

DIGITALIZATION AND INDUSTRIAL PROPERTY: TRADEMARKS (AUDIBLE MARKS)

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Abstract

The rapid development of information technologies and their wide use in various fields have affected intellectual property legal relations as well as other legal relations. The digitization of economic relations, the more accessible, profitable, and convenient implementation of commercial activities using electronic means make it necessary to ensure the protection of industrial property objects. As a result of the rapid development of information technologies, the nature of legal relations is changing, new types of relations are emerging. In such a case, there is a need to hold important discussions about protection from future legal disputes and determination of effective regulatory means. An example can be given by determining the need to change the substantive and procedural legal norms regarding the registration and protection of trademarks in a new form in audio format. In the article, a comparative analysis of the legislation of different countries was carried out, and the recommended practice announced by international organizations was referred to.

Keywords: *intellectual property rights, industrial property, digital society and intellectual property, trademarks, e-commerce and intellectual property, audible marks, audible trademarks.*

The development of information technologies has positive and negative effects on social relations. Even though the use of information technology tools and digitization in various fields help to simplify, make transparent, operationalize, and optimize processes, it complicates the resolution of regulatory and legal disputes due to the novelty of relations. The mentioned brings innovation to social relations and changes the nature of relations. This makes it important to create new legal norms regulating social relations, including amendments and changes to the existing legislation.

In the legal literature, it is determined as on the worldwide web, there exist conflicts of economic interests pertaining to assets such as intellectual property and information. Consequently, a predicament arises in the form of the legal regulation of disputes based on prevailing legal norms. Nevertheless, the interactions on the internet distinguished by the absence of a central regulatory entity that bestows legislative administration within the network. Consequently, the network operates within a multi-jurisdictional milieu, and its global nature encompasses various material jurisdictions. However, there is still a dearth of comprehensive legislative mechanisms for legal regulation at both the international and national levels. [1] As mentioned, the widespread use of the Internet, making data protection a particularly important issue, necessitates a special determination of the legal protection regime of information that is the result of creative activity considered as objects of intellectual property. Thus, in order to ensure the protection of intellectual property objects in the digital environment, as well as objects belonging to the information category, which are the result of the creative activity of individuals, the formation of a normative legal framework is one of the main requirements of the modern era. The rapid development of e-commerce and business relations especially increases the economic value of information that considered an object of intellectual property in e-commerce relations. This makes it even more important to create a special regulation from the mentioned direction.

Currently, rapid digitization observed in economic relations, which is of particular importance for preventing unfair competition in existing relations and ensuring a free

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market economy. In such relations, the protection of intellectual property objects, which considered as a category of property in addition to their understandable property, is particularly important. It should note that intellectual property objects are widely used in the digital environment. Thus, the mobile or web applications, websites, their design, and the content available there, which are the basis of digital platforms, are the object of intellectual property rights, and if it is necessary to emphasize, copyright. On the other hand, industrial property objects with economic value are widely used in electronic commerce and business relations.

It is evident that the "creative economy" is predicated upon the creative industry, which encompasses copyright and related rights. This category encompasses a wide array of products, including computers and other information and communication technology (ICT) goods, books and other publications, new media, music, film production, applied arts, design, and so forth. As evidenced by the report, the creative industry has demonstrated a greater degree of resilience and resistance to the global economic crisis that has engulfed the world when compared to other conventional industries. Therefore, new economic trends that stimulate the recovery of the global economy are evaluated as potential measures. In summary, the advancement of the creative industry in the contemporary world is instrumental in ensuring socio-economic development, and each nation should carefully select the appropriate strategy in this regard. The creative economy exhibits a characteristic that necessitates coordinated efforts across various disciplines, including economic, social, cultural, scientific-technical, environmental, and other domains. Additionally, the creative industries policy not only addresses economic necessities but also takes into consideration social, educational, cultural identity, social inequality, environmental aspects, and other specific requirements. In essence, the creative economy represents the convergence and integration of art, culture, business, innovation, and novel business models. The quintessential element, the fundamental cornerstone of this economy, is the intellectual property that shapes it, namely copyright [2]. The development of the creative economy and its subcategory, creative industry play the most important role in the formation of new forms of trademarks. Thus, the development of information technologies and the presentation of traditional copyright objects in a new version (online) exclude business activities in this area from the traditional level. In such cases, both the cases of using new types of industrial property objects increase, and the fight against the environment of unfair competition in such relations moves to a new level.

