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Ethics in Law

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Abstract

In this paper, it will be discussed whether companies that develop a new gene should be able to preserve their property rights by ensuring their patent or not. In particular, it will be presented the arguments of both sides, namely the advantages of patent such organism and the disadvantages of doing so. In the last part of this essay, it will be recommended which perspective seems to be right and persuasive based oncredible estimations on research.

Key words: biotechnology, USA law, property rights, ethical dillemas

Introduction

Biotechnology and especially biotechnological innovation is a growing field in the USA as from a law perspective, there is an increasing interest in protecting the rights of investors to ensure and develop innovation. First of all, genetically modified organisms arise when "the genes from one species are artificially forced, in laboratory conditions into the gene structures of unrelated plants or animals" (Lombardo, n.d.).Also, patents are official certifications that are given to people or companies that make an invention and complete the relevant law requirements; hence acquiring intellectual properties over the invention which last for a certain time period. The Patent Law of 1930 requires to be satisfied some requirements for the acknowledgment of an invention as such. The invention should introduce something original, innovative and disclose a unique knowledge which limited people would be able to acquire it. Also, what it is discovered should have some value to the society in terms of utility and must be a result of a manufacturing process (Groves, 1997). However, the question of whether GMO should be patterned is a matter of heated debate as patterning has both negative and positive effects on society.

Theoretical Framework

There are staunch supporters of the notion that companies should have motives to patent for their new "genes" that can make the food more nutritious. In this context, it is supported that inventors should be facilitated in patenting their invention the law. The law should be flexible and encourages transparency. An indicative example is the American Invent Act which prompts inventors to patent their inventions timely while it provides procedures in which third parties have the ability to question the accuracy and legitimacy of the patents. Also, patent rights are also authorized by the USA constitution. In essence, inventors, in this way, acquire exclusivity rights for their inventions which can use or sell it accordingly to their will. This protection last at about 15 to 20 years. When the duration of the patent terminates the invention goes to public and all people have access to it (Nard, Madison, & McKenna, 2017). Particularly, when the invention relates to a biotechnological plant, there is the Plant Patent Act which is enacted in 1930 to protect the invention and secure the plants' right. Nonetheless, the plant certifications do not only protect the inventor but also the inventions. That is to say that in order to be ensured a plant and deemed as inventions, it should fulfill some certain requirements that reaffirm its authenticity and have a good to society (Zhou, 2015).

An important advantage that supporters of biotechnological invoke is that patenting GMO gives a strong incentive to researchers to innovate by developing creative "genes" that have a positive effect on society. Many modified organisms can greatly help the human beings by curing certain diseases or avoiding severe diseases or even by ensuring a better quality of their life, an argument that it is in favor of the society's good.

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Therefore, by giving companies intellectual rights to inventions, government prompt the research and encourage the people interested in discovering something special to perfect their inventions, focus on it, and work harder and harder on it (Yang, n.d.).

. Without a doubt, this benefits the society given that it minimizes potential pitfalls or limitation of the inventions. Last but not least, by patterning an invention, companies are able to acquire a huge competitive advantage over the others by having the monopoly of this invention hence increasing their profits and in turn, offering more jobs or increasing salaries etc., something that boosts the economy in general. Besides, other companies seeing the great assets that patterning an invention offer to organizations, they are motivated to follow this path and strive to research and invent something innovative that can help them to strengthen their market position and expand their reputation(Patenting Genes: Pros and Cons, 2015). In this way, technology is developed and the society can enjoy the great benefits that each invention includes.

Opponents of the aforementioned aspect argue that patenting GMO has lots of disadvantages. The first threat relates to the fact that modified organisms hide dangers for the peoples' health and the sustainability of the ecosystem. This is because, in the majority of the case, such experiments may include severe health implications due to the genetic changes occurred that are not directly visible as it takes time to appear. Apart from the potential health problems to human beings, there are also environmental risks which are very difficult to be measured and can be caused by the administration of the genetic material (Merz & Cho, 2008). Another disadvantage is that by patterning intellectual rights to such inventions, some companies-inventors will acquire exclusive rights on them hence exploiting the invention for making extreme profits. This, in turn, means that the company can decide not to permit to other companies to examine these genes something that will increase the prices when the invention launched in the market making it unapproachable to the majority of the people. If we add to this, that developing countries have significant income differences compared to developed countries we can understand that even if the monopoly broke, the prices would still be high for the majority of the people. Without a doubt, in such cases, the companies' interest conflict with the communities' interest to have a better life, namely the common good (Johnston, 2008). Also, patterning can create a culture of secrecy among the firms involved in genes research, something that is negative for society. The history reaffirmed that the outcomes of innovative experiments proved to be destroyable if there is no transparency to the methods and the techniques used so as to be evaluated. What's more, in the field of experimental medicines, genes patent linked negatively to the tester. Particularly, if the company has exclusive rights to a certain gene in which a person is subject to it, the results of the experiment should first be sent to the company that has the relevant intellectual property to the gene so as to be evaluated. This is a time-consuming procedure and the patient may wait months to receive the results that refer to him/her. Most importantly, we should not omit that gene patent gives exclusive rights to the investors for about 17 to 20 years. This means that other companies cannot use such gene for research on it. From this perspective, some people support that patent discourages researchers and put obstacles on the research. If we add to this that many genes may relate to combating certain diseases, such as cancer that plague the humanity, we can understand that eliminating the research to companies that have patented certain genes have a negative effect on the whole of humanity as other companies or individuals may be more effective or have ideas that can contribute to the initial research (Patenting Genes: Pros and Cons, 2015). Apart from that, some theologize pinpoint that the development of a modified organism by combining genes and creating a new organism harm the nature and the decisions of "God". So, modification of the traits of nature considers for many people as a sin because the products of nature own to God.

