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Using artificial intelligence in trademark registration in light of the UAE trademark Law

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Abstract: When a commercial project is established to produce certain goods or services of high quality to compete and attract consumers, the project owner must adopt a trademark for the good, service or product in order to distinguish what he does from other competing services, goods and production. This requires registering the trademark with the relevant institutions in the country of registration, which requires procedures, requirements and attachments to be submitted. Then comes the role of those institutions in examining the submitted application in accordance with the law in force in the country of registration. Hence, we are discussing the special procedures for registration in the United Arab Emirates, which is one of the most advanced countries in government procedures. We are proposing the idea of introducing artificial intelligence software into the examination and judgment process to speed up the registration process for fear of it being registered by another person in another country that has an agreement with the UAE. Therefore, ownership of the trademark will be for the first to register. *Keywords:*

1. Introduction

The UAE legislator has attached great importance to updating the legislative system, especially legislation related to investment.

We will devote this research paper to the mechanism of registering a trademark through the use of artificial intelligence, especially since the UAE legislator has introduced new concepts to trademarks within Federal Decree-Law No. (36) of 2021 regarding trademarks, as the legislator introduced the hologram mark, the smell mark, and the abstract sound mark after they were linked to a traditional mark under the previous law.

Accordingly, the procedures specified in the law will be followed to examine and register the mark, which may extend the time to register the mark to be used on production, services, or goods, and hence the problem that may extend the time to achieve the registration of the mark and its use for the purpose for which it was registered.

If artificial intelligence is used to accomplish this task by examining and quickly searching for a previous registration or similarity between the trademark to be registered and other registered trademarks, whether in the country or abroad, the procedures will be simplified and fast. The importance of the research lies in shedding light on the mechanism of registering a trademark using artificial intelligence, as the examination can be conducted accurately and quickly to compare the trademark to be registered with similar trademarks, and also whether the trademark was previously registered in the same country of registration or in another country that is a member of an agreement, or whether the trademark to be registered is among the prohibited trademarks according to the law of the country of registration.

Through this study, there will be a contribution to the use of artificial intelligence to process procedures that require time periods that may exceed 90 days to decide as a result of investigation and scrutiny of the application attachments, the form and type of the mark, and whether it is a prohibited mark, a registered mark, or a mark similar to a famous mark. Accordingly, the use of artificial intelligence in the inspection mechanism will contribute to completing the task in a short time and accurately.

1.1. The Research Problem

The research problem is the time required for traditional examination and registration, which may lead to the loss of the right to register when there is a registration of the same trademark by another person in another country that is a member of an agreement with the UAE. Therefore, the registration of the trademark will be rejected for the first applicant, while the owner will obtain ownership of it from the one who registered it with the competent authorities in another country, for example, the Gulf Cooperation Council countries, as it is not possible to register a trademark in a Gulf Cooperation Council country if it is registered in another GCC country. Accordingly, the registration request will search for the shortest time for registration in these countries, and this will be for the country that applied artificial intelligence in the examination process for registering the trademark.

1.2. Previous Studies

1. Hamdi Darwish - The Role of Digital Transformation in Protecting Trademarks in Egypt - Journal of Intellectual Property and Innovation Management - June 2022, Page 47-70.

The importance of this research lies in what companies are currently telling us that the traditional intellectual property system is not obsolete, and statistics show an unprecedented use of the traditional intellectual property system, with growth rates far exceeding global economic performance. However, it must be recognized that advanced, data-based digital technology clearly constitutes the dominant force in economic production and distribution within the digital economy. It should also be asked whether statistics reveal increasing use in relation to the industrial economy or if they also apply to the digital economy. It is not yet clear to what extent the traditional intellectual property system, including trademark protection, will be effective in addressing all issues arising from data-based technologies that dominate the digital economy, and this will undoubtedly pose some challenges for policymakers related to intellectual property.

2. Ahmed Mohamed Rabea1 and Husham Ezzat- The Relationship Between Service Automation, Service Quality and Hotel Brand Image in Egypt's Hotel Chains: Guests' Perspective- Journal of Tourism, Hotels and Heritage (JTHH)- Vol. 5 No. 2, (2022) pp. 54-76 - In light of the results, it was found that there is no impact of service automation on the brand image of hotel chains, however, service automation has a very positive impact on service quality, and also service quality positively affects brand image, some limitations and some recommendations for future research were discussed.

