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THE LEGAL PROTECTION OF GREEN TECHNOLOGIES BY WIPO

Abstract. Green technologies are necessary tools for protecting the environment and improving ecology. Environmentally friendly technologies or innovations that address severe environmental situations require legal protection because of their extreme importance. Therefore, international intergovernmental organizations, such as the World Intellectual Property Organization (WIPO) and the World Trade Organization, are taking certain measures to ensure the legal protection of environmentally friendly technologies around the world.

The authors of the article examined the activities of WIPO in the field of legal protection and the promotion of green technologies. The article includes the analysis of WIPO's programs and projects that may provide significant support to the Republic of Kazakhstan in implementing measures for the effective protection of green innovations.

Based on the analysis, the authors concluded that WIPO projects do not only assist in improving the legal protection of green technologies but support their development and implementation. Thus, the cooperation of the Republic of Kazakhstan with WIPO is a necessary step to establish effective legal protection of green technologies and their widespread use.

Key words: green technologies, ecology, international law, WIPO, intellectual property law.

Introduction. Green technologies play significant role in contemporary reality, where the right of people to live in clean environment is of top priority. The group of green technologies includes all inventions that directly or indirectly relate to the protection of environment, pollution abatement or eco-friendly technologies. People are trying to acquire the innovations in this sphere due to the fact that people normally strive to enhance the quality of their life. The rise of demand in green technologies has happened with corresponding increase of intellectual property rights infringements in the sphere of green technology. Therefore, the research on legal protection of green technologies conducted by specialized international organization such as World Intellectual Property Organisation has great relevance. The successful analysis will identify opportunities for the efficient development of national legislation of the Republic of Kazakhstan.

Methods. The authors of article apply several scientific research methods including analysis, synthesis, deduction, and induction. These methods were applied throughout the research. Several sources on intellectual property protection of green technologies were analysed. Including various static data on intellectual property rights management collected by World Intellectual Property Organization. In addition there are data on national performance of the Republic of Kazakhstan.

Results and discussion. Green technologies are type of modern technologies concerned the reduction of negative emissions in the daily life of humanity. Every year, humanity during daily routine activities produces a lot of gas emissions; pollute the environment where it lives. Therefore, since the beginning of

the 20th century scientists around the globe try to invent or develop technologies necessary for daily life activities with aim on not only economic effectiveness, but to create them friendly to nature with zero emissions.

In generally acceptable theory green technologies are the part of technologies that do not harm living environment of people, in other words eco-friendly technologies. Green technologies have many benefits desirable for any state in the world. They include conserving of natural resources and ecosystems for the future generations and keeping natural balance [1, p. 12]. Therefore, green technologies are of great importance for the further effective development of agriculture and food supply [2].

Due to the fact that green technologies do not require natural resources as ordinary techniques, they produce fewer emissions. Alongside with this fact, entrepreneurs while using innovations in the sphere of green technologies pay less eco-taxes or environmental charges. Therefore, entrepreneurs have opportunity to reallocate finance on other part of their business. In this sense, it can be argued that the successful application of green technologies is beneficial for every member of modern society.

Cooperation with WIPO is open for any state that can even be non member of WIPO. Nevertheless, the most productive cooperation will be in the joint collaboration of WIPO's member-states. The joint work is beneficial for all states, because it significantly increase the development of green technologies in a single state.

WIPO as guardian of intellectual property objects and the interests of IP rights' owners conduct systematic studies in order to understand long-term consequences of application of green technologies with and without adequate legal protection in national legislations. In order to conduct study, WIPO collects and analyses and make comparative studies of economic, innovation, legislative development of WIPO's member-states.

WIPO's studies and researches in the sphere of green technologies are aimed to find possible approaches and solutions for the successful protection of intellectual property objects. Information found by WIPO's officials while conducting studies and researches take the form of various programs and projects such as WIPO GREEN.

The one of research programs within WIPO to study the connection between clean environment and intellectual property rights is the WIPO's Global Challenges. It establishes several researches, analyses and expertises on IP that solves challenges of climate changes. Also, it hosts WIPO GREEN platform that fosters the transfer and diffusion of green technologies across the globe with priority attention to least developed countries [3].

