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by Hayyanul Haq Lalu Muhammad

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Hayyan ul Haq

Centre for Intellectual Property Law, Molengraaff Institute for Private Law, Utrecht University, The Netherlands E-mail: hayyanulhaq@yahoo.com

Abstract: This work aims to visualise the importance of a 'coordinated structure' in the contract of technology transfer that may accommodate the different interests among contractual parties and society to access patent products based on the principle of equity and justice. It shows two core problems which stem from the insufficiency of the patent regime and the failure of the doctrine of freedom of contract as the main legal framework in transferring technology. Therefore, this work elaborates some constitutive elements of fundamental rights, public interest and social functions as fundamental guidelines for the '*constitutionalising*' the contract of technology transfer.

Keywords: coordinate structure; constitutionalisation of contract; technology transfer; unity and sustainability; fundamental rights; Pancasila.

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Biographical notes: Hayyan ul Haq is a Lecturer in Intellectual Property, Law Faculty, Mataram University, Indonesia. He is involved in various academic activities in private law, particularly in intellectual property, investment, corporate and contract law. He holds a First Law Degree (Sarjana Hukum) in Private Law from Mataram University and Master of Law (LL.M.) in Intellectual Property from the University of Technology Sydney. Currently, he is a PhD candidate and researcher in the Centre for Intellectual Property Law (CIER), Molengraaff Institute for Private Law, Utrecht University. His research is concerned with the legal protection in optimising information and technology under the intellectual property regime.

1 Introduction

Even though the transfer of technology is strongly campaigned as a principal means of relieving world poverty (Jeremy, 1991), there is no reliable and credible evidence that shows a significant correlation between technology transfer under the patent regime and the collective mastery of a nation to access information, knowledge and technology (INT) effectively (Correa, 2005, p.228) in order to improve the quality of people's lives. Public interest, worldwide, has been aroused by the health crisis in the developing

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countries due to the exorbitant prices of drug treatments. HIV/AIDS medicines are a high-profile example. There are 42 million people living with HIV/AIDS world-wide (WHO, 2002). Cecilia Oh identified that there are more than 14 million deaths each year, because of poverty and lack of access to health services. Basically, affordable medicines could help them. Efficient and affordable medicines could cut down the death toll if people had access to such drugs. The Economist pointed out that a conflict between the South African government and multinational corporations arose over the government's plan to loosen IPRs' restrictions in order to reduce the price for AIDS medication needed for 5 million infected people in the country. Clearly, this non-affordability correlates to interests of companies to control the price of patented medicines and to block competition from other firms and other products. Prices of patented medicines are very much linked to the monopolies enjoyed by pharmaceutical companies, protected and maintained by patent rights (Oh, 2001).

This fact requires social responsibility from corporates to fulfil fundamental rights through disseminating INT in the essential fields. Ideally, industrialised and developing countries should improve cooperation in narrowing the deep gap in utilising INT. Unfortunately, the disparity is increasingly deeper. It is indicated by the domination of industrialised countries that control more than 90% of global research and development. Now the gap is more strongly formatted by various international rules and bilateral agreements (TRIPs Agreement, FTAA, TRIPs Plus, etc.) with the potential to restrict the dissemination of INT. Some scholars show that the TRIPS exacerbate the gap by increasing the cost of knowledge-rich goods imported by developing countries. Royalties and licence fees paid by developing countries to patent holders in the industrialised world have been climbing rapidly since the mid-1980s (Pugatch, 2004). So far, the IP regime is subject to adjustment of economic circumstance and lacks the characteristic of fundamental rights (Drahos, 1998, p.22). In practice, it has been used as the main instrument to accumulate power in exploiting information, knowledge and technology. Drahos and Braithwaite (2003, p.5) maintain that the expansion of intellectual property systems have enabled a relatively small number of corporate players to amass huge intellectual property portfolios.

Developing countries, therefore, have become increasingly sceptical about the existence of various relationships between IPRs and the transfer of technology. This scepticism underpins the commitment of these countries to establish a Working Group on Trade and Technology Transfer in the WTO, as agreed upon by the Doha Ministerial Conference in November 2001. Unfortunately, this agreement has been annulled by developed countries' (the USA, the European Union and Japan) manoeuvres to establish and strengthen a Free Trade Area (FTA). In this case, the USA has taken the current bilateral route (of FTAs) to shorten the long drawn-out process of multilateral, post-TRIPs negotiations and to overcome the resistance of other countries to US interests. This FTA aims to bind and control other countries, particularly developing countries, so that they are compelled to implement the TRIPs-plus provisions, which consist of expanding the scope of protection available to drugs manufacture, limitations on parallel importation; the removal of exceptions from the patentability of life forms; and incorporating of the contents of obligations arising from the 1996 WIPO Treaties. The impact of the peculiar ambition of the FTA can be seen on the US-Singapore Free Trade Agreement negotiated in early 2003. Several provisions that illustrate this problem are:

- the limits on the use of 'compulsory licensing', an important mechanism for governments to obtain affordable drugs and medicines
- · delays or impediments to the introduction of generic competition
- extending the term of patent protection to compensate for delays in regulatory approval
- restricting the parallel importation of medicines placed on a foreign market at a lower price than in the home market (Vitale, 2006, Oxfam, 2006a, 2006b).

