the patent subject matter in the American Patent Law – Changes surrounding so called Business method exception]*, 41 Chizaiken Forum 23 (2000).

[76] Yoshiyuki Tamura, *Hōkatsuteki Cross License to Shokumuhatsumei no Hoshōkingaku no Santei [Comprehensive Cross Licensing and Calculating Compensation for Employee Invention]*, 2 Intell. Prop. L. & Pol'y J. 1 (2004).

[77] See TAKEDA, *supra* note 62, at 134-136, arguing the terminological difference between the inventive step and non-obviousness requirement of Japanese Patent Law art. 29.2.

proper policy making body - whether it is the legislative or the judiciary, suitable for each field and thus instead of stressing the need to construct a comprehensive rules, they argue a case for an individual case specific examination. Moreover, they highlight the role of the judiciary as it is more resilient against the lobbying. This insight is highly useful as it connects the policy making process and the framework of legal institution.

The legislation has the problem of bias in the policy making process.[78] On the other hand the judiciary as recommended by Burk and Lemley is indifferent to lobbying, to a certain degree. However, considering the limitation of the judiciary in collecting necessary information to form policies and the relative weakness in terms of democratic legitimacy, at least in Japan, policy making by a third alternative organisation of the administration, the patent office, can be considered. Indeed, the Patent Office has various patent examiners who are specialised in their field, and as a practice, they apply patent law to each technological field and in particular, some of these technologically specific standards of review are informed to the public in the form of examination guideline.[79] As argued in the above 3.3.3, this emphasis on the role of patent office necessarily adjusts the traditional *Rechtstaat* model (rule of law) based on the full review of the judiciary on the examination guidelines.

3.4.2 The third wave theory of copyright[80]

In terms of copyright, occasional arguments that regard the right against copying as the permanent golden rule are still observed. However, as a copyright is a right that is created in response to the technological and societal changes and it needs to be changed according to the changes in time as well.[81]

The origin of the contemporary copyright laws dates back to the English law around the early 18th century. Historically, this is the time when the publishing industry bloomed together with the distribution of type-printing technology. This increased competitions on the books that contain the same materials, and as a result, it became difficult to recoup the cost of investment on this technology. It is generally believed that from this, the need to prevent the decrease in

[78] In fact, TRIPs art 27.1 is a product of lobbying that requires members not to discriminate on the technological field. See on the negotiating history UNCTAD, RESOURCE BOOK ON TRIPS AND DEVELOPMENT, 368-374 (2005).

[79] For example, JPO's guidelines on inventions related to computer programs, biotechnology, and mmedicines. See, JPO, Examination Guidelines for Patent and Utility Model in Japan, Part 7.

[80] Tamura, *supra* note 4.

[81] NAKAYAMA, *supra* note 52, at 241, 272.

the publication combined with the need to protect an author's interest has lead to the birth of modern copyright institution.[82]

The copyright law that has emerged together with the distribution of printing technology still focus on the right to prevent copying and added restrictions on the act of public uses.[83] This structure of right focusing on the right to prevent copying may have less impact on the personal freedom at the time when the copying technology was not distributed to the personal level and thus when the right regulated only the public arena (as opposed private domain)[84] However, in the late 20th century, audiovisual recording and reproduction technology have reached the private domain and as a result the copyright right framework seems to excessively restrict freedom of individuals, and its efficacy has been questioned.

The significance of the copyright institution of these technologies allows us to call the distribution of the printing technology as the first wave, and the distribution of copyright technology to a private domain as the second wave. In responses to these technologies, copyright law started to introduce complementary measures such as rental rights and remuneration right as against private audio-visual recording, while still maintaining copy-prevention centric view of right. If one takes this copy prevention as a golden rule, at an extreme, all copying becomes wrong. However, when copying (reproduction) is easily done and the quality of a copy is not different from the original, this expands potentials to enrich human life. The institution of law should not keep the enjoyment of the technological progress in shackles, simply because the law is the way it is. A more liberal idea, not confined to the copy-prevention centric view, needs to be employed when considering a long-term legislative theory.[85]

However, the age of the Internet brought new challenges that are qualitatively different from those of the second (which is not yet resolved); on the premises of copyright law, and this is the

[82] See HIDEAKI SHIRATA, COPYRIGHT NO SHITEKITENKAI [HISTORICAL DEVELOPMENT OF COPYRIGHT] (1998).

[83] TAMURA, *supra* note 30, at 108-111.

[84] See also Jessica Litman, *Revising Copyright Law for the Information Age*, 75 Or. L. Rev. 19, 36-37, 48 (1996), arguing copyright law did not regulate non-commercial user and non-institutional user. See also JESSICA LITMAN, *supra* note 19, at 18-19, 177-178.

