

Patent Protection for a Method of Ratoon Rice Management in Supporting Food Security

by Rahmi Jened

Submission date: 03-Dec-2019 11:27AM (UTC+0800)

Submission ID: 1225672093

File name: Patent_Protection_for_a_Method_Food_Security-rahmi.pdf (647.3K)

Word count: 6776

Character count: 35103

PATENT PROTECTION FOR A METHOD OF RATOON RICE MANAGEMENT IN SUPPORTING FOOD SECURITY

Rahmi Jened,

SH., MH and R. Koos Koentjahjo*

Abstract

Pursuant to Article 25 Universal Declaration of Human Rights (1945) that: “Everyone has the right to a standard of living, adequate health and well-being of himself and his family including the right for food” Essentially food security can be described as” a phenomenon relating to individual food security which exists when all people at all the times have physical , social and economic access to sufficient, safe and nutritious food which meet their dietary needs and food preferences for an active and healthy life”. However, since 2009 the food security situation has worsened and continuous to pose a serious threat especially in the developing nations.

The internationally agreed target from the World Food Summit of 1996 to halve hunger by 2015 was not met. Despite progress in some countries, United Nations Food and Agricultural Organization (FAO)’s estimates in 1997-1999 there 865 million people were undernourished, 777 million in developing countries, 27 million in transition countries and 11 million in the industrialized countries. Even if the target is met, it would still leave 400 million people under nourished. The fact that in the year 2017 there was 19, 4 million Indonesian people who did not meet their required food needs.

*RAHMI JENED is senior lecturer at Department of Civil Law of Faculty of Law, of Airlangga Univer, Surabaya.Kampus Unair Jalan Dharmawangsa Dalam Selatan Surabaya 60286.rahmijened@fh.unair.ac.id or jenedjened@yahoo.com. Or Mobile +6281234854299 and R. KOOS KONTJAHJO as the farmer and the inventor at koos_kp@yahoo.comor Mobile+6287882565788.

[2019] Vol. 8, Issue 1 NTUT J. of Intell. Prop. L. & Mgmt

Pursuant to Article 33 paragraph 3 of the 1945 Constitution (UUD1945) stated that: “The earth, the water and all the wealth contained therein are controlled by the State and used as much as possible for the welfare of the people. Production branches that are important and affect the livelihood of many people controlled by the State shall be used for the greatest prosperity of the people.”

This paper will argue that the Method of Ratoon’s Rice Management will benefit in supporting Food Security because it has many advantages over the conventional rice cultivation. The Patent right as legalized monopoly is sought to prevent the abuse of this invention by irresponsible parties.

Key words: food security, patent, management, Ratoon’s rice, method.

I. Introduction

Nowadays, we are in a situation that exists when people lack secure access to sufficient amount of safe and nutritious food for normal growth and development an active healthy life. It may cause by in-availability of food, insufficient purchasing power or the inappropriate distribution or inadequate use of food at the house hold level.¹

The internationally agreed target from the World Food Summit of 1996 to halve hunger by 2015 was not met. Despite progress in some countries, FAO's estimates 865 million people were undernourished in 1997-1999, 777 million in developing countries, 27 million in transition countries and 11 million in the industrialized countries. Even if the target is met, it would still leave 400 million people under nourished.² The fact that in the year 2017 there was 19, 4 million Indonesian people who did not meet their required food needs.³

Many Non-Governmental Organizations (NGO) are calling a broader concept of Food Sovereignty to be used to guarantee the right of small producers to provide and of poor consumers to eat food. The produced a plan of action involving trade, genetic resources, agriculture- ecology, and implementing an international legally

¹ GEOFF TANSEY, *Food Security, Biotechnology and Intellectual Property: Unpacking Some Issues Around RIPS*, p. 5 Quaker United Nation (QUNO), Geneva, (2002.)

² These are also in line with The Plan Action of the World Food Summit (1996) which is as follows: (1) We strive to ensure that food agricultural overall trade policies are conducive to fostering food security through a fair and market oriented world trade system; (2) We will implement, monitor and follow up this plan of action at all level in cooperation with international community; (2) The present parties to the present Covenant recognizes the fundamental right of everyone to be free from hunger.

FAO Division Economic and Social Department. "Implementation of The World Food Summit Plan of Action: Agriculture and Economic Development Analysis" <http://www.fao.org/3/w9990e/w9990e07.htm>

³ "Data dari Bank Dunia Sebut Banyak Rakyat Indonesia Masih Kelaparan" <https://www.republika.co.id/berita/ekonomi/makro/17/03/14/omsnii382-data-dari-bank-dunia-sebut-banyak-rakyat-indonesia-ke>

[2019] Vol. 8, Issue 1 NTUT J. of Intell. Prop. L. & Mgmt

18 binding right to food at NGO Forum at the World Food Summit – five years later in Rome in June 2002.⁴

4 Pursuant to Article 25 Universal Declaration of Human Rights (1948) stated that: “Everyone has the right to a standard of living, adequate health and welfare of himself and his family including the right for food”. The provisions with similar connotation are also incorporated in Article 11 Paragraph (1) and (2) of Covenant on Economic Social and Cultural Right (ICESCR, 1996) and Article 27 Paragraph (1) of Convention on the Right of Child (1989).⁵

5 Pursuant to Article 33 paragraph 3 of the 1945 Constitution (UUD1945) stated that: “The earth, the water and all the wealth contained therein are controlled by the State and used as much as possible for the welfare of the people. Production branches that are important and affect the livelihood of many people controlled by the State shall be used for the greatest prosperity of the people.”²⁰

This provision is the legal politic of Sovereign Food of the Indonesian nation to carry out economic development of the Indonesian nation in managing its natural resources based primarily on agrarian society. Therefore, the plants existing on the earth of Indonesia and the management and cultivation of its plants is part of the constitutional right.⁶

46
⁴ Division, Economic and Social Department, supra note no.2. Also in Food Summit Five Years 26 or (10-13 June 2002, Circular no.2, 30 April (2002).