Clearly, the FTA has been greeted by vigorous opposition from activists in all of the potentially affected countries, including Indonesia. For this reason, we need to find and to create an ideal legal framework, as an alternative solution to the optimisation of intellectual property products for human welfare. This alternative solution is required to provide a solution on the failure of the patent regime and the freedom of contract to facilitate public interest in utilising information, knowledge and technology (INT) for maintaining the sustainability of collective life. Against this background, this paper will focus on and examine:

- the raison détre of the construction of 'coordinate structure' in the contract for the transfer of technology
- the importance of the method (by 'the *constitutionalisation*' of the contract) for ensuring that the contract has a 'coordinated structure'.

In this paper, the coordinated structure in the contract for the transfer of technology is defined as a point of agreement reached by contractual parties and society (interested parties) based on the principles of sustainability, equity and justice. The coordinated structure is required to accommodate the different interests among contractual parties, and interested third parties (society) in utilising and optimising INT (patent products) in order to maintain their sustainability.

2 Why construct a coordinated structure in the contract for the transfer of technology?

The *raison d'etre* of the coordinated structure is to integrate various different interests among contractual parties and interested third parties (society) in optimising intellectual property rights through a mechanism for transferring technology mechanism based on the principles of sustainability, equity and justice. For this reason, the process of constructing a coordinated structure should consider universal values and fundamental rights issues in order to guarantee the acceptability of the contract. This is important in order to eliminate any barriers (restrictive or illegal clauses) that may impede the ability of people and local firms to utilise any essential patent product.

Black or illegal clauses (which amount to unfair business practices) are frequently inserted by dominant or stronger parties (the licensor) in the contract to transfer technology, and this is particularly so in Indonesia. There are at least two reasons for this. Firstly, in practice, licensor tends to maximise its interest to the maximum extent by inserting certain black clauses in the contract that may damage national interest, public interest, and even fundamental rights. Secondly, the Indonesian Patent Act 2001 regulates

many fundamental rights issues by employing norms, which are too abstract and broad, such as public interest, social function, and national interest without any detailed explanation, as well as implementation regulations. Consequently, this weakness contributes to the failure of the IPA 2001 in providing legal certainty in protecting fundamental issues, such as peoples' rights to access INT in the fields of food, health, and education. It can be seen that these two reasons are related to each other, when the weaknesses of IPA 2001 fail to eliminate any black or illegal clauses (unfair business practices) in the contract to transfer technology.

2.1 Restricting business practices in the patent licence

It has been already noted that the inventor doctrine and the doctrine of freedom of contract had failed to allow people (public interest) to have unlimited access to information, knowledge and technology (INT). This is because the two doctrines tend to serve and protect the interest of dominant or stronger parties (capitalism) in developed countries. These doctrines open up the opportunity for the dominant parties (licensors) in the contract for transfer of technology to create certain barriers in exploiting their technology and interests to a maximum extent without considering public interest and fundamental rights issues. In practice, licensors try to impose their interests by drafting certain restrictive clauses that tend to hamper the capabilities of people in developing countries, i.e., Indonesia, to optimise INT, and they frequently even try to extend their patent rights illegally by inserting certain clauses to this effect in the agreement.

The interests embodied in some restrictive business practices (restrictive clauses) become potential obstacles to transferring INT. These restrictions may vary; some of the main restrictions are: tie-in, tie-out, price fixing, package licensing, field of use restrictions, grant-back provisions, limitations on the transferee with respect to research and development, quality control clauses, exclusive sales or representation agreements, production volume restraints, and export restrictions (Blakeney, 1989). Other restrictions which could be inserted into the licence agreement are, minimum royalty/quantity requirements, post-termination restrictions, sub-licensing restrictions, no-challenge clauses, non-competition clauses, and full or third-line forcing and leveraging (Trade Practice Commission, 1991). These restrictive clauses or requirements are commonly incorporated in patent licensing agreements. Consequently, the methods used in this exploitation have resulted in a deficiency in the transfer of technology. This exploitation impedes the dissemination of INT which is very much required by people to improve their quality of life and to fulfil their fundamental rights. The impact of this deficiency in the transfer of technology from developed to developing countries is largely felt in developing countries, particularly in the fields of public health and sanitation, food, nutrition and education.

2.2 Re-questioning the Indonesian patent regime

The aforementioned description has made it clear that, due to abstract norms the Indonesian Patent Act (IPA, 2001) has failed to provide protection for social function, public interest, national interest and fundamental rights. Even though the national interest in terms of economic development is repeatedly mentioned in the preamble to the IPA 2001 as the motive for its introduction and is referred to in a number of different provisions throughout the Act, those papers are not accompanied by sufficient

explanations. For example, relating to patent implementation, based on the national interest, Article 18 of the IPA 2001 obliges patent holders to implement their patent in Indonesian territory. In addition, patented inventions -products and processes- may be used for the purposes of research and education as long as that use does not otherwise harm the normal interests of the patent holders (IPA, 2001, Article 17(3)). Then, Article 8 allows the President to postpone the granting of a patent for five years by means of a Presidential Decree. In other provisions the IPA 2001 uses the national interest and the social function principle to restrict patent implementation, even though an invention has been patented. These provisions can be seen in the specific patent implementation by government (IPA, 2001, Articles 98(1–2)) and compulsory license (IPA, 2001, Articles 74–86) provisions. Basically, the two principles, national interest and social function, are also used as indicators to assess any exemptions or to render a licence agreement null and void. They may also be interpreted in the context of internal security and public order, which may cover defence and security considerations (Antons, 1995, p.15).