WIPO GREEN is marketplace facilitating the transfer of knowledge, the adaptation of innovations, providing a collaborative framework for the effective protection of economic interests of state and IP's rights owners. WIPO GREEN provides the global connectivity of developing countries innovators that face global challenges [4, p. 152].

Therefore, the main resources of WIPO GREEN that conduct main work and are opened for states are WIPO GREEN database, and WIPO GREEN network. WIPO GREEN database includes all necessary information that has been considered by WIPO as valuable for the global promotion of green technologies and their adaptation. WIPO GREEN network is working as the core of WIPO GREEN, which is first and foremost marketplace that shares innovations within global community [5].

WIPO GREEN is WIPO's flagship public-private initiative, which resources can be used by not only Kazakhstan's official bodies, but entrepreneurs in the various sectors of economy [6, p. 20]. In the cooperation with WIPO, Kazakhstan's officials can learn how to protect green technology in order to distribute it to civil community, and how to commercialize the ideas developed by local inventors, including projects developed within national and private research facilities.

The commercialization of green technologies developed in the scientific, educational organisations will contribute to overall Kazakhstan's prosperity and recognition on global arena. The commercialization of green technologies can be enhanced by creation of network between IP users that have interest in realisation of their innovations. GREEN WIPO database suggests articles, case studies, reports related to green technology. The most valuable information for Kazakhstan will be case studies on success of WIPO's member-states in the protection of intellectual property objects related to green technologies.

To sum up, from the cooperation with WIPO, Kazakhstan will learn what kind of amendments in legislation must be done in order to provide adequate, balanced protection to innovations in green

technology sphere. Kazakhstan can use the WIPO's knowledge on how to protect know-how transfer within entrepreneurial network.

Kazakhstan will receive extensive support that can take form of assistance with access to theoretical materials, databases and training, as in case of other WIPO's projects [4, p. 152]. WIPO can conduct separate research depending on specific needs of Kazakhstan in the particular type of green technologies. As one can see that the top desired green technologies are innovations concerning renewable energy sources, environmental cleanup and health care projects. EXPO 2017 shows that this statement is true with respect to Kazakhstan [7].

Kazakhstan's scientists and innovators through preparation of their projects can participate in collaborative networks and partnerships in the framework of WIPO GREEN [4, p. 152]. The exchange of technological approaches will be useful for the mutual benefit of Kazakhstan and its international partners. Therefore, Kazakhstan has to support all existed international collaborative projects, including those outside of WIPO's framework.

In the cooperation with WIPO Kazakhstan can conclude bilateral agreement, according to it Kazakhstan will promote wider use of WIPO GREEN's tools among states of Central Asia. Therefore, Kazakhstan may become the regional learning center establishing local network of cooperation between universities and national authorities. Kazakhstan can hold regional seminars and trainings for all participants from the Central Asia concerning the provision of successful protection of green technologies.

The contemporary states as a part of global society give careful consideration to investment into green technologies and the development of legislation and infrastructure necessary to the successful adaptation and transformation of technologies and the training of specialists that will have necessary skills in the management of modern green technologies.

As the part of standard policy, WIPO respect choice made by its member-states [6, p. 20]. Therefore, Kazakhstan can freely choose the way of protection of green technologies. Nevertheless, as the part of common global practice the registration and protection of green technologies fall within patent law of the Republic of Kazakhstan [8, p. 11]. However, the protection can be also applied through know-how and trade secrets, which exist in civil law of the Republic of Kazakhstan. Thereby, Kazakhstan has opportunity to create specific legal norms strictly concerned the protection of green technologies in all legal cases including contracts, international transfer of knowledge and investment. The proposed amendments may potentially require the creation of separate law code.

The activities of Kazakhstan in the adaptation of green technologies are governed by goals established by national program «Kazakhstan – 2050». According to this program there are provisions concerning the application of green technologies on the territory of Kazakhstan that should be implemented until 2050. As part of program «Kazakhstan – 2050», green technologies include technologies that are applied in the production of energy, including alternative energy technologies with zero negative emissions [9].