⁵ Convention on the Rights of Child , <https://www.unicef.org/child-rights-convention/what-is-the-convention>

⁶ In the Indonesian context, the food issue is one of the substantive matters which was one of the prominent reason for the struggle for independence. Ir. Sukarno very clearly mentioned the necessity of the State, to end the poverty and hunger conditions of the people. Ir. Sukarno also emphasized that such action can only be exercised if the State is based on kinship and mutual cooperation. The spirit of kinship and mutual cooperation is what animates the formulation of the idea of management of people's economic resources in the 1945 Constitution. www.pikiran-rakyat.com/nasional/2016/06/22/soekarno-dan-pidatonya-yang-tak-terlupakan-372577.

The Republic of Indonesia is the second largest archipelago *in the World* with nearly 17,000 islands by area of 1.82644 million km square.⁷The biggest islands are *Borneo, Papua, Sulawesi, Sumatera* and *Java*. Most of the islands are uninhabited, only *Java* that has been inhabited by almost 60% of the population. Population are living in Indonesia has more than 265 million inhabitants in 2017.⁸

Indonesia consists of 32 provinces and 3 Special Regions; each of these is headed by a Governor. Each region has its own special product that generates income per capita. In 2018 the Gross Domestic Product (GDP) in Indonesia was US\$ 10.15.54 billion that supported by private and government expenditure. Contribution of agricultural and plantation sector amounted to US 2, 5 million.⁹ However, it turns out from these amount there are a lot of agricultural or plantation products own by Multinational Corporation (MNCs) or Transnational Corporation (TNCs), like BISI Limited Company that is subsidiary of Monsanto Incorporations.

Richard Cook a former analyst of US Federal Government in his paper "*Crisis in Food Prices Threatens Worldwide Starvation: It is Genocide*",¹⁰ states that: "It is the time for the Country to reaffirm the importance of a distinct policy in agricultural sector, so that the food production will not be controlled by agribusiness companies and financial capitalists internationally through Multinational corporations (MNCs) or Trans National Corporations (TNCs)".¹¹

⁷ Badan Perencanaan Pembangunan Nasional (BAPENAS), "Wilayah Kritis Keanekaragaman Hayati di Indonesia: Instrumen Bagi Pengambil Kebijakan", p. 19, (2003).

⁸ "2018, Jumlah Penduduk Indonesia 265 juta jiwa" <https://databoks.katadata.co.id/datapublish/2018/05/18/2018-jumlah-penduduk-indonesia-mencapai-265-juta-jiwa>

⁹ "Indonesia DGP" <https://tradingeconomics.com/indonesia/gdp> and also in "Ekonomi Indonesia 2018 Capai Rp 14.837,4 T, Ini komposisinya" <https://www.cnbcindonesia.com/market/20190206140257-17-54058/ekonomi-indonesia-2018-capai-rp-148374-t-ini-komposisinya>.

¹⁰ Editorial. "Pertanian di Negara Berkembang dihancurkan oleh Rezim Peragangan Global", p.1, Kompas Jakarta, 8 August (2008).

¹¹ According to JOHN H. DUNNING in a book of International Business Law defined as: "one undertakes foreign direct Investment (FDI) i.e. which owns or controls income gathering assets in more than one country and in so doing it produces goods or services outside its country of origin i.e. engages international productions". from RAY AUGUST, *International Business Law: tax,*

II. SOME FACTORS THAT WEAKENING FOOD SECURITY

The term of “Food Security” is defined by The United Nation Food and Agriculture Organization (FAO) ¹²as:” a phenomenon relating to individual food security which exists when all people at all the times have physical , social and economic access to sufficient, safe and nutritious food which meet their dietary needs and food preferences for an active and healthy life”. Whereas the Parameter of Food Security are:

- a. Physical availability of food;
- b. economic and physical access to food;
- c. food utilization and;
- d. Stability of the other of three dimension overtime.

Regarding with the physical availability of food a and economic and physical access to food can be seen to the Annual Report 2016 issued by the South Center that 75% of cereal products (grains) are controlled by only two multinational corporations (MNCs), 50% of banana produced and traded by two MNCs, 83% of cacao produced and traded by three TNCs, 85% of tea products controlled by three TNCs, 83% of sugar produced and traded by three MNCs, and pesticide and supporting agricultural/plantation products are controlled by four MNCs.¹³

It is estimated that by year 2020 the world population will reach near about 80 billion and 83% of them would be living in developing countries. Therefore, annual food production will increase to 3,000 metric tons from currently 1,800 metric tons¹⁴

Cases and Readings, p.202 ³²6, (4th ed), Pearson Education International, Prentice hall, Sydney,(2002).See also in RAHMI JENED, *Teori dan Kebijakan Hukum Investasi Langsung* ⁴⁵irect Investment, , p. 233(Kencana Prenada Media Group, (2016) ²⁸

¹² Master in Human Development and Food Security (2010/2011) Toward Insecurity Multidimensional Index (FIMI), p.7.
<http://www.fao.org/fileadmin/templates/ERP/uni/FIMI.pdf>.

¹³ Editorial “*Pertanian Di Negara Berkembang Dihancurkan Oleh Rezim Perdagangan Global*” p.1. Kompas ,8August (2008), Also IN JULIATI CHOLIL, *Hak Petani (Farmer Right)* , p. 8-14, Thesis Disertation , Doktor Ilmu Hukum (Doctor of Jurisprudence) of the Law Faculty Airlangga University , Surabaya, Indonesia, (2014).