Again, due to the broad and abstract norms which are not followed by proportional and clear explanations, the national interest and public interest principles could be interpreted fairly widely. Consequently, in their implementation, those abstract and broad norms become 'catch all' provisions, and leave legislators, the executive, and the courts to develop a wide discretion policy in interpreting the social function, public interest, and the national interest. This leads to legal uncertainty in intellectual property. These uncertainties open up loopholes for certain interest parties to make deviations. This can be seen in the Monsanto bribery and corruption case and also affects key personnel in the Indonesian Agriculture Department in general (Monsanto Bribery Case, 2005). Another example is the District Court of Kediri (15 February, 2005), which supported PT. BISI's demands that five farmers should be imprisoned ("Imprisonment for Creative Farmer", Tempointeraktif, 2005). The judges used and interpreted Law No. 12/1992 concerning Plant Cultivation Systems and the IPA 2001 to punish those farmers. Ironically, those farmers were trainees (training participants) in the technology transfer training programmes held by PT. BISI (one of the subsidiary companies of Charoen Pokphand, the largest agricultural corporation in Asia) (Walhi, 2005). Clearly, this decision may threaten the creativity of people and it revoked the rights of farmers to participate in developing a plant cultivation system to fulfil the peoples' right to food.

Other weaknesses of the IPA 2001 concern some certain patent licence provisions, such as Articles 70 and 71. Those articles strictly exclude any conduct that may damage the Indonesian economy (Article 70(1), IPA, 2001) including unfair competition practices as they do not yet have an implementation regulation. Consequently, the IPA 2001 suffers from legal uncertainty, which means that loopholes that may have detrimental effects on the fulfilment of peoples' fundamental rights can not be closed. Actually, this weakness can be dealt with by utilising Indonesian competition law, which also provides strong protection for the public interest, the social function and the national interest (The Indonesian Competition Law, Paragraph 1, Sections (b) and (c). Chapter 1, Article 1, Paragraph 2). Principally, the laws are most likely to be useful in meeting their goals as long as:

- the legal rules and frameworks for analysis are clear
- any derogations from market-based rules are clear
- decision making is transparent and agency and court discretion is limited.

Unfortunately, in the implementation of Indonesian competition law, the government tends to faces serious challenges due to large-scale ambiguities concerning the wide range of discretion which is possible (Fox, 2000, p.594).

Indeed, Indonesia can learn from the Australian patent regime in designing and optimising legal instruments. Under Chapter 14, Sections 144–146 of the Australian Patent Act 1990, Australia details all anti-competitive actions (Ricketson and Richardson, 1998, p.754), thereby providing legal certainty. The regulation prohibits anti-competitive conduct under the Australian Trade Practice Act 1974, which is perhaps an amalgam of the United States (USA) and European Community (EC) competition laws (Blakeney, 1987). It is interesting to note the European experience in formulating Commission Regulation No. 2349/1984 (this regulation was revised in 2004) on Block Exemptions in Patent Licences which specifies the conditions for a patent licence. This provides legal certainty in trade practices, thereby classifying those practices into three categories:

- white
- grey
- black clause (Korah, 1996, pp.158–258).

This regulation provides detailed guidance and legal certainty in protecting the public interest, the social function, and the national interest.

Therefore, the extensively drafted Article 71(1), IPA (2001) should be detailed by providing clear and concrete 'exemptions' (which are black, grey and white clauses), thereby providing legal certainty in exploiting technology and protecting fundamental rights. The above description shows the weaknesses of the IPA (2001) in providing equitable protection for striking a just balance between private and public interests. This is because those provisions are not completed by a detailed explanation of the concepts of national interest, public interest and social function. Additionally, it has no substantial norms to regulate and to protect fundamental rights. Consequently, many transfer of technology contracts in the form of licence agreements are determined by the contractual parties' interests without considering the fundamental rights of people. In this case, many licensees merely play the role of o broker or a subsidiary company of the licensor (multinational corporations) (Kompas, 2004).

Learning from European countries, Indonesia should reorganise various statutes concerning industry and commerce, such as the Civil Code, the Foreign Investment Act, the Intellectual Property Acts (Copyright, Patent, Trademark etc.), and the Anti Monopoly Act to allow society to have access to, invent and innovate technology. Moreover, those regulations can be used to exclude unfair business practices (black clauses) which damage the national economy and the fundamental rights of the people. Thus, the regulations may amount to a comprehensive and integrated legal framework which reflects awareness, preparedness and proper responses to drive national capacity towards the industrialisation of the country without ignoring human dignity.

3 Root cause

In this context, the root cause refers to the different interests which have resulted from certain problems in the patent system. They may situated in several contexts:

- substantial
- structural
- cultural issues.

A substantial problem is related to legal issues concerning patents, while the structural problem refers to the different political and economic interests of parties in exploiting technology (patent rights). Then, the cultural problem relates to the capabilities of the social structure to adapt the transferred technology.