3. Hadeer Sharif Mohamed Ayoub El-Yazid - The problems raised about registering the trademark of a legal entity on all categories included in the global classification and the impact of the intellectual property infrastructure and its suitability for building a national strategy for intellectual property in Egypt - Scientific Journal of Intellectual Property and Innovation Management - Helwan University -Issue Six - 2022. The study sheds light on the problem facing national offices and administrations in registering the trademark for a legal entity on all categories included in goods and services without adhering to the specific purpose of the legal entity, and the resulting effects on other entities.

4. Dr. Nawaf Saud Al-Yassin - Nationality of the trademark as a reason for refusing registration in Kuwaiti law, an analytical and critical study in light of the provisions of the TRIPS Agreement - Law Journal - Kuwait - Issue 4 - Year 2019. This research discusses the extent to which the principle of national treatment stipulated in the TRIPS Agreement is applied with regard to the protection of trademarks in light of the provisions of the Kuwaiti Trademark Law. This research is based on

analyzing the texts governing the protection of trademarks in the TRIPS Agreement and Kuwaiti laws related to trademarks.

5. Ahmed Abdel Halim Ahmed - Objection to the registration of a trademark in accordance with the provisions of Law 83 of 2002 and international agreements. Scientific Journal of Intellectual Property and Innovation Management - Helwan University - Issue 1 - 2019.

The research focused on the importance of protecting the trademark from infringement and the mechanisms organized by the legislation for that protection with examples of court rulings that ruled to repel the infringement.

6. Ihab Ahmed El-Sayed - Trademark Protection According to Egyptian Law. Scientific Journal of Intellectual Property and Innovation Management - Helwan University - First Issue - 2019. The research focused on the nature of the trademark and the special rules for civil protection and criminal protection of the trademark from infringement.

7. Aziza Sayed Mohamed - General provisions for licensing the use of a trademark. Scientific Journal of Intellectual Property and Innovation Management - Helwan University - First Issue - 2019.

The research focused on licensing contracts for the use of the trademark and the obligations of the two contracting parties.

8. Nirvana Mohamed Essam - The economic importance of registering commercial notifications internationally. Scientific Journal of Intellectual Property and Innovation Management - Helwan University - First Issue - 2019.

The research focused on the importance of the trademark from an economic point of view and the extent of the benefit obtained from the existence of protection for the trademark to enhance the attraction of famous trademarks to achieve the revenues obtained from them due to their popularity with the consumer.

9. Amjad Muflih Al-Hamad - Registration of an electronic trademark in Jordanian and French law) A comparative study - Sharjah University Journal of Legal Sciences - Issue 1 - Volume 19 - 2022.

The research focused on the marriage between information and communication technology to change the form of commercial activity from traditional to electronic, which led to the emergence of ecommerce through the Internet, which has become a reality that imposes itself in all spectrums. Which requires the protection of the electronic trademark.

10. Khamis bin Saeed Al-Masoudi and Maan Muhammad Salamah Al-Qasaima - Preventive protection of the famous trademark in Omani law - A comparative study. Qaboos University Journal of Legal Studies - Volume 2 - Issue 1 - 2023

The research focused on the rules set by the Omani legislator to protect the famous trademark when it opens an investment activity on the authority's lands in terms of civil protection and criminal protection.

2. Research Methodology

In this research, we will follow the descriptive analytical approach to the legal texts of the UAE Trademark Law and the executive regulations for the trademark registration process, the rules for trademarks and their types, and the mechanism for using artificial intelligence for the examination process, as the laws in the United Arab Emirates are very advanced and take into account global development and attract investment. Accordingly, the texts will be analyzed by presenting the nature of the rule and its purpose.