¹⁴ GRAHAM DUTFIELD, *Plant Variety Protection ,Traditional Knowledge and Genetic Resources*, Teaching Material, p.2, European Community and ASEAN Intellectual Property

However, since 2009 the food security situation has worsened and continuous to pose a serious threat especially in the developing nations, like Indonesia. Even though Indonesia has already regulated Food Security by Government Regulation Number 68 of year 2002¹⁵, however still there are several factors that cause weakening of food security.

First, the reduction in agricultural land due to the shift in the allocation of agricultural land to industrial and residential housing. Second, reduced rice productivity because of the many natural disasters such as floods, earthquake, and volcanic eruptions¹⁶which destroy rice plants.Third, the high cost of fertilizer because of the price game of bad faith business people.

Four, abuses of rice import licenses which are often carried out during the harvest season with abundant production are actually damaged by the entry imported rice, resulting lower grain prices at the farm level. Five, the increasing fears among traditional farmer will be criminalized by large companies with allegations of damaging plants that contaminate the plants of large companies, most of which have been protected by plant variety rights or plant patents. Or the MNC's bio-piracy conduct.¹⁷

Sixth, the fear of the existence of various kind of genetically engineered agricultural products, on the contrary, has resulted in traditional farmers being unable to do seedlings traditionally and conventionally. Seven, the danger of genetically

Cooperation Program (ECAP)II, Queen Mary Intellectual Property Research Institute University of London, UK, (2005). See BAYU KRISNAMURTI, "Agenda Pemberdayaan Petani dalam rangka Pemantapan Ketahanan Pangan, Jurnal EkonomiTh II, no. 7 Oktober 2005".

¹⁵ Government Regulation No. 68 of 2002 Regarding Food Security (hereinafter as Peraturan Pemerintah Nomor 68 Tahun 2002 Tentang Ketahanan Pangan...

¹⁶ Food and Agriculture Organization (FAO) of the United Nations, "The Impact of Natural Hazards and Disasters on Agriculture and Food Security and Nutrition: A Call for Action to the Resilient Livelihood", updated May, 2015. <http://www.fao.org/3/a-i4434e.pdf>.

¹⁷ Fortunately this Rice already has been protected by Geographical Indication of Cianjur West Java Region.

modified organism (GMO) in agricultural products even fake rice made from plastic.¹⁸

There are some alternative solutions to address these problems, among others the invention of Ratoon' Rice Management Method which also consequently support the Government Program for Realization of Food security.

III. THE METHOD OF RATOON'S RICE /PADDY MANAGEMENT

Rice is included in the world/kingdom of Plantae, species/genus of *Oryza*, family of Poaceae, order of Poales, and belongs to the species of *Sativa*.¹⁹ So the Latin name of the rice plant is *Oryza sativa*.²⁰

There are several methods of paddy fields and land management have been done to utilize the management of paddy fields in post- harvest waiting time to obtain maximum yields, however the existing methods are perceived to be less effective and efficient in achieving desired goals.

¹⁹ Rice is a very important plant other than potatoes, corn, wheat and other cereals as a staple food for about half of the world. Rice has been staple food for many Asian countries including Indonesia.²¹ Besides containing carbohydrates that are easily digested, it also contains important vitamins and minerals.

Technology for the management and storage is simple and it is easy to grow from the tropics to the sub-tropic regions, from the lowlands to highlands, can be

¹⁸ Liputan 6 Metro TV 3 Juli 2015, "Kementerian Pertanian Dinas Pertanian Banten Menolak Benih Murah Transgenik Monsanto. ."

¹⁹ Binomial nomenclature is the standard naming rules for all living organisms in the world consisting of two names (binomial itself has meaning two names) by taking the name of the genus and species name of the living beings. Rules of binomial nomenclature itself were first conceived by Carolus Linnaeus www.ricepedia.org.

²⁰ BAO RONG LU, *Taxonomy of the Genus Oryza (Poaceae) Historical Perspective*, www.researchgate.net/publication/285277190_Taxonomy_of_the_genus_Oryza_Poaceae_Historical_perspective_and_current.

²¹ RAHMI JENED at.all, *Perlindungan HKI untuk Pola Tanam Pertanian dan Produk Padi*, Hasil Penelitian Fundamental, Kementerian Riset dan Teknologi, p.12-39. Jakarta (2016).

cultivated traditionally until fully mechanized, the varieties extend up to 9000 varieties, even the vegetative part can be used for feed, organic fertilizers and industrial raw materials.²²

Efficient cropping pattern must require greatest efficiency of land fertilizer, complex irrigation water and other in-puts. The word "cropping pattern" means "the most efficient use of land and other resources the cropping pattern also defined as": "a sequence of planting on a plot of land in one year including the land management".²³

The cropping pattern in plant cultivation or a part of the cultivation system, so it can be developed one or more systems of cropping patterns and no cropping pattern can be good for all times or a proportion area under various crops at a point of time. The cropping pattern is applied in order to obtain optimum benefits, so as to avoid the risk of harvest failure. Unlike the traditional cropping patterns, planting of hybrid rice seeds (high yielding variety) in the era of green revolution in monoculture lead to the erosion of biodiversity.²⁴

Cropping patterns and agricultural products are traditionally rice with local varieties based on seasonal conditions and the local ecology.²⁵ There are several methods of paddy field and land management have been one in order to take advantage of the subsequent waiting time so that the maximum yield of paddy fields, especially those that have experienced the harvest period, however the existing methods are perceived to be less effective and efficient in achieving desired goals, such as Conventional, Intensification Rice System (SRI), Polycultural, Hadzon, Jajar Legowo, Gogo Rancah.²⁶

²² FAO, "Fertilizer Resources", <http://www.fao.org/3/W6928E/w6928e06.htm>

²³ Interviewed with Mrs. Ir. DIAH AHMAD, head of the Agricultural Research Institute of Environmental Research (Balingtang), Jl Raya Jakenan- Jaken Km 05 59 182 Pati, Central Java. August 15, 2016

²⁴ See previous note no.24.