In the legal literature, intellectual property rights, including copyright, patents, and trademarks, treated as a category of property rights. By granting these rights and allowing them to control how their property is used, they enable IP creators or owners to profit from their work or investment in production. Trademarks are now crucial to modern business. They come in a variety of shapes and denote a wide range of products and services. Businesses invest a significant amount of time and money in creating their brands and trademarks. [3] At this time, the identification and understanding of industrial property objects that are widely used in the digital society are of particular importance to implement the regulation. In practice, the followings can distinguish as the main disclosed industrial property objects that are widely used for commercial purposes on digital platforms:

- trademarks

- geographical indications;
- service marks.
- industrial designs e.t.c.

Taking into account the above, it is also necessary to clearly define the notions of the above-mentioned intellectual property (industrial property) objects.

According to Section (1) of WIPO Model Law for Developing Countries on Marks, Trade Names and Acts of Unfair Competition of 1967 "trademark" means any visible sign serving to distinguish the goods of one enterprise from those of other enterprises [4]. The concept that is define in that model law defined in the relevant law of the Republic of Azerbaijan. Thus, according to Article 1 of The Law of the Republic of Azerbaijan on "Trademarks and Geographical Indications" "trademark is any sign or combination of signs which can be represented graphically and is capable of distinguishing the goods and services of one entrepreneur from those of another entrepreneur" [5].

Some points should be noted in the given definitions. The first point here is related to distinguishing, which can express the purpose or function of a trademark. The trademark is a sign that serves to identify and distinguish the goods of a particular company from those of others. Therefore, in order for a trademark to be registered, there must first be a sign and that sign must be distinctive. The purpose of the trademark means that practically any sign that can be used to distinguish one product from other goods can be trademarked. Trademark laws should therefore not attempt to create an exhaustive list of marks permitted for registration. Where examples are provided, they should provide a practical illustration of what can be registered without being exhaustive. If there are to be restrictions, they should only be based on practical considerations, such as the need for a functioning register and the need for publication of the registered trademark. If we strictly adhere to the principle that the sign must serve to distinguish the goods of a particular company from those of others, we can imagine the following types and categories of signs: words, letters and numbers, devices, combinations, colored Marks etc -dimensional signs, audible signs (auditory signs), olfactory signs (smell signs), other (invisible) signs. [6] According to Article 4 of The Law of the Republic of Azerbaijan on "Trademarks and Geographical Indications" words, personal names, letters, numerals, figurative elements, shape of the goods or their packaging, combinations of colors as well as any combination of such signs may be registered as trademarks [7] But according to article 9 of the Trademarks and geographical Indications Law of Republic of Bulgaria the mark shall be a sign capable to distinct the commodities or the services of one person from these of other persons and could be graphically presented. Such signs could be words, including names of persons, letters, numbers, drawings, forms, and the form of the commodity or its packing, combination of colours, sound or any combinations of such signs. *A mark shall be a trademark, mark for services and certificate mark* [8]. Limitation of the category of the trademark to only visual signs or their combination may have a negative impact on the regulation of market relations formed in the modern information society, as well as on the fight against unfair competition in e-commerce relations.

The two categories of sound trademark distinguished in the WIPO Model Law for Developing Countries on Marks, Trade Names and Acts of Unfair Competition of 1967.

They are namely those that can transcribe in musical notes or other symbols and others (e.g. the cry of an animal).

In the legal literature, noted as a sound mark serves the purpose of identifying and distinguishing a product or service based on auditory characteristics rather than visual ones. These sound marks act as indicators of origin when they take on a definitive form or arrangement and create an association in the listener's mind with a specific product or service. Consequently, sounds registered on the Principal Register if they possess qualities of being arbitrary, unique, or distinctive, and if they have the ability to leave a lasting impression on the listener, thus indicating that a particular product or service originates from a specific, albeit potentially anonymous, source. Examples of sound marks include a sequence of tones or musical notes, with or without accompanying words, as well as verbal expressions accompanied by music. There exists, nevertheless, a discrepancy amid unique, dissimilar, or noteworthy auditory perceptions and those that resemble or mimic "ordinary" auditory perceptions or those to which listeners have been exposed under diverse circumstances, which necessitates demonstrating the acquisition of distinctiveness... Instances of "ordinary" auditory marks encompass commodities that generate the auditory perception during their customary functioning (e.g., timepieces, appliances incorporating audible alerts or indications, telephones, and individual safety alerts). Therefore, only goods that produce sound as part of their typical functioning are eligible for registration of sound marks, provided that distinctive characteristics which determined that cellular telephones emitting a "chirp" sound belong to the category of goods that generate sound during their normal operation, personal security alarm clock products emitting sound pulses. [9] First, it would be necessary to define the elements of audio trademarks. Thus, audible trademarks must initially be distinctive. This criterion considers as a very difficult criterion to evaluate. Because in practice, it sometimes finds that common sounds have the ability to differentiate. For this, it is necessary to provide an evaluation of the ability to absorb, taking into account the average consumer's opinion. Thus, a combination of ordinary sounds can have the ability to differentiate goods or services with its special effect. This complicates the process of determining such criteria. The second key element is the fact that the sound mark corresponds to the main function of the trademark. Thus, the main purpose of the trademark is to distinguish the goods of one market entity from the goods of other market entities. Distinctive sounds or combinations that do not perform this function can not be considered as sound trademarks.