The source of the substantial problem lies in the different policy, provisions and precedents in the patent regimes of WIPO member countries. For example, the USA has introduced discriminatory provisions related to the registration system (Sheldon and Mak, 2000, p.8). The other substantial problems relate to:

- patentability subject-matters and requirements
- misconceptions in recognising prior art and prior use in foreign countries
- the scope of patent protection
- different methods and capabilities in patent enforcement.

In addition, different appreciations of the concepts of morality and public order are likely to be serious obstacles in establishing patentable subject matter and this may prove to be an impediment to the transfer of technology (Diamond v. Chakrabarty, 1980). These substantial problems are likely to be serious obstacles in guaranteeing the fulfilment of fundamental rights (such as food, health, information and education), particularly in Indonesia. For example, regarding the scope of patent protection, any inventor can protect any invention under the sun. These different norms allow US inventors and industries to expand their invention in the field of INT, including research tools that may hamper other people and institutions in developing, even in fulfilling their fundamental rights such as the right to: food, medicine, health, information, and education. In this case, many scholars have voiced their concerns about the potential obstacles of patents to research, biotechnology, and biomedicine that may limit public access to technologies in contributing further biological research and other scientific basic research development (Eisenberg, 1993 and Heller and Eisenberg, 1998).

The structural and cultural problem is caused by the gap in social, political, technological and economic interests between developed and developing countries (Tuney, 1998, p.337). Since the 1970s, in various international forums, developing countries have expressed their preoccupation with access to foreign technologies as a means of enhancing their technological capabilities (Patel et al., 2000) and narrowing the deep North-South gap in development levels. Unfortunately, their efforts fail to create an ideal model for the transfer of technology, which is able to alleviate any obstacle to optimising intellectual property rights. This failure is caused by diametrically opposite interests between the owner (developed countries) and the user (developing countries) of technology. The substantial, structural and cultural problems have become increasingly

complex when FTAA try to introduce some stricter rules (see the aforementioned description) that may impact on the capability of people to access and optimise INT. In this case, more people will be excluded from accessing INT, particularly in the essential fields of food, health and education. For that reason, the government should undertake an initiative (an active role) in protecting fundamental rights.

4 Identifying the coordinated structure of a contract: universal values and fundamental rights

This section elaborates some constitutive elements of universal values (unity and sustainability) and fundamental rights as universal measurements or indicators in constructing a coordinated structure in the contract for the transfer of technology, under the patent regime and contract law. The fundamental rights can be used to lay down the ground rules for appreciating and understanding the different interests based on the principles of sustainability, equity and justice, as well as to limit the scope and the means of the exploitation of information and technology through contracts for transferring technology.

4.1 Unity and sustainability as a meta-principle

This section introduces unity as the main essential element of a social system to maintain sustainability. Unity is indicated by good or normal interaction among the components in a social system attention. It was interaction, not components that became the main focus of the systems' view. A social system will work properly if all components can interact normally. Good quality interaction among the components will stimulate the full participation of the components so as to function proportionally, which, in turn, maintains unity. This condition requires a balance. In the legal context, this balance can be interpreted as justice. Therefore, justice should be dedicated to maintaining unity and sustainability. The legal consequence is that all interaction systems either at the political, economic, social or cultural level should be devoted to creating and strengthening the unity and sustainability of collective life. Thus, all development programmes which ignore the main mandatory element of systems become invalid.

Regarding the utilisation of INT, the deep inside message of the system phenomenon, which posits unity as a constitutive element of a sustainable system, can be considered as a meta-principle in providing guidelines to manage and optimise intellectual products (INT). The sustainability and unity in a social system is reflected in its interconnectedness. Systems will not work and function normally if the element of a social system has no regular intake or input in the form of energy and material (of a certain quality and quantity). In maintaining a balanced structural coupling with nature, in order to produce relevant intake (input) for a social system as well as to preserve the sustainability of the natural system, patterns of interaction of the two systems (social and natural systems) should be able to produce a congruent structural drift.

Under the circularity principle, the interaction (structured coupling) (Maturana and Varela, 1975, 1980, 1981, 1987; Varela, 1979) between the human being and nature will produce several second-order phenomena, such as: science, knowledge, and technology, and concepts of property rights. It should be noted that the second-order products are

instruments to support the sustainability of a system. As complementary instruments, their values' hierarchy are lower than unity and sustainability. Thus, the values of science, technology, art and natural resources are just instrumental. Therefore, their legitimisation cannot surpass the need to maintain unity and sustainability. Ideally, as subordinate or instrumental rights, intellectual property should serve the interests and needs that citizens identify through the language of human rights as being fundamental rights (Drahos, 1998, p.22).

4.2 Fundamental rights and human rights

Fundamental rights and human rights are an ideal basis to provide a just balance between private and public interest in intellectual property, based on the principle of equity and justice. They offer a synthesis of the bases of natural law and utilitarianism and represent the values from which intellectual property developed (Drahos, 1997, p.47). At the international level, the synthesis of the two schools of thought is built into in Article 27 of the Universal Declaration of Human Rights (UDHR) of 1948, which states that "everyone has the rights freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits". Other international Conventions are Article 15(1) of the International Covenant on Economic, Social and Cultural Rights (ICESR) of 19 December 1966 (G.A. res. 2200A (XXI); UN Doc. A/6316, 999 UNTS 171), and Article 10(1) of the European Convention of Human Rights (ECHR) that codifies the principle of the freedom of expression and communication. (In presenting a human rights approach to intellectual property law, see: Audrey Chapman who focuses her argument on Article 15 (the intellectual property provision, which is equivalent to Article 27 of the UDHR) of the International Covenant on Economic, Social and Cultural Rights).