²⁵ DIAH AHMAD, see previous note no.25.

²⁶ RAHMI JENED at.all, see supra note no. 23, p. 12-39.

General description can be described that paddy is mainly grown in paddy fields in West Java, Center Java, East Java and South Sulawesi . The rice crop can be harvested 2 (two) times per- year with the length of planting time until the harvest for 4 months. So the rice paddy field will be idle for approximately 2 (two) months waiting for the next planting period. During this time of unemployed rice field, the farm laborers almost certainly do not have a definite job.

Beside some factors that are already mentioned above, younger generation are no more interested to practice farming because of low yields and income so they prefer to work in factories or in cities. By decreasing agricultural employment, farmers can be categorized: ²⁷

- a. Farmer as land owner with average about 2 hectare;
- b. Farmer as permanent worker;
- c. Farmer as peasant laborer.

In addition the decreasing of agricultural land and paddy field and the reduction of traditional farmers willing to work in the rice paddy fields resulted in a high rate of poverty.

The method of Ratoon Rice/ Paddy Management invention conducted in Krawang of West Java which was originally known as a Rice Barn or Granery (hereinafter as Lumbung Padi)” of java island. This invention applied in 2 hectares paddy field.

The field of technology of this invention relates to a management of paddy fields, in particular Ratoon’s rice management method, which is a rice plant derived from shoots that grow from stumps after harvesting and produce new tillers to be harvested, which can take advantage of time to wait for farmers after harvesting within of 45-60 days.

²⁷ Interviewed with Farmer Bapak R. KOOS KONTJAHJO in Karawang, 16 August 2016.

The purpose of the invention can be achieved by implementing the method of Ratoon's rice management which includes the following stages:

1. 1st day, post-harvest rice plant in paddy rice field are dispensed;
2. 1st day the remaining pieces of rice plant that have been harvested are flattened with a certain average height. Where the height of the rice tree cut is 10cm average from the soil surface and in the dry season is an average of 5cm, in this case the condition of dry planting media and age of day-1;
3. 5th day, the area of paddy rice fields of the remnants of harvesting straw and former cuts of rice plant trunks are cleaned;
4. Paddy rice field watered until the condition of muddy planting media;
5. 7th day NPK Plus as much as 20 sacks @ 25kg sprinkled in the condition of muddy planting media
6. 12th day, grass and weed are weeded;
7. 14th day, Urea as much as 100kg sprayed a in the condition of muddy planting media;
8. 15th day, organic fertilizer Super liquid as much as 5 bottles (@ 500ml) per hectare sprayed a in the condition of muddy planting media;
9. The condition of muddy planting media is still maintained;
10. 19th day, drug enhancers as much as 5 tablets with organic fertilizer Super water as much as 3 bottles are squirted and mixed;
11. 20th day, NPK Mutiara (NPK 16:16:16) as much as 100kg the condition of muddy planting media applied; and
12. 45th-60 day when the rice is mature harvested.

After that, still according to the present invention, what is meant by the condition of muddy planting media is the wet cultivation media (soil) but not inundated by water.

Then, the composition of the Pearl NPK is 16: 16: 16 where the element content is:²⁸

Nitrogen (N): 16%

Phospate (F): 16%

Potassium (K): 16%

Magnesium (MgO): 0.5%

Calcium (CaO): 6%.

In addition, the elements contained in the liquid organic fertilizer Super are:

C Organic: 9.6%

P₂O₅: 1.22%

K₂O: 0.32%

Fe: 31.8 ppm

Mn: 0.48 ppm

Cu: 0.08 ppm

B: 179 ppm

²⁸ Patent Description, p. 5-6.

Mo: 0.1 ppm,

This paper specifically investigate there are some differences between the staple basic rice and Ratoon's rice. *First*, in the staple rice which requires the processing of land, whereas Ratoon's rice does not. *Second*, the staple basic rice needs nursery or seedlings activities, on the other hand Ratoon's rice utilizes the remaining staple crops after harvesting to be managed.

Third, the basic staple rice requires the amount of water from complex irrigation, but the Ratoon's rice is only needs about 30% of the staple rice water requirement. *Fourth*, the staple planting is requiring sufficient paddy fields, while the atoon's rice does not need a field. Fifth, embroidery activities exist in basic rice crops, whereas in Ratoon's rice only maintains the remaining crops of staple rice harvested.

Sixth, - the basic staple rice requires Urea as much as 400 kg, whereas Ratoon's rice only need as much as 100 kg. *Seventh*, the basic staple rice needs NPK Mutiara as much as 200 kg, wheres Ratoon's rice needs a total of 100 kg. *Eighth*, the staple basic rice needs of NPK plus as much as 625 kg, whereas in Ratoon rice as much as 500 kg.

Ninth, the basic staple rice planting periodds or rice harvest average 110 days, while Ratoon's rice harvest age is about 45 - 60 days. *Tenth*, suppose the basic rice crop produces yields are X kg, then the Ratoon's rice yield is about 90% - 110% of X kg. *Eleventh*, the quality of rice that is not pollen, but the Ratoon's rice will be pollen (more like stick rice).

Twelveth, the basic staple rice is not flavored rice, but on the Ratoon's rice will appear a little aroma fragrance. *Thirteenth*, if the basic staple rice total cost of rice processing is IDR Y, then the total Ratoon's rice will cost 40% - 50% of IDR Y. Finally the basic staple rice regular harvest time are twice a year, but Ratoon' rice is 4 times a year.²⁹

²⁹ The advantages of this invention as see in Patent Description, p.8-9.