In this sense amendments to current legislation of the Republic of Azerbaijan are needed for better regulation the relations which exists in this field. If when a comparative analysis of both concepts conducted, the concept given in our trademark legislation considered successful for the period when they were adopted. After the development of information technologies, when analyzing the cases where the trademark is used as an object of industrial property in the digital environment, electronic commerce or business activity, it is noticed that the given concept is not compatible with the existing social relations, and it is necessary to make certain changes and amendments. Thus, the trademarks currently used on certain digital platforms can exist not only in visual form but also in different forms.

For example, in the current period, many entrepreneurs distinguish their goods or services with sound trademarks. Even in some developed countries, the trademarks which is in the form of sound is registered. The use of sound trademarks on digital platforms is widespread. Even consumers distinguish many goods or services with sounds and melodies, identify the entrepreneur to whom those goods or services belong with such signs. We can take as example to such trademarks the intro music of their films used by the famous film producer TWENTIETH CENTURY STUDIOS, Inc., the intros of films, series and other audiovisual contents available on the digital social platform owned by "Netflix, Inc.", the sound used in goods (telephones) produced by the telecommunications company Nokia Corporation. Even, according to the official website of the USPTO, the intro music of films produced by "20th CENTURY Studios, Inc" was registered in the United States (Registration number: 74629287) [10].

At the same time Article 15 of The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) the main international agreement on protection of intellectual property rights in the international trade relations any sign, or any combination of signs, capable of distinguishing the goods or services of one undertaking from those of other undertakings, shall be capable of constituting a trademark. Such signs, in particular words including personal names, letters, numerals, figurative elements and combinations of colors as well as any combination of such signs, shall be eligible for registration as trademarks. Where signs are not inherently capable of distinguishing the relevant goods or services, Members may make registrability depend on distinctiveness acquired through use. Members may require, as a condition of registration, that signs be visually perceptible. [11] As can be seen, the definition given in the international agreement related to the protection of intellectual property rights in international trade relations is also general. Although the form of trademarks is listed in the article given that concept, sound trademarks do not exist among them. As can be seen from the examples mentioned above, many multinational corporations choose to differentiate their goods or services by means of sound marks. This contributes to the development of the free market economy, including the fight against unfair competition, by providing differentiation between consumers in the market. In the mentioned article of TRIPS, giving member countries the right to register only visually reflected signs is not compatible with the new changing nature of international trade relations. It would be appropriate to further expand the concept in the mentioned international agreement, to define all the forms used in today's commercial relations among the forms of the trademark.

Audio branding, as a relatively new concept, has been widely used in practice. Some acoustic designs have already become famous marks, for example, "the lion's roar of Metro-Goldwyn-Mayer" (US Trademark Reg. No. 1395550.), "the Nokia ringtone" (US Trademark Reg. No. 3288274), and Intel jingles. Behind those strong brands, high value and profit are generated beyond the product itself. Thus, the protection of brands' added value is of great significance. The trademark, as an exclusive right, is an effective tool to protect brands. In fact, the registration of sound marks has become an international tendency. Different jurisdictions, to a certain extent, specified the registration requirements in legislation. Audio designs need to meet the criteria before gaining the trademark protection. It is therefore quite critical to discuss the registration criteria. [12] As mentioned above using sounds as marks or audio branding is the new

trend for distinguishing the goods and services in the economic market. In particular, the digitization of music, film, cinema platforms and the increase in their use, as well as the unexpected increase in the number of users of various applications (apps), make it necessary to determine the procedures for the protection of the use of sound trademarks, which leads to an increase in the economic value of this category of intellectual property objects.