3. Research Division

Hence, the research paper must be divided into two sections The first section - the concept of the trademark and the concept of artificial intelligence The second section - registering the trademark using artificial intelligence

3.1. The First Topic

3.1.1. The Concept of Brand and Artificial Intelligence

Through this topic, we will explain the nature of both the trademark and the nature of artificial intelligence in two requirements, respectively:

3.2. The First Requirement

3.2.1. What is a Trademark?

A trademark or industrial mark means any sign or symbol that is used as a logo to distinguish the products of a commercial or industrial project, or as a logo for the services provided by the project. A trademark is also known as the visible sign that a manufacturer, merchant or service provider uses to distinguish his industry, goods or services from similar products that others manufacture, trade in or provide."1"

The UAE legislator did not define the trademark, but rather stipulated that a trademark is anything that takes a distinctive form of names, words, signatures, letters, symbols, numbers, titles, seals, drawings, pictures, engravings, packaging, pictorial elements, shapes, color, color groups, or a combination thereof, or a sign or group of signs, including three-dimensional signs and hologram signs, or any other sign used or intended to be used to distinguish the goods or services of an establishment from the goods or services of other establishments, or to indicate the performance of a service, or to conduct monitoring or inspection of goods or services. A trademark may be considered a mark related to sound or smell."2"

Through the above concept of the trademark, the following points must be stated:

3.3. First - The Importance of the Trademark

The importance of the trademark lies in the following points: -

1. Determining the source of products, goods and services

Where the consumer can easily distinguish between products, goods and services with other similar ones through the trademark.

2. It is a symbol of confidence in the qualities of products, goods and services

Here, the trademark will show the qualities of products, goods or services in terms of type, rank, warranty, or method of preparation and manufacture, meaning stating the distinctive characteristics of products, goods or services.

3. A means of advertising products, goods and services

The trademark is one of the important means of advertising products, goods and services, as it reaches the minds of the consumer through various traditional and electronic advertising methods. 4. Protection of the consumer public from fraud and imitation

Protection lies in knowing the high-quality products, goods and services from other poor products, goods or services. Therefore, if there are poor products bearing a trademark, the consumer will refrain from buying them and turn to the product bearing another trademark that enjoys durability and high quality.

5. It is a means of legitimate competition

The trademark is one of the important means of the success of the economic project. It is a means of competition between economic projects at all local and international levels, as it aims to attract the consumer public and distinguish projects for investors, as well as distinguish goods, products and services for the consumer who trusts the quality of products, goods or services bearing a brand he trusts.

3.4. Second - Models of Trademarks Permitted by the UAE Legislator

1. Names and signatures, which are the names of manufacturers, merchants, service providers or their establishments, provided that they are in a distinctive form such as geometric shapes. 2. Words, which are any innovative and new name that is not commonly used and is not derived from the products, their descriptions or their quality.

3. Letters and numbers, in this regard, certain letters or numbers can be taken, or numbers and letters can be combined but in a distinctive and new form with the addition of geometric shapes to attract the attention of the consuming public.

4. Drawings, which are types of trademarks represented in a similar form from the imagination, provided that they take on the character of innovation, distinction and novelty.

5. Symbols, which are any visual three-dimensional drawing, and it is required that it be distinct from another three-dimensional used by others, even if it is for the same term, as in the threedimensional models of some car brands that take the shape of a horse, for example, the threedimensional drawing is different from similar three-dimensional models of the same character.

6. Packaging and wrapping, which are the shapes of product boxes and wrappers, and to be considered a trademark, they must take a distinctive form that includes innovation and novelty.

7. Colors, and the color mark is usually used most often with telecommunications services with the addition of letters or numbers to them in a distinctive and new way.

8. Hologram, which is a photographic recording of a light field, used to display a three-dimensional image of the object photographed in a holographic manner, and the photograph of the mark is a single view of the sign in which the effect of the hologram appears in full, or several views of the hologram from different angles when needed.

9. Sound, which is a recording of a specific sound that is included in some industrial products such as cars, computer programs and phones.

10. Smell, which is through the creation of a new distinctive smell to distinguish certain products, and it is one of the signs that raises controversy about the possibility of proving or identifying it when there is a similarity in smell or if the person has a weak sense of smell, there will be difficulty in identifying the mark and its returns."3"

3.5. Third - Marks and Shapes That are Prohibited from Being Registered on Products, Goods and Services "4"

1. A mark devoid of any distinctive characteristic, or consisting of data that is nothing but the name given by custom to goods and services, or familiar drawings or ordinary images of goods and services.

2. Expressions, drawings or marks that violate public morals or violate public order.

3. Public slogans, flags, military and honorary badges, national and foreign medals, coins and paper currencies and other symbols of the state or other countries, or of Arab or international organizations or one of their institutions, or any imitation of any of them.