One of the uniqueness of Ratoon's rice is the possibility of adjusting the short length of harvest time based on the choice of method of management. Given the existing shortcomings of existing paddy rice management methods, The Ratoon Rice Management Method creates a better method of paddy field management that can address the food security problem. Or gain better objectives through the method of Ratoon's rice management.

The purpose of the present invention is to provide a technique or method of processing or managing paddy fields so as to obtain optimal yields on the paddy fields and more paddy yields compared to conventional rice cultivation.

The present invention relates to "Ratoon's Rice Management Method" which enables creation of a Ratoon's rice that can be available in relatively shorter period of time with good rice quality.

In this case, the use of the above 2 month period has a very big and positive meaning for farm laborers and land productivity, where farm workers can earn extra income that they usually do not get any income at all. Paddy production increases from the usual 2 harvests in a year to become 4 times.

This invention will benefit 2 positive things plus the low cost and time of the method of Ratoon's rice management and production, considering most of the villagers work as farm laborers, so the presence of Ratoon's rice can help improve the welfare.

Currently the presence of the method of Ratoon's rice management was greeted with great enthusiasm by the farmers and the local government, and Ministry of Agriculture. This invention has already implemented widely in Karawang regency.

IV. PATENT RIGHT THE METHOD OF RATOON'S RICE MANAGEMENT IN SUPPORTING FOOD SECURITY

The title of the invention is "Method of Ratoon's Rice / Paddy Management has already been granted Simple Patent Right through certificate IDS 000001730 dated 20 December 2017. The term of protection will be 10 (ten) years commencing from filing date 11 November 2016.

According to World Intellectual Property Organization (WIPO) that:

A utility model is similar to a patent. In fact utility models sometimes referred to as "Petty Patent" or "Innovation Patent" that defined as: "A utility model is an exclusive right granted for an invention, which allows the right holder to prevent others from commercially using the protected invention, without his authorization, for a limited period of time. In its basic definition, which may vary from one country (where such protection is available) to another³⁰, a utility model is similar to a patent... The requirements for acquiring a utility model are less stringent than for patents".

Patent is legalized monopoly granted is given for a period of time specifically in exchange for the inventor disclosing to the public how to make or practice the invention.³¹ Patent is a part of Intellectual Property Rights.³²

³⁰ Indonesia the application procedure all together within 9 months from the filing date.

³¹ MINDAUGAS KISKIS, "Transparency, for Efficiency of the International Patent System", p. 123 -124, 3 NTUT, of Intel. Prop. L& Mgmt.

³² Property Rights is mainly divided into 2 (two) are:

I. Copyrights and related rights

II. Industrial Property Rights that consists:

- a. Patent;
- b. Plant Variety rights;
- c. Trademark; Geographical Indications;
- d. Industrial Design Lay-out of Topographic of IC ;and
- e. Undisclosed information especially Trade Secret.

Pursuant to Article 2 Patent Law Number 13 of year 2016³³ there are two types of patent applications can be filed in Indonesia. One is an invention patent application and the other is a simple patent application.

The term of “novelty” can be assessed from the technology itself and from the grace period. From view point of technology, the term ‘novelty’ in patent system is the new state compared to a prior art of the same technology or cannot be anticipated by prior art.

Pursuant to Article 3 of Act number 13 of 2016 stated Patent is granted to the invention that fulfills patentability novelty; inventive step; and industrial application.³⁴

The ‘novelty’ in patent system is the new state compared to a prior art of the same technology and from the view point of technology. In the case Van der Lely v. Bamford (1963) in W.R Cornish & Llewelyn books, the invention is novel if the invention that registered cannot be anticipated by prior art as “ the invention not be abandoned, suppressed or concealed”.³⁵

Regarding with the novelty of this invention is stated to be new compared to prior art of the same technology so called some prior arts as follows:³⁶

- a. P00201300710 The Rice Harvesting Method;

³³ Previously regulated in the Act number 14 of 2001 on Patent.

³⁴ RAHMI JENED, *Hak Kekayaan Intelektual: Penyalahgunaan Hak Eksklusif*, p. 129, *Airlangga University Press*, (2007) p.211-2112. See also in MINDAUGAS KISKIS supranote no. 35, p.129.

³⁵ WR CORNIS & LLEWELYN, *Intellectual Property, Patetys, Copyrights, Trademarks and Allied Rights*. p. 173-175, *5th Ed.*, Thomson Sweet Maxwell, (2003).

³⁶ P00201300710 Metode Panen tanam Padi, P 00201200252 Meode Pembiakan Padi dan Metode Promosi Perkecambahan Biji Padi, WP00201200703 Protein yang berhubungan Bentuk Bulir Padidan Daun Padi Gen penyandi dan Penggunaannya, W00200601118 Padi dan Produk-Produknya yang Menandung Pati dengan Proporsi Amilosa yang ditingkatkan. As discussion with Ptent Examiner Bapak Fauzi tanjung, December 2017.

- b. P00201200252 The Method of Rice Breeding ;
- c. The Method Promotion of Rice Seed Germination;
- d. W 002012200703 Protein Related to Grain Shape , Rice Leaves Coding Genes and their Use;
- e. W 002012200118 Rice Products containing Starch with an increased Proportion of Amylose.

The novelty of this invention was also compared to the prior art that in general rice planted with the particular seeding system to produce good seed by soaking salt or by arranging cropping pattern to produce abundant crops such as used Jajar Legowo Sytem, or Hadzon System .

The new state is viewed from the grace period of its registration, which means its registration shall be applied not more than 6 (six) months after the date of invention is concluded.