“Sounds have become an important method used to help consumers better recognize and distinguish brands and products. Behind the famous audio branding, massive profit can be generated by those sound marks. It’s the law’s role to protect the added value of a sound mark. Indeed, different jurisdictions have already recognized the current situation and made an amendment in their laws. In March 2006, the Singapore Treaty on the Law of Trademarks was adopted by 147 WIPO Member States in Singapore, then entered into force on March 16, 2009. This Treaty set out a multilateral framework for the law definition of different types of marks which included non-visible signs on trademark application and registration. In its last two sessions, according to the SCT (the WIPO Standing Committee on the Law of Trademarks), there are some areas representing and describing non-traditional marks being defined, like 3D marks and sound marks (Non-Traditional Marks, 2009). It was meaningful in that this was the first international reference discussing non-traditional marks in that area” [10]. From this point of view so many countries which have strong economy have been started to amend to their legislation. According to infographic of World Intellectual Property about the top 10 countries which filed the most Madrid (Madrid System for the International Registration of Marks) trademark applications in 2013 [4] (hereinafter-infographic) China was ranked the seventh largest user. The third amendment of the trademark law which allowed for audible trademarks to be registered adopted in May 2014 in China. “Amongst the amendments, the most significant one is that the revised law extended non-traditional trademark registration to cover sound. Although the relevant examination procedure is waited to release, it is still an important progress for China to keep pace with international standards and provide an enhanced protection for businesses” [10]. Should be noted, the legal regulation of the process of registration and examination of sound trademarks is one of the most difficult issues.

The main difficulty in determining the specific requirements for the examination or registration of sound trademarks is that since these are new types of trademarks, there is no uniform practical approach to them. Forming the foundations of this unified practical approach is not an easy process.

In infographic Japan followed China in the 8th place of this list. According to the Article 2 of Trademark Act (No. 127 of April 13, 1959) of Japan “Trademark” means, among those which can be perceived by people, any character, figure, sign or three-dimensional shape or color, or any combination thereof; sounds, or anything else specified by Cabinet Order (hereinafter referred to as a “mark”) which is: used* by a person in connection with a good which the person produces, certifies or assigns as its

* Section (1), WIPO Model Law for Developing Countries on Marks, Trade Names and Acts of Unfair Competition of 1967

business; or used** by a person in connection with the services which the person provides or certifies as its business (except those provided for in the preceding item). This definition and forms of trademark in this Act was extended after 2015 amendments to Act.

The experience of Thailand in this regard is also commendable. Thus “Thailand has several amendments in the pipeline for the Trade Marks Act. Amongst them is the introduction of smell and sound marks. The bill extends the meaning of a “mark” to include non-visual trade marks such as sounds and smells, which will bring Thai trade mark law in line with international standards. To be registered, sound would need to be distinctive. The bill being considered describes it as a “sound that is not directly descriptive of the quality or character of the goods, a natural sound of the product or a sound arising from the functionality of a product”. For example, a sewing machine manufacturer cannot register the sound of the sewing machine as a sound mark. By making natural sounds unregistrable, the bill provides a fair playing field for businesses. Only those sounds that can indicate a product’s origin will be allowed. For example, jingles used in advertisements for some products may be registered provided consumers associate those jingles with that product. Businesses will be able to register not only the traditional visual marks but also the sounds used in the product’s advertising, thereby providing complete protection” [13].

According to EU legislation the trademarks can be registred in the forms of sounds. The Article 1 of Regulation (Eu) 2017/1001 of the European Parliament and of the Council of 14 June 2017 on the European Union trade mark (codification) (hereinafter- Regulation on EU trade mark) states that “ A trade mark for goods or services which is registered in accordance with the conditions contained in this Regulation and in the manner herein provided is hereinafter referred to as a ‘European Union trade mark (“EU trade mark”)’. An EU trade mark shall have a unitary character. It shall have equal effect throughout the Union: it shall not be registered, transferred or surrendered or be the subject of a decision revoking the rights of the proprietor or declaring it invalid, nor shall its use be prohibited, save in respect of the whole Union. This principle shall apply unless otherwise provided for in this Regulation.” The Article 4 of Regulation on EU trade mark was defined as “an EU trade mark may consist of any signs, in particular words, including personal names, or designs, letters, numerals, colours, the shape of goods or of the packaging of goods, or sounds, provided that such signs are capable of distinguishing the goods or services of one undertaking from those of other undertakings; and being represented on the Register of European Union trade marks (‘the Register’), in a manner which enables the competent authorities and the public to determine the clear and precise subject matter of the protection afforded to its proprietor”.