4. Red Crescent or Red Cross symbols and other similar symbols, and marks that are an imitation of them.

5. Marks identical or similar to religious symbols.

6. Geographical names and data if their use causes confusion about the source or origin of goods or services.

7. The name, title, image, logo or fame of another person unless he or his heirs agree in advance to its use.

8. Data on honorary degrees or academic degrees that the applicant for registration does not prove his legal entitlement to.

9. Marks that may mislead the public, or include false data about the origin or source of goods or services or their other characteristics, and marks that contain a trade name owned by another person.

Trademarks owned by natural or legal persons with whom dealing is prohibited according to the legislation in force in the country.

11. A trademark that is identical or similar to a trademark previously filed or registered by a third party for the same goods or services or for related goods or services if the use of the trademark to be

registered creates an impression of a connection between it and the goods or services of the owner of the registered trademark or leads to harm to his interests.

12. Trademarks whose registration for some goods or services results in reducing the value of the goods or services distinguished by a previous trademark.

13. Trademarks that constitute copies, imitations, translations, Arabizations or any phonetic translation of a famous trademark or part thereof owned by a third party, for use in distinguishing goods or services that are identical or similar to those for which the famous trademark is used to distinguish.

14. Marks that constitute copies, imitations, translations, Arabizations or any phonetic translation of a famous trademark owned by others, or an essential part thereof, for use in distinguishing goods or services that are not identical or dissimilar to those distinguished by the famous trademark, if such use indicates a connection between those goods or services and the famous trademark and if such mark is registered, such registration is likely to cause harm to the interests of the owner of the famous trademark.

15. Marks that include the following words or phrases: privileged or privileged, registered, registered design, copyright, or other similar words and phrases.

16. Any three-dimensional mark consisting of a shape resulting from the nature of the goods specified in the registration application or necessary to achieve a technical result; without any intrinsic elements distinguishing it from others.

Fourth - Types of trademarks

First - The trademark - which is the mark used by the merchant on the goods and commodities that he trades in, and its purpose is to draw the attention of the consuming public to it, whether those goods are produced by him or by others, but according to his own specifications.

Second - The industrial trademark, which is the mark used by manufacturers by placing it on their industrial products, such as the marks placed by car manufacturing companies, telephone companies, or durable goods companies.

Third - The service mark, which is the mark used by service providers to distinguish those services from other providers to distinguish themselves when the service provider relies on quality and distinction in that.

Fourth - The collective mark - This mark is granted to persons who monitor or examine some products or services in terms of source, composition, and quality of the method of manufacture, and it can take different forms as follows:

1. Certification mark - which indicates the specifications and data of goods and commodities in terms of quality, quality, source, or method of manufacture.

2. Trade association mark: which is the mark that indicates the relationship between the production of members of a trade association from the origin of its distinction from the production of other associations.

3. Cooperative mark - It is used to distinguish goods and services with common characteristics to distinguish them from goods that do not have such characteristics, meaning that it identifies the goods. This mark is owned by associations, organizations or a league.

Fourth: Prohibitive mark - It is a mark that is registered by a person not for the purpose of using it now, but is registered in order to prevent others from using it or registering it in the future. This mark is often similar to a registered and famous trademark owned by the same person who registered it.

Fifth: Protective mark, which is a mark that is registered without using it now, but its use is postponed until a specified date until all the necessary requirements for producing the goods on which the mark is to be registered are completed.

• Sixth: The famous trademark - A famous trademark is a trademark that enjoys wide knowledge among consumers, a reputation and publicity worldwide, and has a financial value in the market. It includes products, goods, and services. Examples include Coca-Cola, Lipton, Marlboro, VISA, CNN, Rolex, and other trademarks. The fame of the trademark gives the trademark strength, and this strength stems from the difficulty of imitating or infringing on a famous trademark known to the public and the competent authorities, such that imitation or infringement can be proven easily and simply."5"

3.6. The Second Requirement

3.6.1. The Concept of Artificial Intelligence:"6"

In this requirement, it is necessary to explain the nature of artificial intelligence, its history, the acquired importance of its existence, and its types, as follows:

First - What is artificial intelligence

Artificial intelligence is a branch of computer science that aims to create systems that can perform tasks that typically require human intelligence such as perception, reasoning, learning and decisionmaking. The fields of artificial intelligence include developing algorithms and computer programs that can analyze data, learn from it and make predictions or decisions based on this analysis. Artificial intelligence can be classified into several subfields such as machine learning, natural language processing, robotics and computers; therefore, the concept of artificial intelligence will gain great importance worldwide."7"

It can also be said that the concept of artificial intelligence means simulating human intelligence processes by special systems similar to computer systems. Artificial intelligence is characterized by the ability to "think" and "learn" by analyzing large amounts of data. Artificial intelligence can be used to automate tasks, make predictions or identify patterns that humans may not be able to discover.