Recently, many national constitutions (such as the Portuguese, Swedish, Slovenian, Russian and Czech Constitutions) have also adopted the spirit and substance of fundamental rights and human rights protection. All provide equally for the protection of property and personality on the one hand, and the protection of the freedom of expression, of information and of art and science, on the other (Geiger, 2006, p.385). At the national level, Indonesia has adopted some essential elements of fundamental rights, which are regulated in several provisions in the 1945 Constitution, such as the rights to food, housing, and a normal environment, the rights to health, the right to information, knowledge and technology (Article 28), and the right to education (Article 31). Those articles are the ultimate imperative norms that impose a positive obligation on the State to undertake any active action in order to maintain and protect the fundamental rights of people. This concept may apply to the scope of the State's responsibility to amend the existing legislation or to adopt new legislation (X and Y v. The Netherlands, 1985), to change administrative practices (Gaskin v. The United Kingdom, 1989), or even to halt financial efforts (Airey v. Ireland, 1979) if they result in potential obstacles for people to fulfil their (weaker parties) fundamental rights (Grosheide, 2001, p.48 in Cherednychenko, 2004, p.5, 2006, p.199).

Based on the above arguments, the unity, sustainability and fundamental rights principles can be elaborated as constitutive elements of the coordinated structure in the contracts for the transfer of technology. It means that they should be appreciated as the ultimate guidance in drafting contracts for the transfer of technology, based on the principle of equity and justice not only for economic purposes but also for human dignity.

5 Manifesting a coordinated structure (through the 'constitutionalisation' of the contract) in Indonesia

The *raison d'etre* of the construction of a coordinated structure is to provide an alternative so as to create a strong legal framework that guarantees an ideal optimisation of INT not only for the benefit of contractual parties, but also for the benefit of people in fulfilling their fundamental rights. In order to manifest this, and to provide a solution to the failure of the IPA 2001 and the freedom of contract, the Indonesian government needs to 'constitutionalise' patents and contracts for the transfer of technology. The constitutionalisation of contract is defined as re-evaluation and re-construction of contract in order to ascertain its coherence to fundamental constitution that contain fundamental rights and human rights issues. This is required in order to guarantee equitable protection for the national interest, the public interest and fundamental rights issues.

The constitutionalisation of contracts for the transfer of technology is required in order to integrate different and various interests emerging from substantial, structural and cultural problems. This is important because the crucial problems -substance, structural and cultural- may bring about the risk of failure in transferring technology. The risk may affect various parties, such as the patent owner, the licensor, the licensee, the industry sector, country in question and society. Therefore, it is relevant to identify and analyse the risk aspect in technology transfer. Thus, in addition to the unity, sustainability and fundamental rights principles, the 'constitutionalisation' of contracts should also consider the benefits and the risk of transferring technology.

5.1 Constitutionalisation of contracts under Indonesian law

In Indonesia, the 'constitutionalisation' of contracts for transferring technology refers to the ideal state of the social order. It can be traced through the Pancasila as the grand norm of Indonesian positive laws and the 1945 Constitution. Hierarchically, after the Pancasila, the source of Indonesian positive law is the 1945 Constitution. In its preamble, the 1945 constitution lays down the Pancasila as the embodiment of basic principles of an independent Indonesian state (Soekarno, 1957). To put it succinctly, and in the order provided in the constitution, the pertinent Pancasila principles are:

- a belief in one supreme God
- humanitarianism
- the unity of Indonesia
- democracy
- social justice.

Basically, the Pancasila principles have the same spirit and characteristics as the Western tradition particularly the European continental principles (Aquinasian thought).

The Pancasila and the Preamble to the 1945 Constitution are considered as the axiom of Indonesian legal endeavours, i.e., managing information, knowledge, technology (INT), and natural resources, which cover:

- legal objectives
- legal resources
- social justice
- legal protection aspects.

The first main idea refers to the legal objectives which govern society's interests emerging rights and duties) as determined by God (Yolton, 1958, pp.487-489). In this case, the law emphasises the importance of a balance being drawn between rights and duty. Thus, any action to help each other is necessarily an obligation to fulfil the need for sustainable collective life. This condition requires that every human being should act based on justice and civilised rules. In this case, they should maintain their own, and each other's, existence; they even have an obligation to maintain other forms of life. The harmonious relationship between rights and obligations is a must. Therefore, it requires legal protection. Thus, clearly, there is a strong link between moral and positive law. In this context, positive law must be in accordance with morals (Leiter, 2001, pp.12, 13). Law should help human beings to develop their existence and potential based on their nature: conserving the dignity of human beings, maintaining justice, ensuring equality and freedom, developing public interest and welfare (Aquinas, 1972). Those terms (social justice, social function, public interest, human dignity, the greatest benefit is the greatest number of people) are the core constitutive elements for creating and strengthening unity and sustainability.