The government of Kazakhstan understands that in the new era of rapidly-developing technologies and fast-growing inventions, Kazakhstan has to keep abreast of developed countries. Human activity will be based not only and not so much on oil and gas, as on renewable energy sources. Kazakhstan pays attention to global energy security. Our country will develop mutually beneficial international cooperation in the energy sector in order to share and develop knowledge necessary for the application of green technologies.

Alongside the training and application of green technologies Kazakhstan is amending contemporary legislation in order to provide adequate protection to green technologies due to the fact that they are consisted of IP objects of various natures. In addition, green technologies need commercialisation and less strict procedure during its registration, adaptation and application in order to answer contemporary ecology issues.

The National institute of intellectual property of Kazakhstan has opened databases on the registered green technologies on the territory of Kazakhstan. The database is opened for public can be accessed online in any time. The database is basically the database of patents that have some relation to green technologies. The creation of digital platform specifically for the search of green technologies will support the entrepreneurial activities of WIPO and benefits the overall development of green technologies sphere in Kazakhstan [10].

In current legislation green technologies of foreign and local inventors on the territory of Kazakhstan are generally protected by patent registration. In order to accelerate the process of application of green technologies and make the protection system more user-friendly for prospective applicants the National institute of intellectual property of Kazakhstan, along with the patent offices of other countries, introduced a mechanism for time efficient consideration of patent applications concerning green technologies, the relevant amendments to the Patent Law were made in April 2015. The essence of these amendments lies in a significant reduction of the period required to obtain protection for a green technologies. The consideration period in this case is six months [8].

Time efficient examination includes conducting all the necessary procedures within six months: formal examination, information search and substantive examination of the application. The period may be suspended until the necessary documents will be received from the applicant.

The legal infrastructure necessary for patenting green technologies has been created in Kazakhstan. The development of the renewable energy industry plays an important role in the development of the state, and the work carried out in the framework of improving the patent system is aimed at creating developments in this area [11]. The planned legislative innovations are dictated by the desire to create favourable conditions not only for obtaining legal protection of environmentally important developments, but also to make the process of their entry into the market time and cost efficient [8].

Speaking about the legal protection, it is easy to notice that many states adopt or try to adopt respective measures in order to make the registration processes easier for applicant. These facts highlight the significance of green technologies to civil communities [12].

Besides amending legislation in the sphere of registration of green technologies, many states also apply changes in taxation or create special funding programs for entrepreneurs. Some states apply regulations both political and legislative on the market of goods and services that use natural resources, such as fossil fuel, in the sphere of renewable energy consumption [13]. For the development of market, whose members stick to green technologies and used to apply them, it necessary to control pricing and taxation in order to keep balance between the interests of green technologies' owners and the interest of entrepreneurs that do not want excessive spending.

Conclusion. Contemporary technologies that are considered by global community as key technologies for the prosperity of states and the world at whole are various ideas and desires that are necessary for solving of issues. Among them the most important for the development of modern state are green technologies that require legal protection as a part of intellectual property of Kazakhstan. We consider the cooperation with WIPO as important cooperation with international organisation necessary for the establishment of effective legal protection of these technologies.

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ДЗМҰ-НЫҢ ЖАСЫЛ ТЕХНОЛОГИЯЛАРДЫ ҚҰҚЫҚТЫҚ ҚОРҒАУЫ

Аннотация. Жасыл технологиялар – қоршаған ортаны қорғау мен экологияны жақсартудың қажетті құралдары. Ауыр экологиялық жағдайларды түзету үшін қажетті экологиялық таза технологиялар немесе инновациялар олардың өте өзекті болуымен байланысты құқықтық қорғауды қажет етеді. Қазіргі мемлекеттер жасыл экономикаға инвестиция тарту және зерттемелерді ойдағыдай бейімдеу үшін, сондай-ақ трансформациялау үшін қажетті заңнама мен инфрақұрылымды дамытуға, қазіргі заманғы жасыл технологияларды енгізудің қажетті дағдыларына иегеретін мамандарды дайындауға ерекше көңіл бөледі. Осыған байланысты Дүниежүзілік зияткерлік меншік ұйымы (ДЗМҰ) және Дүниежүзілік Сауда Ұйымы сияқты халықаралық үкіметаралық ұйымдар бүкіл әлем бойынша экологиялық таза технологияларды құқықтық қорғауды қамтамасыз ету үшін белгілі бір шараларды қабылдайды.