Artificial intelligence is used in a wide range of applications from virtual personal assistants and chatbots to self-driving cars and medical diagnostic systems; therefore, the future of artificial intelligence is promising and holds new horizons; therefore, in this article, we will present research on artificial intelligence.

Second - History of Artificial Intelligence: The history of artificial intelligence dates back to the middle of the twentieth century. In 1956, John McCarthy, Marvin Minsky, Nathaniel Rochester, and Claude Shannon organized the Dartmouth Conference. Researchers at the conference suggested that a machine could be designed to simulate any task that required human intelligence.

In the years that followed, AI research progressed rapidly and researchers developed several techniques such as symbolic thinking and expert systems to enable machines to make decisions and solve problems based on rules and knowledge. In the 1980s, machine learning emerged as a new approach to AI that allowed machines to learn from data and improve their performance over time.

Despite the great progress, AI faced several setbacks in the 1990s due to technical limitations and reduced funding. However, this field regained momentum in the twenty-first century, thanks to the availability of large amounts of data and powerful computing resources. Today, AI is used in a wide range of applications such as image and speech recognition. Therefore, the future of AI will be full of benefits, and its fields will diversify over time.

3.7. Third - The importance of AI: "8"

The importance of AI is evident in several aspects, perhaps the most prominent of which was in:

- Efficiency and productivity: AI can automate various tasks, which leads to increased efficiency and productivity. For example, chat programs based on AI concepts can handle customer inquiries, which allows human agents to focus on more complex problems.
- Personalization: AI can help customize experiences for customers, employees, and users. For example, recommendation systems built using AI concepts can suggest products or services based on user preferences and behavior.
- Accuracy: AI can process massive amounts of data and identify patterns that humans may not be able to detect, which can lead to more accurate predictions and better decision-making.
- Innovation: AI can enable the development of new products and services that were previously not possible, for example AI is being used to create personalized healthcare solutions.

Cost-effectiveness: AI can help reduce costs by automating tasks and reducing the need for human intervention, which can benefit businesses and organizations across industries.

Improved safety: AI can be used to improve safety in areas such as transportation and healthcare, for example AI-powered systems can monitor patients' vital signs and alert medical staff if any abnormalities occur.

3.8. Fourth - Types of Artificial Intelligence

Now we will complete the research on artificial intelligence by mentioning its types. Artificial intelligence can be classified into the following types based on its level of advancement and interaction with the environment and humans:

1. Weak artificial intelligence:

This type of artificial intelligence includes programming computer systems to perform a specific task more efficiently than humans in some cases, for example, classifying email as spam or not spam (spam filter).

2. Strong artificial intelligence:

Also known as artificial general intelligence (AGI), this type of artificial intelligence aims to focus on human-level intelligence, problem-solving skills, with the ability to learn and perform any intellectual task that a human can do.

Do it.

3. Superintelligence:

This refers to the hypothetical level of artificial intelligence that exceeds human intelligence and capabilities in all areas.

4. Reactive machines:

These are the simplest forms of artificial intelligence that can only respond to specific inputs with pre-defined actions without memory or the ability to use past experiences for future actions.

5. Limited memory:

These AI systems can store past experiences and use them to inform future decisions, such as selfdriving cars that remember previous routes and make adjustments based on previous obstacles.

6. Theory of mind:

Refers to the ability of AI systems to understand the feelings, beliefs, and intentions of humans, and use this understanding to interact with them more effectively.

7. Self-aware AI:

This type of AI is hypothetical, but it requires a machine with consciousness that is able to think and be aware of its own existence and the existence of others.