[85] For example, arguing a case for copyright registry as a condition for protection against digital use, see Yoshiyuki Tamura, *Digital-ka Jidai no Chitekizaisanhōseido [Intellectual Property Law in Digital Age]*, *in* KINŌTEKI CHITEKIZAISAN HŌ NO RIRON [FUNCTIONAL THEORY OF INTELLECTUAL PROPERTY], *supra* note 43, at 183. See also JESSICA LITMAN, *supra* note 19, at 180-182, arguing that the copyright infringement should be found only in the large scale commercial uses that deprive the right holder of the economic opportunity and that the standard should be found in the common-law or court based concretization of the standard to delineate the commercial use from other uses (see also suggests introduction of social norms by the jury trials). Litman also argues that it is difficult to to demand the general public who does not participate in the policy-making process of copyright law to follow the law that is only understandable by the copyright law experts.

third wave of changes. In other words, as the distribution of communication technology enables information communication networks, in addition to the copying technology, anybody can make information publicly available. This unifies the public arena with the private domain and it becomes difficult to distinguish them. In this context, not just the copy prevention centric view, but also the use in the "public" sphere also has to be used as a device to prevent the excessive intervention in the private person's freedom.

Additionally, further defence systems are being constructed such as copy protection technology and technological management against public transmission, and click-on contracting. These additional means should be viewed as an intermediate step to facilitate the recoupment of the right holder's interests and need to be accompanied by the distribution of circumventing technology and the levy system. Otherwise, several types of technological protection would make a copyright system a means to simply protect the vested interests of the old technology media that have distributed the copyrighted work. This may deprive the society, to more precisely, private members of the society, of the benefits from the widespread diffusion of copy and communication technology.[86] In this sense, what is called for the copyright law is a paradigm shift from the copy-prevention centric view toward a combined perspective of copy-prevention and regulation of the general use in the public sphere.

Originally, as is the case in other types of intellectual property right, the justification of a copyright is based on two conflicting theories and the paradigm shift proposed in this paper may be criticised as being only based on the incentive based theory. However, even if one adopts a natural right based theory, it is fundamentally questionable that the proposition of "creation" (i.e. that a person creates something) can be used as a ground to change back the society toward the direction before the development of new technologies.

[86] See LAWRENCE LESSIG, CODE VERSION 2.0, 169-199 (2006), for a warning that the technological access and copy control in the cyberspace unsettles the traditional balance of protection and the public, and calling for a creation e.g. by law of a certain incompleteness in cyberspace. See also, Dan L. Burk & Julie E. Cohen, *Fair Use Infrastructure for Rights Management Systems*, 15 Harv. J. L. & Tech. 41 (2001), suggesting a concrete proposal for a framework that systematic and technical provision of fair-use, accompanying the technological protection. See, for the formation and validity of click-on type contracts, Sono Hiroo, *Jōhōkeiyaku ni okeru Jiyū to Kōjo [Copyright Takeover: The Expansion of Contract under UCITA]*, 1999 Americahō 181, 192 (2000). See also Hiroo Sono, *Keiyaku to Gijutu ni yoru Chosakuken no Kakuchō ni kansuru Nihonhō no Jōkyō [Dealing with Contractual and Technological Expansion of Copyright Under Japanese Law]*, 3 Intell. Prop. L. & Pol'y J. 185 (2004), arguing that the mass market contract and the individual negotiation cannot be the same. See also, a balancing these two views, TAMURA, *supra* note 14, at 427-428, 433-434.

4. Concluding Remarks

A theory of intellectual property law and policy that this paper proposed so far can be summarised as following five arguments:

a. As long as intellectual property right is a freedom inhibiting regulation, it is difficult to justify its foundation based on the labour-base property theory or theory of personhood. The foundation then should be based on the efficiency gain from the provision of efficiency.

b. On the other hand, efficiency is difficult to assess and the trade offs between efficiency and the freedom become questioned. As the verification of the efficiency gains is difficult, the justification ultimately depends on the legitimization of the process based on political responsibility through democratic decision making.

c. However, the policy-making process is structurally biased. It easily reflects the organized and aggregated interests of large companies, but neglects the interests of the disaggregated private individuals. This leads to excessive strengthening of the intellectual property rights.

d. In this context, it is necessary to ensure the legitimacy of the process by utilizing the role of the judiciary that fine tunes the law to ensure individual freedom, while seeking a governing mechanism to correct the bias in the policy making process as much as possible.[87]

e. If possible it is desirable to clarify the types of institution would improve or would not improve the efficiency. In addition, by adopting a consequentialist theory, the scope of fundamental freedom that must be ensured by the legislation or the judiciary may become clarified. This should reduce a grey area and narrows the room for discretion in the decision making process.