Considering the above, we can note that after the acceleration of digitization in entrepreneurial activity and its radical change in the nature of relations, it was inevitable to change the norms related to the protection of intellectual property objects. It is a well-known fact that non-traditional industrial property objects are widespread used in digital platforms. “In modern times, the world is full of brands with high-tech

** Infographic-

https://www.wipo.int/export/sites/www/global_innovation_index/en/docs/infographics_marks_2013.pdf

designs. The audio mark, as a popular technical method, has consisted of an important part to establish a distinguished brand; meanwhile the trademark law serves an essential function to protect those audio brands. By analyzing of the EU and the US laws, we could summarize the core criteria that an audio brand need to meet the distinctiveness and functionality standards, and should be able to be graphic presented. And also, those rules established meaningful models to other jurisdictions. However, current legislations are still immature, and many counties haven't admitted the sound trademark yet. The audio branding, as well as the sound trademark, still has a long way to go" [10]. As a result, it is understandable that it is more convenient and appropriate for entrepreneurs to distinguish the services they offer on digital platforms with sound marks. This is due to following several factors:

1. It is more memorable;
2. It is more distinctive.
3. Using this type of marks can reach a wider audience e.t.c.

The utilization of audible trademarks in the realm of electronic commerce has become progressively vital owing to multiple key factors such as brand recognition, augmentation of user experience, marketing through various channels, accessibility, memorability, emotional connection, voice commerce, and intelligent devices. Audible trademarks, including jingles or sonic logos, serve as an auditory embodiment of a brand. They possess the potential to be instantly identifiable, comparable to a logo or brand name. Amidst the bustling electronic commerce landscape, these auditory cues can facilitate the distinctiveness and remembrance of your brand. Within electronic commerce, where customers frequently rely on visual and auditory cues, audible trademarks can contribute to a more immersive and captivating user experience. This, in turn, can result in heightened user satisfaction and potentially enhanced sales. Businesses in the electronic commerce sector operate across diverse digital platforms and marketing channels. Seamless integration of audible trademarks can be accomplished within video content, podcasts, radio advertisements, social media posts, and other mediums. This unwavering consistency in branding aids in reinforcing the image of the brand. Auditory marks can be particularly beneficial for individuals who have impairments in their vision. They offer an additional means for users to identify and interact with a particular brand, thereby enhancing the inclusivity of e-commerce. Auditory stimuli tend to have a greater impact on memory compared to visual stimuli. A memorable jingle or a distinctive sound can firmly establish itself in a customer's mind, thereby increasing the likelihood of the brand being recalled when making purchasing decisions. Music and sound have the ability to elicit emotions, which e-commerce brands can use to their advantage. Through the use of an auditory mark, positive associations can be established with a brand, leading to enhanced customer loyalty and trust. Auditory marks are capable of transcending language barriers and can be universally understood. This is particularly advantageous for e-commerce companies with a customer base that spans across the globe. With the increasing prevalence of voice-activated devices and voice-based commerce, such as Amazon's Alexa and Google Assistant, auditory marks have become even more relevant. These devices often rely on voice cues for interaction, making an audible brand identity crucial.

In conclusion, it should be noted that since intellectual property objects are closely related to the nature of developing economic relations, it is appropriate to change internal and international legal acts that regulate intellectual property legal relations in accordance with the current situation. The implementation of such changes in legal acts will result in the development of economy and entrepreneurship in countries, protection of consumer rights, ensuring of free market economy, prevention of unfair competition between competitors, protection of people's digital rights, and more effective regulation of intellectual property legal relations existing in this field.

Radical changes in modern market relations make it necessary to change the essence of norms on the regulation of intellectual property objects. Because it is known that intellectual property and economy are distinguished by their continuous effects on each other. The fact that technological development significantly changes social relations makes it necessary to adapt economic relations, as well as the mechanisms of regulation of social relations about intellectual property objects to the modern era. Audible trademarks serve a crucial function in the field of electronic commerce by augmenting the recognition of a brand, enhancing user experiences, and fostering a more profound emotional connection with customers. As the realm of electronic commerce steadily expands, establishing a robust auditory brand presence becomes a valuable resource for distinguishing one's business and establishing a bond with consumers.

As a result of the conducted research, it is proposed to specify and expand the scope of objects that can be protected as a trademark of the Law of the Republic of Azerbaijan "On Trademarks and Geographical Indications", as well as to make appropriate changes in the normative legal acts regulating the examination process necessary for the registration of trademarks. In particular, in the rules for examination of trademark claim documents, the examination procedure of sound trademarks should be determined taking into account the specific characteristics of audio marks. In such a case, one could not observe high indicators in the statistics of industrial property disputes on audible trademarks.

It is necessary to form technical mechanisms, such as defining legal mechanisms in order to ensure the registration and protection of sound trademarks. The mechanism that can be proposed as the most effective way to solve the issues that may arise from this direction can be the use of artificial intelligence or special algorithm-based applications in the expertise process. By means of an application operating on the basis of artificial intelligence or a special algorithm, a comparison of more copyrighted musical works with or without text could be made in a shorter period of time, and the result obtained would be more accurate than the results of a human search.

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