3.8. Fifth - Characteristics of Artificial Intelligence

- Intelligence: AI systems have the ability to learn and adapt to new situations, which allows them to perform tasks that were previously possible only for humans.
- Self-learning: AI systems can learn and improve their performance over time without the need for human intervention.
- Decision-making: AI systems are able to make decisions based on data, rules, and probabilistic reasoning.
- Natural language processing: AI systems can understand, interpret, and generate human language, allowing for more natural communication with humans.
- Perception: AI systems can sense and interpret their environment using various sensors and input devices.
- Creativity: AI systems can generate new ideas and solutions that lead to innovations and breakthroughs in various fields.

- Problem-solving: AI systems can analyze complex problems and provide solutions, often faster and more accurately than humans.
- Parallel processing: AI systems can process massive amounts of data simultaneously, allowing for faster and more efficient computations.

3.9. Sixth - Applications of Artificial Intelligence

Artificial intelligence has a wide range of applications as it can be used in the fields of health care and treatments

It can also be used in economics and finance to speed up the work of banks and predict the economy according to economic data analyzed through intelligence programs. It can also be used in manufacturing and trade in general, education, military systems, space, police systems, etc., and the most important case that concerns us in this paper is the application of artificial intelligence in research

And the investigation to examine the trademark to be registered, as there is great importance for the entry of intelligence into government applications and administrative work, as it will work to accelerate the completion of administrative work accurately. "9"

It is worth noting that artificial intelligence has great advantages and at the same time has disadvantages that we can briefly present through two points: -

3.10. A- Advantages

1. Reducing costs: Artificial intelligence can reduce labor costs and increase operational efficiency, which leads to saving costs for companies.

2. Speed of innovation: Artificial intelligence can accelerate the innovation process; by quickly analyzing data and identifying patterns and trends that humans may overlook.

3. Contributing to improving the decision-making process, as artificial intelligence can analyze huge amounts of data and provide insights to support decision-making.

4. Predictive analytics: Artificial intelligence can analyze huge amounts of data to provide predictions and insights, which allows companies to make informed decisions and stay ahead of the competition.

B - Disadvantages of Artificial Intelligence:

1. Job elimination: Artificial intelligence can replace human jobs, leading to job losses and increased unemployment.

2. Security risks: Artificial intelligence can cause cyber-attacks and hacking, leading to potential security risks.

3. Lack of emotion and feelings, as artificial intelligence lacks the ability to understand and empathize with human emotions and experiences.

4. Innovative thinking of humans: Excessive reliance on artificial intelligence systems may lead to the loss of critical thinking and decision-making skills among humans.

This is considered selecting an attractive and expressive brand that can later become a distinctive mark in a market crowded with competitors. This task has always been difficult and requires a great deal of creativity and deep thinking, and with technological development, the opportunity to invest in artificial intelligence as a tool to assist in this field emerges.

Artificial intelligence technologies are innovative solutions through systems and programs that can analyze big data with accuracy and speed comparable to the human mind. These systems scan thousands of brands and then create brand suggestions that reflect the values, principles and aspirations of the product, manufacturer or service provider.

These smart tools rely on machine learning and deep learning to understand the characteristics required in a brand based on the criteria and inputs specified by users. From there, the system proceeds to generate a list of options that are not limited to the extent of innovation and difference, but also include complex analyses of trademarks in terms of legal and commercial aspects, to show previously registered trademarks, and the extent of similarity between them. Artificial intelligence collects huge data that includes existing trademarks, according to targeted products and industries, descriptions related to the field of work, target audience, or brand values. Artificial intelligence uses this information to understand the prevailing trends and characteristics that make brands successful.

The system applies machine learning techniques to identify patterns and correlations in the collected data through natural text analysis and language processing processes. It can then detect similarities and suggest modifications.

This will facilitate the examination process and reduce the required time.

3.11. The Second Topic

3.11. Registering A Trademark using Artificial Intelligence

In this section, the mechanism for registering a trademark in the United Arab Emirates will be explained in accordance with the provisions and rules stipulated in the UAE Trademark Law of 2021, with the possibility of using artificial intelligence to speed up the completion process and register the trademark as follows:

3.12. First Requirement

3.12.1. Trademark Registry

According to UAE law, there is a registry in the Ministry of Economy called the "Trademark Registry" in which the following data is recorded:"10"

1. Trademarks - which are the trademarks registered in the United Arab Emirates

2. Names of the owners of registered trademarks.

3. Their addresses, the owners of registered trademarks, and include all data to identify the owner of the trademark.

4. Type of activity, which is the activity practiced by the owner of the registered trademark.

5. Descriptions of the goods or services covered by these trademarks,

6. Data on all that occurs to the trademark from transfer, assignment, transfer of ownership, mortgage, license to use, or any other amendments.