Based on the above description, the general legal principals, legal theories, legal dogma and legal practice concerning the just utilisation of INT should emanate from the grand norm. In Indonesia, the basic concepts of justice can be explored from the social justice concept within the framework of the Pancasila. Consequently, all laws and regulations relating to the utilisation of INT should take into consideration the greatest therefit of people, based on social justice (*Preamble, Law No.18/2002*) as outlined in the Pancasila and the 1945 Constitution. This reasoning is reflected in a series of Indonesian intellectual property, research, science, and technology Act, which refer to the Pancasila and the 1945 Constitution (including fundamental rights). Thus, in practice, those legal principles may provide guidance for settling various disputes emerging from conflicts of interest in controlling important and vital INT.

5.2 Integrating exclusive rights, freedom of contract, the social function, public interest and fundamental rights in the coordinated structure of the contract

One of the main challenges in the visualisation of the concept of fundamental rights is how to interpret, elaborate and embody this in practice. It is important to provide legal certainty and to avoid inconsistency between fundamental rights and the utilisation information, knowledge and technology (INT). This is because the utilisation of INT is frequently inconsistent with fundamental rights. In practice, certain people, corporations or institutions that control INT through state funding, technology trading, or other valid methods, do not use or optimise it properly. In this context, several important provisions related to social functions, national interests, the public interest in regulating INT under the patent regime become more relevant.

In Indonesia, the social function is meant to restate the fact that the exclusive right has a social function. This is similar to Notonagoro's concept that underlies the concept of the social function for the country. He started from the point of view of the state's authority. Because the state is the personification of the people, it has the authority and power to guarantee the social function (Notonagoro, 1984), i.e., INT. The authority of the state means the state's authority to regulate and maintain collective life. So, if we focus on INT, it means that we develop and make efforts to regulate anything concerning INT. From the above description, apparently the State has a certain authority to emphasise the characteristics of the social function, and the national interest including the fundamental rights of people.

In elaborating those interests, i.e., exclusive rights in INT, public interest, the social function, and fundamental rights, the Pancasila and the 1945 Constitution provide guidance to Indonesian law and regulations on how to think and act for the utilisation of INT within clear legal rules and framework analysis. This concept contains several operational principles:

- the principle of the State's authority to INT
- the principle of the utilisation of INT for the greatest benefit of the people, including fundamental rights
- the principle of social justice as contained in the Pancasila.

To simplify the concept, the first principle relates to the status of INT in Indonesia, and the second and the third principles concern the utilisation and optimisation of INT, which are measured by two determinant indicators:

- for the greatest benefit of the people
- social justice.

Those principles limit the state's authority in controlling (mastering) and optimising the utilisation of INT.

The term mastery implies the state's authority in using and optimising INT. With regard to the concept of mastery, the State, as the sovereign organisation, should be considered as the organisation of the people's power. Therefore, it is not assume the state's authority along the lines of the theory of ownership. The state, as the organisation representing sovereign people, has authority to regulate:

- the availability, utility, and optimisation of INT
- the determination and regulation of the trigal relationship between individuals or institutions (legal subjects) and INT (legal objects).

An indicator that can be used to measure the limits of the legal subjects in utilising these legal objects is the term "the greatest benefit of the people" and fundamental rights, such as the rights: to food, health, education, information, knowledge and technology for maintaining human dignity (Articles 27, 28, 31, 33, the 1945 Constitution). These articles not only function as meta-values, but also as operation guidance in creating a coordinated structure that integrates exclusive rights, social function, public interest, and national interest. Therefore, the concept of utilisation and optimisation of intellectual

products for the greatest benefit of the people should be embodied in a concrete statement. It requires that:

- any grant, utilisation and optimisation of INT
- any determination and regulation of the legal relationship between individuals and INT
- any regulation and legal relationship between individuals and legal action concerning INT
- should be dedicated to achieving the greatest degree of benefits –including fundamental rights- for the people (*Law No. 18/2002*).

Thus, the constitutionalisation of contract for the transfer of technology could be a strategic policy to construct the coordinate structure in order to integrate various different interests among contractual parties and interested parties (society) towards the sustainability of collective life. At the policy level, the Indonesian parliament may provide the Indonesian Constitutional Court with broader responsibilities and competencies in evaluating and examining any contract that has the potential to damage fundamental rights. In this case, the government may undertake any active action to scrutinise and invalidate any contract that may contain any black clause or provision under TRIPS Plus. Then, at a practical level, Indonesia can learn from various jurisprudences in protecting fundamental rights. For example, by considering the UDHR and the ECHR, Paris Court of Appeal, 1 February 1989, (142 RIDA 301, 1989), Paris Court of Appeals, 14th Chamber, Sec. A, 26 February 2003, (35 IIC 342, 2004) and German Constitutional Court 7 July 1971 (1972 GRUR 481, 3 IIC 394, 1972) examined and restricted intellectual property exploitation to protect individual and societies' fundamental rights, such as freedom of expression and rights to information (Geigher, 2006).

6 Conclusion

In creating a suitable model for transferring technology, Indonesia should construct a coordinate structured to integrate various different interests (an exclusive right, the freedom to exploit it, the national interest, the social function, public interest, and fundamental rights). This can be realised through the 'constitutionalisation' of contracts by considering fundamental rights under the 1945 Indonesian Constitution.