The new state is viewed from the grace period of its registration, which means its registration shall be applied not more than 6 (six) months after the date of invention is concluded. The inventor start invent in May 2016 at that time we were conducting Fundamental Research grant with the title of “Potential and Protection of Intellectual Property Rights for Cropping Patterns of Agricultural and Rice Farming Products”.³⁷

According to Prof Strauss, The ‘inventive step’ in patent means the non-obvious Invention for person having ordinary skilled of the art (Poshita) which is patent examiner. Test of Obviousness according to Prof Strauss that among others: ³⁸

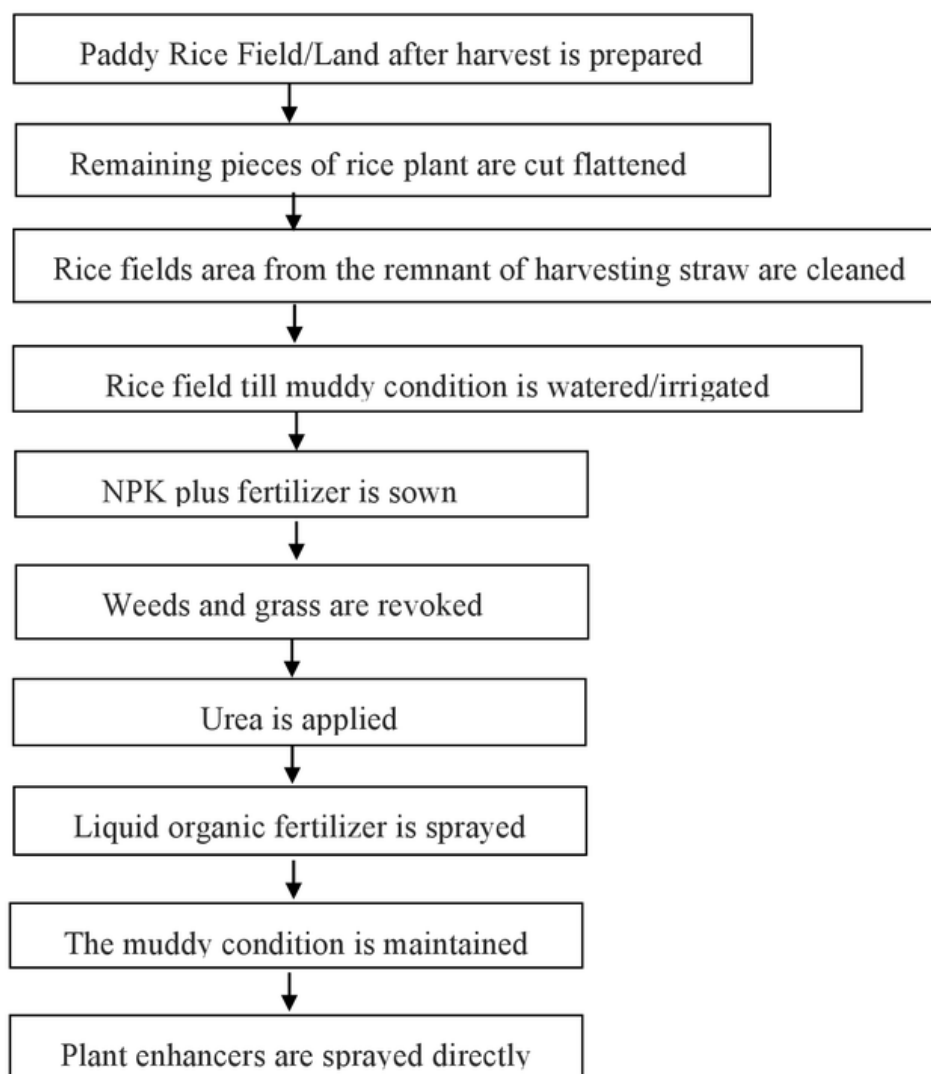
- a. Problem-solution approach;
- b. The closest prior-art- teaching – Motivation- Suggestion (TMS);
- c. Could-would test as a reasonable expectation of success (RES).

³⁷ RAHMI JENED at all, see supra note no.23.

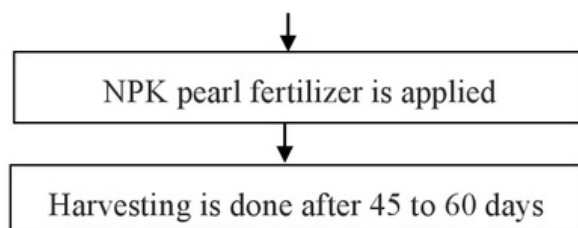
³⁸ DRES.H.C. JOSEF STRAUSS, International and European Patent Law, p.37-52, IP Training, MIPLC Max Planck Institute, Munchen, (2004).

According to judge Giles Rich that: “Even though their invention are not as good as what already exists, such as inventors are not being rewarded for standing still or for retrogressing, but having invented something... The system is not concerned with individual inventor ‘s progress but only with what is happening to technology...”.³⁹

The mechanism of Ratoon’s Rice Management Method as follows:



³⁹ DONALD S. CHISUM and F SCOTT KIEF, *the Principle of Patent Law*, p. 328, Foundation Pres, (2004).



The “inventive step” value of this invention that the patent examiner did not expect that the same rice would grow from the remaining rice paddy plant that have been harvested leaving 5-15 10 cm from the land surface paddy field.⁴⁰ The Ratoon’s Rice Management Method mentioned in the description above and listed in the drawing is merely an example used to illustrate the embodiment of the present invention. Of course, another embodiment, as mentioned above, is easily made by someone skilled in the art after reading the description of this invention. Therefore, the present invention is not limited to the embodiment.