Any person can request a copy of the data recorded in the registry after paying the prescribed fees.

The UAE law has granted the right to any natural or legal person to register his trademark on the goods or services he provides. "11"

3.13. The Second Requirement

3.13.1. The Mechanism for Registering a Trademark

The trademark registration application shall be submitted to the Ministry in accordance with the terms, controls and procedures specified in the executive regulations of this decree-law, which is that the trademark registration application shall be submitted by the trademark owner if he has a residence in the country or by the agent registered in a special register for trademark registration agents. Applications submitted by entities registered in the free zones shall be treated as entities that have a residence in the country, provided that the application is submitted for one or more categories according to the international classification of goods and services.

The trademark registration application shall be submitted according to the form prepared for this purpose through the electronic services of the department responsible for examining and registering the trademark. "12"

The trademark registration application shall include the following data in the electronic system: - "13"

1. A copy of the trademark to be registered

2. The name, address, nationality and profession of the applicant for registration, if any. If the applicant for registration is a legal person, its name, headquarters address and nationality must be stated.

3. Name, details and address of the registered agent if the application is submitted by a registered registration agent.

4. Accurate description of the mark to be registered.

- 5. Goods or services for which the mark is to be registered and their category.
- 6. Any other data specified by the Ministry.

The application submitted to register the trademark shall be attached to

- A. Supporting documents
- B. B. A copy of the agency duly certified and translated into Arabic if the application is submitted by the registered agent.
- C. C. A translation of the Arabic language with an explanation of the pronunciation if the trademark to be registered includes one or more words written in a foreign language.
- D. D. The musical score and its mp3 file if it is a sound trademark.
- E. E. A written description of the chemical composition if the trademark is a scent.

It is permissible to register a trademark for one or more categories with a single application from the categories of goods or services.

However, goods or services are not considered similar to each other simply because they are included in the same category, and goods or services are not considered different from each other simply because they are included in different categories of the same classification specified by the Ministry.

It is permissible to submit a single application to register a group of trademarks that are identical in their essential elements and whose differences are limited to matters that do not fundamentally affect their identity, such as the color of the marks or the data of the goods or services associated with them, provided that these goods or services belong to one category. "14"

It is worth noting that if two or more persons simultaneously request the registration of the same trademark or similar or similar trademarks for the same category of goods or services, all applications must be suspended until one of the disputants submits a waiver in favor of the other or a final judgment is issued by the competent court in the dispute. The UAE legislator has stipulated that if the applicant for registration of a trademark or his successor wishes to enjoy the right of priority in registering the trademark based on a previous application filed in a member state of the Paris Convention on Industrial Property or a multilateral international agreement to which the state or one of the Gulf Cooperation Council countries is a party or a bilateral international agreement to which the state is a party, he must attach to his application a copy of the previous application and a declaration "15"

It shall state the date of the previous application, its number and the country in which it was filed, within (6) six months from the date of the registration application on which the priority right is based, otherwise his right to claim priority registration shall be forfeited. "16"

3.14. Third Requirement

3.14.1. Examining the Mark and Deciding on the Application

The competent department shall examine the registration applications and verify that they do not match or resemble a previously registered mark and that they do not violate the provisions of the Decree-Law and its executive regulations. The Ministry shall issue its decision in this regard, either by accepting the application if it meets the conditions and procedures stipulated in the law and this decision, or by rejecting it if it does not agree with them or by making acceptance conditional on certain conditions or amendments.

The competent department shall notify the applicant for registration by modern electronic means of its decision or request him to fulfill the conditions or documents or make the necessary amendments to accept the application. If the applicant for registration does not respond to the decision of the competent department within 30 days from the date of notification, he shall be deemed to have waived his application.