In national strategy, the government may introduce some significant Restrictive Business Practice provisions in order to protect public interests -national interest, and fundamental rights. Another significant step is introducing a minimum standard (Chawthra, 1986, p.19) on technology transfer agreements that can guarantee the rights and obligations of parties proportionally by considering the existing values in society (legal culture), and fundamental rights. In this context, the values should refer to Indonesian characteristics, such as communalism, that give rise to the social function concept. The embodiment of the concept requires the political will of the Government to insert and place the social function, public interest, and fundamental rights into specific law/legislation (Radbruch, 1914 in Wilk 1950), so that it can be one of the main requirements for establishing a contract for the transfer of technology. The content of

such a contract can be reflected in the provisions relating to payment for technology, or other provisions concerning the distribution of rights and obligations in the contract, for example.

Then, in international strategies, Indonesia and other developing countries can campaign for the enforcement of fundamental rights under various international conventions, such as the UDHR, ECHR, and ICESR and initiate the establishment of a global moratorium, to manage the fruits of significant patents for guaranteeing the fulfilment of fundamental rights. Additionally, they can take a part in strengthening the global coalition of consumer patents (Gerhart, 2000, p.312) as a control instrument to facilitate the creation of balance and harmony in the global patent regime and technology transfer. Of course, the role of international and national institutions should be more progressive so as to facilitate such strategies.

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References

Airey v. Ireland (1979) Series A, Vol. 32.

- Antons, C. (1995) 'Intellectual property law reform in Indonesia', Paper presented in *Indonesian Law: The First Fifty Years*, 28 September, Asian Law Centre, University of Melbourne, Australia, p.15.
- Aquinas, T. (1972) 'The ends of man, summa theologica', in Lord Lloyd of Hampstead, Introduction to Jurisprudence, 3rd ed., Praeger Publisher, London, UK, pp.96–97, 609–613.
- Blakeney, M. (1987) 'Intellectual property licensing in New Zealand and the impacts of the competition laws', Seminar paper for the Commercial Law Summer School, Queen Mary College, University of London, in McKeough, J., Stewart, A., McKeough, J. and Stewart, A. (Eds.) (1997): Intellectual Property in Australia, 2nd ed., Butterworth, p.510.
- Blakeney, M. (1989) Legal Aspects of the Transfer of Technology to Developing Countries, ESC Publishing Ltd., Oxford.
- Chawthra, B. (1986) Patent Licensing in Europe, 2nd ed., Butterworths, London, UK, p.19.
- Cherednychenko, O. (2004) 'The constitutionalization of contract law: something new under the Sun?', *Electronic Journal of Comparative Law*, Vol. 8.1, Available at: http://www.ejcl.org/81/art81-3.PDF.
- Cherednychenko, O. (2006) Towards the Control of Private Acts by the European Court of Human Rights, 13 MJ 2, p.199.
- Correa, C. (2005) 'Can the TRIPs agreement foster technology transfer to developing countries?', in Maskus, K. and Reichman, J.H. (Eds.): *International Public Goods and Transfer of Technology under a Globalised Intellectual Property*, Cambridge University Press, London, UK, pp.227–256.
- Diamond v. Chakrabarty (1980) 447 US 303.
- Drahos, P. (1997) 'Thinking strategically about intellectual property rights', *Telecommunications Policy*, Vol. 21, No. 3.

- Drahos, P. (1998) 'The universality of intellectual property rights', Paper in Panel Discussion on Intellectual Property and Human Rights in Geneva, 9 September, Available at: http://www.wipo.int/tk/en/hr/paneldiscussion/biographies/drahos.html.
- Drahos, P. and Braithwaite, J. (2003) Information Feudalism: Who Owns the Knowledge Economy?, The New Press, New York, p.5.
- Eisenberg, R. (1993) Technology Transfer and the Genom Project: Problems with Patenting Research Tools, Available at: http://www.piercelaw.edu/risk/vol5/spring/Eisenber.htm.
- Fox, E. (2000) 'Equality, discrimination, and competition law: lessons from and for South Africa and Indonesia', *Harv. Int'l. L. J.*, Vol. 41, p.594.

Gaskin v. The United Kingdom (1989) Series A, Vol. 160.

- Geiger, C. (2006) "Constitutionalising' intellectual property law? The influence of fundamental rights on intellectual property in the European Union', *IIC*, Vol. 37, No. 4, pp.371–500.
- Gerhart, P. (2000) 'Why lawmaking for global intellectual property is unbalanced', *European Intellectual Property Review*, Vol. 22, No. 7, pp.309–313.
- Grosheide, F.W. (2001) 'Constitutionalisering van het burgerlijk recht?', 3 Contracteren 1, p.48.

Heller, M. and Eisenberg, R. (1998) 'Can patents deter innovation? The anticommons in biomedical research', Science, Vol. 280, No. 5364, pp.698–701.