The ‘industrially application’ means an invention whether product or process must be able to be applied in industry that if the invention is in the form process, then its process can be carried out. The invention can be applied industry-proven even though the initial experiment was use polybag but subsequent experiment of the method has been applied in 2 hectares of paddy field in Kerawang region of East Java province. The scope or extent of the present invention is expressed in the following claims are:⁴¹

A method of Ratoon’s Rice management which includes step 1 to 12 that mentioned above;

The method of Ratoon’s Rice management to claim 1 as mentioned above;

The method of managing Ratoon’s rice according to claim 1 as mentioned above using the new elements of the Pearl NPK and liquid organic fertilizer super.

⁴⁰ as stated by Patent Examiner Bapak Fauzi Tanjung, in Jakarta, 9 December 2016

⁴¹ Patent description, p.10-11.

In addition, there are limitations and exceptions to the invention as guided by the national policy as the manifestation of state sovereignty to grant patent rights. Beside patentability, there are discoveries or activities that not categorized as invention enumerated (non-statutory invention) under Article 4 of Act number 13 of 2016 as follows:

Invention does not include:

- a. Esthetical creation;
- b. Schema;
- c. Rules or methods for conducting activities as follows:
 1. That involves mental activity;
 2. Games;
 3. Business.
- d. Rules or method that only consist software;
- e. Presentation of information;
- f. Discovery as form of:
 1. New usage of known product, or
 2. New form of an existing compound which does not result in a significant increase in efficacy and there is a corresponding difference in chemical structure of the compound substance or composition.

There is also non- statutory patentable subject matter stated in Article 9 Act number 13 of 2016 that:

Patents are not granted for the Invention on:

- a. Processes or products which the notice and the use or operation of which is contrary to applicable legislation, religious morality, public order or morals;
- b. Methods of examination, treatment, treatment and / or surgery applied to humans and / or animals;
- c. Theories and methods in the field of science and mathematics;
- d. All living things, except micro-organisms;

- e. Biological processes that are essential for producing plants or animals, except for non-biological processes or microbiological processes.

The Patent Right is obtained based on 'First to File System', this means that the legal assumption arises based on the first registering person to become the party deserving the right, until it is proven the contrary.⁴² During the typical patent prosecution process the patentability of the claimed invention is authoritatively evaluated by the pertinent patent office through the search and review process. Normally, lack in any of the patentability characteristics shall be an obstacle to grant of the patent. If the patent an application is not subject to search and examination, the patentability is not established at all. Whether to undergo the search and examination remains the unilateral decision of the applicant.⁴³

Once the application is filed, a formality check is performed (Article 24 refer to Article 34 of Law No. 13 of 2016). If it contains no elements that may be deemed unsuitable for publication through examination, it shall be published in 18 months after the filing date. Substantive examination will then be proceeded upon a request filed by the applicant (Article 46 Law No. 13 of 2016). If the application is not rejected, it will be published and granted patent right. For utility model patent application, after it is filed, it will undergo a formality check and formality examination (Article 122 Law Number 13 of 2016). If the application passes both, then it will be published and granted.

The term of an invention patent shall expire 20 (twenty) years from the filling date of application (Article 22 Law Number 13 of year 2016). The term protection of a simple patent shall expire after a period 10 (ten) years effective commencing from filing date of application (Article 23 Law Number 13 of year 2016). The both two protection without possibility of extension renewal.

After obtaining the Agenda of patent application for registration, inventors receiving duty and trust from Dr. Soekarwo, a governor of East Java where the

⁴² See RAHMI JENED, *supra* note no.23, p.132.

⁴³ MINDAUGAS KIKIS, *supra* note no.34, p.128.

Method of Ratoon's Rice Management was simultaneously used by farmers who affiliated in the Central Market of Puspa Agro and applied in 120 hectares of paddy field.⁴⁴

In principle, the Patent Holder has the Exclusive Right with the dimensions moral right and of economic right. Moral Right is for the purpose that his name as the Inventor shall remain be stated at the Patent Certificate although the patent is held by another person such as a corporation where the inventor works as employee.⁴⁵ While the Economic Right is the right to enjoy the financial benefit from the exploitation of his right.

Pursuant to Article 19 of the Law Number 13 of year 2016 Patent right give an exclusive substantive right to execute and to prohibit other without authorization:

In the case of patent product: making, using, selling, importing, lease, assign, or provide for sold, or lease or delivered patented products;

⁴⁷ In the case of process: using the process production patented process of production are given patent to make goods and others actions.

¹ Patent granted have been central to the innovation system around the globe at least these last fifty years. Economic and technological development as well as globalization have contribute to the explosion of patent application and patent grants worldwide. So the purpose of obtaining patent right in order to execute this invention as the Method of Ratoon's Rice Paddy Management throughout the territory of Indonesia. Considering all ,the (13) advantages of the Method of Ratoon's Rice Paddy Management will enable to support Food Security program and at the same

⁴⁴ As discussion between Bapak R. KOOS KONTJAHJO farmer inventor and Bapak FAUZI TANJUNG, PATENT EXAMINER OF DGIP in Jakarta, 9December 2016.

⁴⁵ Based on Written Agreement on Assignment between Bapak Koos and Rahmi Jened, Rahmi Jened will eligible for Patent of the Mrthod of Ratoon's Rice Management, whereas patent for the liquid fertilizer belongs to Bapak Koos. Then both of us will endow our patent right to the Indonesian Government. If possible both of these inventions are displayed in all regions of Indonesia as National Movement.

time able to prevent the abuse of this invention by irresponsible parties.

V. CONCLUSION

The right to food is constitutional right enshrined under Art. 25 of Universal Declaration of Human Rights 1945 and Article 33 of Constitution 1945 of Indonesia as a realization of Food Sovereignty.

There are some factors causing the deterioration to the state providing Food Security, among other is the reduction of agricultural land, abuse of Import Permit License.