Finally, I would like to add the area where the theory proposed in the above may be applied. The theory outlined in the above is based on the premise that it is socially desirable to view the active justification for intellectual property law regulation to be based on the promotion of creative production and its distribution.[88]

Thus, as stated several times in the above, it s believed that there is a democratic consensus that the Japanese domestic law incorporate these premises supporting each intellectual property laws. Intellectual property right inhibits others' freedom to use without physical and geographical limits, and the MNEs activities tend to expand the rights internationally. In this

[87] See *supra* text accompanying note 61.

[88] Ko Hasegawa, *Kyōsōtekihan'ei to Chitekizaisanhōgenri ['Competitive Flourishing' and the Principles of Intellectual Property Law]*, 3 Intell. Prop. L. & Pol'y J. 17, 17-25 (2004).

sense, a theory suitable for one domestic law should not be applied to all intellectual property laws in general. In addition, incentive theory is premised on the vision of a society that reached a threshold of a certain level of economic development that could prosper through competition. Thus this may be inapplicable to a society with different degree of maturity in economic development.[89] However, the process oriented theory may be even more suitable to be applied to the international community where the conflict of interests is visibly stronger. Thus a clarification of a consequentialist governance theory may be called for, while seeking legitimacy in policy making process, and acknowledging the bias in the international intellectual property policy making process.

Typical examples of non universal applicability of incentive theory are the international debates surrounding the traditional knowledge and the genetic resources. As widely known, there is a strong tension between the developed country and the less developed and developing countries that are endowed with traditional knowledge and genetic resources.[90] Traditional knowledge can be approached from a cultural pluralistic perspective.[91] The friction stems from the tension between the IP system based on the culture of developed country that is dynamic, industrial, and individualistic against the gradual, ecological and communitarian protection of traditional knowledge.[92] Furthermore, the question of protecting traditional knowledge and genetic resources is related to ecosystem and thus cannot be discussed without discussing the policy and value choices between prioritising the industrial development or biodiversity and environmental protection.[93]

When one considers the differences in the culture and value system, consequentialism cannot be applied at all. Ultimately, a process oriented solutions such as international treaty

[89] *Id.* at 24, 30.

[90] VANDANA SHIVA, PROTECT OR PLUNDER? - UNDERSTANDING INTELLECTUAL PROPERTY RIGHTS (2001), See for a theoretical review, Yoshiyuki Tamura, *Dentōtekichishiki to Idenshigen no Hogo no Konkyo to Chitekizaisanhōseido: Sairon [Revisiting the Normative Foundations of Protection of Traditional Knowledge and Genetic Resources]*, 19 Intell. Prop. L. & Pol'y J. 157 (2008); Yoshiyuki Tamura, *Dentōtekichishiki to Idenshigen no Hogo no Konkyo to Chitekizaisanhōseido [Normative Foundation of Protection of Traditional Knowledge and Genetic Resources]*, 13 Intell. Prop. L. & Pol'y J. 53 (2006).

[91] See WILL KYMLICKA, CONTEMPORARY POLITICAL PHILOSOPHY: AN INTRODUCTION Ch. 8 (2nd ed., 2002).

[92] Ko Hasegawa, *Senjūmin no Chitekizaisanhogo ni okeru Tetsugakutekibunmyaku [The Philosophical context of the intellectual property protections for indigenous people]*, 13 Intell. Prop. L. & Pol'y J. 27 (2006). See also BOYLE, *supra* note 37, at 128-130. They suggest that there is need to share or return profits to the indigenous people to preserve biodiversity and the nature. In particular, the Bellagio Declaration similarly critics the vision of creatorship in the current intellectual property and calls for a special neighboring rights to protect the traditional knowledge. See BOYLE, *supra*, at 192-200.

[93] Shiva, *supra* note 90.

negotiation has to be adopted, and ensuring the legitimacy of the process becomes crucial.[94] In this case, even if it is not possible to adopt a natural right based conclusion that the traditional knowledge and genetic resources should be protected as such, it is equally erroneous to argue that their protection is outside the scope of intellectual property, simply because they do not fit to the current shape of intellectual property law system of developed countries.[95]

[94] See also Yuka Aoyagi, *Dentōtekichishiki ni kansuru Hōseibi eno Senjūmin oyobi Chiikikyōdōtai no Sanka ni tsuite [Participation of Indigenous and Local Communities to the Development of Legal Systems on Traditional Knowledge, Genetic Resources and Folklore]*, 8 Intell. Prop. L. & Pol'y J. 95 (2005).

[95] Tamura, *Sairon [Revisiting]*, *supra* note 90.