- IPA (2001) Indonesian Patent Act, Law No.14/2001.
- Jeremy, D. (1991) International Technology Transfer: Europe, Japan and the USA, 1700–1914, Edward Elgar, p.2.
- Kierkegaard, S. (2006) 'Business law and technology: present and emerging trends', International Conference on Business, Law and Technology (IBLT) Conference Proceedings, Vol. 1, International Association of Information Technology Lawyers (IALT).
- Kompas (2004) 'Peran industri farmasi Indonesia sebagai tukang jahit', (The role of the Indonesian pharmaceuticals industries as tailor), Kompas, 6 June.
- Korah, V. (1996) Technology Transfer Agreements and the EC Competition Rules, Clarendon Press, Oxford, pp.158–258.
- Leiter, B. (2001) Objectivity in Law and Morals, Cambridge University Press, London, UK.
- Maturana, H. (1981) 'Autopoiesis', in Zeleny, M. (Ed.): Autopoiesis: A Theory of Living Organization, Elsevier, North-Holland, New York, pp.23–32.
- Maturana, H. and Varela, F. (1975) Autopoietic Systems, in: Biological Computer Laboratory, Report No. 9.4, University of III, Urbana/III, pp.322–326.
- Maturana, H. and Varela, F. (1980) 'Autopoiesis and cognition', Boston Studies in Philosophical Science, Vol. 42 D, Reidel, Boston, pp.78–82, 98, 99.
- Maturana, H. and Varela, F. (1987) The Tree of Knowledge: The Biological Roots of Human Understanding, Shambhala/New Science Press, Boston, Revised paperback edition released in 1992, pp.75–80.
- Monsanto Bribery Case (2005) KPK to Investigate Monsanto Bribery Case, The Jakarta Post, Jakarta, January 10, at: http://www.thejakartapost.com/yesterdaydetail.asp?fileid=20050110. B02.
- Notonagoro, P. (1984) 'Hukum dan pembangunan agraria di Indonesia', *Political Law and Agrarian Development in Indonesia*, Bina Aksara, Jakarta, p.106, et.seq.
- Oh, C. (2001) The Health Crisis in Developing Countries, http://www.twnside.org.sg/title/ twr131a.htm, Retrieved: 12 Februari 2005.
- Oxfam (2006a) 'TRIPS-Plus' Provisions, http://www.oxfamamerica.org/whatwedo/ issues_we_work_on/trade/news_publications/trips/art5391.html, Retrieved at: 26 September.
- Oxfam (2006b) Just Trade, http://www.pcusa.org/trade/ftaa.htm#r, Retrieved at: 26 September.
- Patel, S., Roffe, P. and Yusuf, A. (2000) 'International technology transfer: the origins and aftermath of the United Nations negotiations of a draft code of conduct', *Khuwer Law International*, The Hague, The Netherlands, pp.7–13.

PT. BISI v. 5 Farmer (2005) District Court, Kediri, 15 February.

- Pugatch, M. (2004) The International Political Economy of Intellectual Property Rights, Edward Elgar, London, UK.
- Radbruch, G. (1914) 'Grundzuge der rechsphilosophie', in Wilk, K. (Trans.) (1950): Outlines of the Legal Philosophy, Radbruch and Dabin, 20th Century Legal Philosophy Series, Vol. iv, Harvard University Press, Cambridge-Massachussets.
- Ricketson, S. and Richardson, M. (1998) Intellectual Property: Cases, Materials and Commentary, 2nd ed., Butterworths, p.754.
- Sheldon and Mak (2000) First to File V. First to Invent: A Bone of Contention in the International Harmonisation of US Patent Law, http://www.usip.com/articles/1st2fil.htm, p.8.
- Soekarno (1957) Pancasila, Binatjipta, Jakarta, Indonesia.
- Tempointeraktif (2005) 'Penjara bagi petani kreatif', (Imprisonment for creative farmer), Tempointeraktif, 28, August, Available at: http://www.tempointeraktif.com/hg/nusa/ jawamadura/2005/08/28/brk,20050828-65842,id.html.
- Trade Practice Commission (1991) Application of the Trade Practice Act to Intellectual Property, Background Paper, Commonwealth of Australia, available at: http://www.accc.gov.au/content/ item.phtml?itemId=325546&nodeId=675c8618481cb8fa2a5004b936adb525&fn=Application %20of%20the%20TPA%20to%20intellectual%20property.pdf.
- Tuney, J. (1998) 'EU, IP, indigenous peoples and digital age: intersecting circles?', European Intellectual Property Review, Vol. 20, No. 9, September, pp.335–346.
- Varela, F. (1979) Principles of Biological Autonomy, Elsevier/North-Holland, New York, pp.32, 33.
- Vitale, A. in Oxfam (2006) 'TRIPs Plus' Provisions, available at: http://www.oxfamamerica.org/ whatwedo/issues_we_work_on/trade/news_publications/trips/art5391.html, Retrieved at: 26 September.
- Walhi (Wahana Lingkungan Hidup Indonesia) (Indonesian Forum for Environment) (2005) Patent of Seed Drags Sweetcorn Farmer to the Court, Available at: http://www.walhi.or.id/ kampanye/psda/050922_ptnbenih_cu/.

WHO (2002) AIDS Updated, http://www.who.int/hiv/pub/epidemiology/epi2002/en/.

X and Y v. The Netherlands (1985) Series A, Vol. 91.

Yolton, J. (1958) 'Locke on the law of nature', Phil. Rev., Vol. 67, pp.477, 483, 487-489.

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