The method of Ratoon's Rice Management can be offered as one of the best possible solutions because it has many advantages, such as, does not need development of paddy field, does not need irrigation and seed compared to the Conventional Rice Cultivation. This invention can be turned into a National Movement Program which would support food security to ensure the welfare of the Society. There is also arises a cogent need to take proper caution to prevent misappropriation of this invention by the irresponsible parties.

Patent Protection for a Method of Ratoon Rice Management in Supporting Food Security

ORIGINALITY REPORT

22%

SIMILARITY INDEX

20%

INTERNET SOURCES

13%

PUBLICATIONS

0%

STUDENT PAPERS

PRIMARY SOURCES

1

iip.ntut.edu.tw

Internet Source

5%

2

quno.org

Internet Source

3%

3

www.icsi.edu

Internet Source

1%

4

docplayer.net

Internet Source

1%

5

Marhaini, Legiso, Mubin. "Impact of Coal Mining Activity on Water Quality Mining Area at South Sumatera Province", Journal of Physics: Conference Series, 2019

Publication

1%

6

www.law.harvard.edu

Internet Source

1%

7

humanitarianinfo.org

Internet Source

1%

8

aquaticcommons.org

Internet Source

1%

| | | |
|----|--|-----|
| 9 | www.who.int Internet Source | 1% |
| 10 | ddceutkal.ac.in Internet Source | 1% |
| 11 | Theofransus Litaay, Dyah Hapsari Prananingrum, Yakub Adi Krisanto. "chapter 12 Indonesian Legal Perspectives on Biotechnology and Intellectual Property Rights", IGI Global, 2011 Publication | <1% |
| 12 | baadalsg.inflibnet.ac.in Internet Source | <1% |
| 13 | www.eria.org Internet Source | <1% |
| 14 | www.republika.co.id Internet Source | <1% |
| 15 | eprints.umm.ac.id Internet Source | <1% |
| 16 | www.fiveipoffices.org Internet Source | <1% |
| 17 | "International Food Law and Policy", Springer Nature, 2016 Publication | <1% |
| 18 | quakerservice.ca Internet Source | <1% |
| 19 | Shah Fahad, Muhammad Adnan, Muhammad | |

Noor, Muhammad Arif et al. "Major Constraints for Global Rice Production", Elsevier BV, 2019

Publication

<1 %

20

Sulaiman Sulaiman, Ade Arif Firmansyah. "The Reconstruction of Energy Management Law Based on Indonesia Legal System", FIAT JUSTISIA, 2018

Publication

<1 %

21

fh.unair.ac.id

Internet Source

<1 %

22

id.m.wikipedia.org

Internet Source

<1 %

23

www.iprsonline.org

Internet Source

<1 %

24

environmentalevidencejournal.biomedcentral.com

Internet Source

<1 %

25

links.org.au

Internet Source

<1 %

26

www.mdpi.com

Internet Source

<1 %

27

www.bressler.co.il

Internet Source

<1 %

28

agricultureandfoodsecurity.biomedcentral.com

Internet Source

<1 %

29

www.mirandahlaw.com

Internet Source

<1 %

| | | |
|----|--|------|
| 30 | id.scribd.com Internet Source | <1 % |
| 31 | B.-R. Lu, K. Zheng, H. Qian, J. Zhuang. "Genetic differentiation of wild relatives of rice as assessed by RFLP analysis", Theoretical and Applied Genetics, 2002 Publication | <1 % |
| 32 | e-journal.unair.ac.id Internet Source | <1 % |
| 33 | news.trendingnews.co.in Internet Source | <1 % |
| 34 | www.agr.gc.ca Internet Source | <1 % |
| 35 | archive.unu.edu Internet Source | <1 % |
| 36 | academic.oup.com Internet Source | <1 % |
| 37 | Viola Prifti. "The Breeder's Exception to Patent Rights", Springer Science and Business Media LLC, 2015 Publication | <1 % |
| 38 | www.undg.org Internet Source | <1 % |
| 39 | newmanpublication.com Internet Source | <1 % |

| | | |
|----|---|------|
| 40 | Internet Source | <1 % |
| 41 | digilib.uin-suka.ac.id Internet Source | <1 % |
| 42 | www.jurists.co.jp Internet Source | <1 % |
| 43 | www.scribd.com Internet Source | <1 % |
| 44 | adoc.tips Internet Source | <1 % |
| 45 | repository.nwu.ac.za Internet Source | <1 % |
| 46 | www.fao.org Internet Source | <1 % |
| 47 | okpat.cn Internet Source | <1 % |
| 48 | citeseerx.ist.psu.edu Internet Source | <1 % |
| 49 | D. John Shaw. "World Food Security", Springer Nature, 2007 Publication | <1 % |
| 50 | nepal.unfpa.org Internet Source | <1 % |
| 51 | Encyclopedia of Food and Agricultural Ethics, 2014. Publication | <1 % |

52 Daniel Martin, Andrew Thompson, Iain Stewart, Edward Gilbert, Katrina Hope, Grace Kawai, Alistair Griffiths. "A paradigm of fragile Earth in Priestley's bell jar", *Extreme Physiology & Medicine*, 2012
Publication <1%

53 N Buri, Z Mantau. "Food expenditure share analysis of household: Case study of food reserved garden area program in Bone Bolango regency of Gorontalo province", *IOP Conference Series: Earth and Environmental Science*, 2018
Publication <1%

54 R. Nikzad. "Small and medium-sized enterprises, intellectual property, and public policy", *Science and Public Policy*, 2014
Publication <1%

55 Karsten Königer. "Chapter 2 Registration without Examination: The Utility Model – A Useful Model?", *Springer Science and Business Media LLC*, 2009
Publication <1%

Exclude quotes Off
Exclude bibliography On

Exclude matches Off