Мақала авторлары ДЗМҰ-ның жасыл технологияларды құқықтық қорғау және ілгерілету саласындағы қызметін зерттеді. Мақалада Қазақстан Республикасына "жасыл" зерттемелерді тиімді қорғау шараларын жүзеге асыруда айтарлықтай қолдау көрсете алатын ДЗМҰ бағдарламалары мен жобаларына талдау жүргізілді.

Қазіргі уақытта ДЗМҰ жаһандық орталыққа айналды, соның арқасында экологиялық таза технологиялар дамушы елдер үшін барынша қолжетімді болып отыр. ДЗМҰ-ның бұл жобасы WIPO GREEN деп аталады және қазіргі уақытта бар жасыл технологиялар туралы ақпаратты, сондай-ақ экологиялық таза технологияларды сату мен лицензиялауда мүдделі тұлғалар арасындағы байланыс алмасудың халықаралық желісін жариялайтын портал болып саналады. Осылайша, осы портал арқылы Қазақстан Республикасының ғылыми, білім беру ұйымдарында әзірленген жасыл технологияларды коммерцияландыруға болады. GREEN WIPO деректер қорына қоршаған ортаны қорғау саласындағы инновациялармен байланысты мақалалар, тақырыптық зерттеулер, есептер кіреді. Қазақстан үшін неғұрлым құнды ақпарат қоршаған ортаны қорғау саласындағы инновацияларға байланысты зияткерлік меншік объектілерін қорғаудағы ДЗМҰ-ға мүше мемлекеттердің оң тәжірибесін зерттеу болып саналады.

Қазіргі уақытта, жыл сайын жүргізілген ДЗМҰ зерттеулеріне сәйкес, неғұрлым сұранысқа ие жасыл технологиялар – жаңартылатын энергия көздеріне, қоршаған ортаны тазалау және денсаулық сақтау жобаларына қатысты инновациялар. Алайда әрбір мемлекеттің басымдыққа ие жасыл технологияларының өз тізімдері бар. ДЗМҰ экологиялық таза технологиялардың белгілі бір түрлеріне елдің нақты қажеттіліктеріне байланысты жекелеген зерттеулер жүргізе алады. ДЗМҰ құқықтық жүйенің кемшіліктеріне талдау жүргізе алады. Осылайша, Қазақстан Республикасына жасыл технологиялар саласындағы инновацияларды лайықты, теңгерімді қорғауды қамтамасыз ету үшін заңнамадағы қажетті өзгерістерді анықтауда көмек көрсету ДЗМҰ құзыретіне кіреді. Қазіргі уақытта Қазақстан ДЗМҰ-дан теориялық материалдарға, деректер базасына және оқуға қол жеткізу түріндегі кең қолдауларға ие болып отыр.

Келешекте Қазақстан Республикасы ДЗМҰ-мен екіжақты келісім жасай алады, оған сәйкес Қазақстан Орталық Азия мемлекеттері арасында WIPO GREEN құралдарын кенінен пайдалануға ықпал ететін болады. Осылайша, Қазақстан университеттер мен ұлттық билік органдары арасындағы ынтымақтастықтың жергілікті желісін құратын өңірлік оқу орталығына айналуы мүмкін. Қазақстан Орталық Азиядан келген барлық қатысушылар үшін жасыл технологияларды табысты қорғауды қамтамасыз етуге қатысты өңірлік семинарлар мен тренингтер өткізе алады.

Авторлардың жүргізген талдауларының қорытындысы бойынша, ДЗМҰ жобалары – жасыл технологияларды құқықтық қорғауды жақсартуға деген көмек қана емес, сондай-ақ олардың дамуы мен іске асырылуына көрсетілетін қолдау. Осылайша, Қазақстан Республикасының ДЗМҰ-мен ынтымақтастығы жасыл технологияларды тиімді құқықтық қорғауды орнату және оларды кеңінен қолдану үшін қажетті қадам болып табылады.