In the agriculture sector, genetically modified seeds can lead to lack of food and the disappearance of certain species. Also, labor costs will be reduced along with the number of labors needed for this job leading many people to unemployment as such genes could possibly replace the labor job. In any case, chemicals are not the solution and cannot deal with the problems that are aimed at solving without having severe consequences on other sectors. What's more, by patenting genes other companies are discouraged to find alternative ways to solve society's problems, perhaps using fewer chemicals as they cannot have access to such gene to assess it and find the limitations and the possible detrimental effects that may have (Hug, 2008).

Discussion

While patterning genes have some significant disadvantages, the advantages outweigh the disadvantages. Nonetheless, this estimation should be properly delineated. Without a doubt, inventors should be awarded for their innovative idea and their contribution to the society (Haspel, 2014).

However, there should be certain restrictions to patterning rights, especially as concerned as the exclusivity to the usage of the genes. Exclusivity rights consider as the main competitive advantage for companies that managed to innovate. However, there should be a balance between the company's interest and society's interest in the context of business ethics. For this reason, it is recommended that the relevant rights should have less duration to avoid monopoly behavior.

This measure could help the society as a whole to be developed as many researchers would have access to these genes that could be examined, monitored cautiously so as to be improved. The aforementioned suggestion does not eliminate the competitive advantage of the inventor as for a certain time, he/she would have exclusivity property rights and in any case, he/she could remain the pioneer of this invention. Therefore, it is more likely people trust them at priority. If this happens, the government will encourage research and many inventions will be enhanced for the benefit of society. As a matter of fact, it is more likely to appear significant scientific results in a shorter amount of time (Sreenivasulu, 2008). Also, in this way, it could be improved the quality of the research and the genes as there would be a healthy competition that could encourage scientists to continuously improve the product and check for the limitations. So, the next version of the genes could be better than the previous. As the people say, many heads are better than one. In this way, the technology could make impeccable strides in a short amount on time, something that benefits the society. Respectively, the genes would be more reachable to the majority of the people and hence no unethical discrimination concerning the financial dynamic of people would exist. Also, by patenting the genes, if any harmful effect appears, it would be clear who is responsible for this act, and hence law punishment would be applied. Therefore, investors would be more careful to their estimations and would be enforced to adopt a more ethical attitude about the environment and social responsibility and maintain public confidence in science (Hug, 2008).

What's more, a highly controversial issue is what it considers as invention and what it is not when the modifications are done to an existed living organism. With this dilemma, it is involved the court in the Chakrabarty case which starts in 1971 and the final decisions published in 1980. Chakrabarty file for patenting a genetically modified bacterium that has the ability to be a splitter in multiple parts in crude oil. Chakrabarty claimed that this bacterium does not have such property in nature and hence it considers as invention. When the first decision is ruled, it rejected the patent explaining that bacterium was an organism that already existed in nature and cannot be patented and own to anyone. Chakrabarty questions the rightness of the decisions and eventually, the Supreme Court ruled out a decision in favor of him. Particularly, the court pinpointed that living organism can be patented if this invention considers as "manufacture" or "composition matter", some prerequisites of Planet Act of 1930 and Plant Variety Protection Act of 1970 (Roorda, 2017). Therefore, the court did not make any discrimination interpreting the law between the living organism and the non-living organism; instead, it focuses on the aforementioned two criteria. Nonetheless, this decision was not absolutely correct because modifies living organism is not an invention and cannot be patentable. The problem lies in what should be deemed as "composition of matter". This word is so broad that includes both living and non-living organisms. For this reason, Chakrabarty "invention" cannot deem as a human-made invention because it was not an artificial but a product retrieved from nature. Although Chakrabarty attributed to this microorganism a new property, he did not create a new organism to be eligible for a patent but maintained the original structure of the organism by adding and modifying some of its functions (Lacey, & Lamont, 2005). So, to my mind, companies should be able to patent their inventions and secure their intellectual properties rights; albeit this should be restricted on real inventions and not just to modifications of an existing organism. This would prove to be really harmful from the society since scientists and other researchers could not use products come from nature to further proceed their studies. This fact, along with the monopoly of the patent company would discourage creative research at all. From this perspective, I think that companies-inventors should pattern their rights so as to have incentives to innovate; albeit some necessary restrictions to these rights are necessary to benefit the whole society.

Conclusion

Taking everything into account, agricultural and biological technology had made incredible strides in facilitating peoples' life and increasing the living standards of the whole society. However, such breakthroughs do not have only positive effects on the communities but also it involves risks that should be taken into account when it comes to patenting a modified organism. From the above analysis, it becomes more than apparent that the advantages of patenting such organism are second to none. Nonetheless, there should be certain restrictions to patenting in order to be avoided pitfalls and the possible negative effects that patenting have to the society. So, patenting modified organism is an acceptable solution if corrective measures concerning the Patent Law of 1930 taken.

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