Түйін сөздер: жасыл технологиялар, экология, халықаралық құқық, ДЗМҰ, зияткерлік меншік құқығы.

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ПРАВОВАЯ ЗАЩИТА ЗЕЛЕННЫХ ТЕХНОЛОГИЙ ВОИС

Аннотация. Зеленые технологии являются необходимыми инструментами защиты окружающей среды и улучшения экологии. Экологически чистые технологии или инновации, необходимые для исправления тяжелых экологических ситуаций, нуждаются в правовой охране из-за их чрезвычайной актуальности. Современные государства уделяют пристальное внимание инвестициям в зеленые технологии и развитию законодательства и инфраструктуры, необходимых для успешной адаптации и трансформации разработок, а также подготовке специалистов, которые будут обладать необходимыми навыками внедрения современных зеленых технологий. В связи с этим международные межправительственные организации, такие как Всемирная организация интеллектуальной собственности (ВОИС) и Всемирная Торговая Организация, принимают определенные меры для обеспечения правовой защиты экологически чистых технологий по всему миру.

Авторы статьи исследовали деятельность ВОИС в области правовой защиты и продвижения зеленых технологий. В статье был проведен анализ программ и проектов ВОИС, которые могут оказать значительную поддержку Республике Казахстан в осуществлении мер эффективной защиты «зеленых» разработок.

На данный момент ВОИС стала глобальным центром, благодаря которому экологически чистые технологии становятся более доступными для развивающихся стран. Данный проект ВОИС называется WIPO GREEN и представляет собой портал, публикующий информацию о существующих зеленых технологиях, а также международную сеть обмена контактами между заинтересованными лицами в продаже и лицензировании экологически чистых технологий. Таким образом, через данный портал возможна коммерциализация зеленых технологий, разработанных в научных, образовательных организациях

Республики Казахстан. База данных GREEN WIPO включает в себя статьи, тематические исследования, отчеты, связанные с инновациями в области охраны окружающей среды. Наиболее ценной информацией для Казахстана являются исследования положительного опыта государств-членов ВОИС в защите объектов интеллектуальной собственности, связанного с инновациями в области охраны окружающей среды.

В настоящее время согласно ежегодно проводимым исследованиям ВОИС, наиболее востребованными зелеными технологиями являются инновации, касающиеся возобновляемых источников энергии, проектов по очистке окружающей среды и здравоохранению. Однако каждое государство имеет свой список приоритетных зеленых технологий. ВОИС может проводить отдельные исследования в зависимости от конкретных потребностей страны в определенном виде экологически чистых технологий. ВОИС может провести анализ недостатков правовой системы. Таким образом, в компетенцию ВОИС входит помощь Республике Казахстан в определении необходимых изменений в законодательстве для обеспечения адекватной, сбалансированной защиты инноваций в сфере зеленых технологий. На данный момент Казахстан получает обширную поддержку от ВОИС в форме доступа к теоретическим материалам, базам данных и обучению.

В перспективе Республика Казахстан может заключить двустороннее соглашение с ВОИС, в соответствии с которым Казахстан будет способствовать более широкому использованию инструментов WIPO GREEN среди государств Центральной Азии. Таким образом, Казахстан может стать региональным учебным центром, создающим локальную сеть сотрудничества между университетами и национальными органами власти. Казахстан может проводить региональные семинары и тренинги для всех участников из Центральной Азии, касающиеся обеспечения успешной защиты зеленых технологий.

На основании проведенного анализа авторы пришли к выводу, что проекты ВОИС представляют собой не только помощь по улучшению правовой защиты зеленых технологий, но поддержку их развития и применения. Таким образом, сотрудничество Республики Казахстан с ВОИС является необходимым шагом для установления эффективной правовой защиты зеленых технологий и их широкого применения.

Ключевые слова: зеленые технологии, экология, международное право, ВОИС, право интеллектуальной собственности.

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