If the application is accepted, the applicant for registration or his agent must pay the fees. It is worth noting that in the event of rejection of the application or request for amendments, the applicant or his agent shall have the right to appeal to the Grievance Committee"17" within 30 days from the date of notification of the decision. "18". In the event that the application for registration of the trademark is accepted, an announcement shall be published by the Ministry at the expense of the applicant, indicating the last date for objecting to the registration of the trademark, and then the trademark shall be published in the electronic bulletin. The announcement shall include some information in addition to the above, which are:"19"

- 1. Application number and date
- 2. A picture of the trademark and its description
- 3. Name and address of the registered agent, if any
- 4. List of goods or services for which the trademark is to be registered and their category
- 5. Any restrictions and conditions, if any
- 6. Priority date, if any, and its number and the country in which the application was filed.

Upon the expiry of the 30-day period for objecting to the trademark registration, the trademark is protected, as well as if a final judgment is issued by the competent court. The applicant for trademark registration must then pay the fees within 30 days after the expiry of the objection period. Here, the effect of registration will be retroactive from the date of submission of the application.

The applicant for registration has the right to request correction of any error related to the trademark, whether in terms of color or otherwise, noting that if the trademark does not specify a color, it includes all colors. "20"

It is worth noting that if an artificial intelligence program is included in the website for examining trademark registration applications, the examination process will be accurate and fast through the program's recognition of similar or registered trademarks, whether locally, regionally or internationally. Hence, the search will be faster and more accurate in terms of whether the trademark to be registered is a famous trademark or similar to it, or a prohibited trademark in the UAE, or a border trademark. The same applies to identifying the chemical composition of the scent mark, which raises wide controversy in legal circles in terms of the difficulty of using it alone and in terms of the similarity between scents, as some chemical compositions may be different but may be similar in smell to non-scent specialists, which confuses the consumer. Also, using artificial intelligence to examine sound trademark registration applications will be more accurate and faster, as well as for the rest of the marks such as symbols and holograms.

4. Recommendations

1. We recommend developing AI-powered software to be used in examining trademark registration applications.

2. We recommend developing websites for submitting applications to be able to accept or reject the application in the initial submission stage according to the requirements of the competent registration authority.

3. We recommend creating an explanatory film on the submission sites as a working guide for the applicant for trademark registration.

5. Conclusion

Through this research, the nature of the trademark was addressed in general according to the UAE law in particular, as well as the rules related to each of these forms, as well as what relates to all types of trademarks and their use, in addition to the nature of artificial intelligence, its types, advantages and disadvantages in use, as well as the mechanism for registering a trademark and the applicant obtaining ownership of the trademark that he will use in his production, goods or services. If artificial intelligence is used in the registration and examination process, there will be a reduction in time and accuracy in the examination process. We have reached the results that we present below.

6. Results

1. There is a diversity in the forms of trademarks, including traditional ones and those that are newly developed using modern technologies.

2. Trademarks are important in protecting the consumer public by distinguishing between highquality and poor-quality products, goods and services.

3. Famous trademarks that have exceeded the territorial borders of countries may not be registered.

4. Laws prohibit the registration of some forms of trademarks, as laws stipulate the prohibition of registration.

5. Artificial intelligence is a revolution in eliminating bureaucracy.

6. Artificial intelligence has degrees, some of which are in the first stage in terms of software and the industry of controlled robots, and some of which are in the second advanced stage under development and research, while the third stage has not yet appeared, which is software developed by other programs without human intervention.

7. To register a trademark, governmental procedures are required, including submitting the necessary documents, including those related to careful examination, and then issuing the decision after a specified period of time in the law.

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- 3. Hasbro has made efforts to convince the United States Patent and Trademark Office to register the trademark for the scent of its Play-Doh clay, and the company succeeded in doing so when it proved the close connection between the scent of the product and the trademark. It is worth noting that when registering any scent as a trademark, examiners have a role in analyzing its elements and chemical composition, and ensuring that it is not similar to a scent registered on similar products or services. It is known that the inability to theoretically understand how similar it is to another registered trademark makes examining it difficult. In this regard, technology may play an effective role, as there is something called the electronic nose, which works to analyze and sense the chemical composition of scents to identify them, and thus can be used to identify the components of the scent, and help examiners in making their decisions.
- 4. Article No. 3 of the UAE Trademarks Law of 2021
- 5. Article 4 of the UAE Trademarks Law of 2021 stipulates that a well-known trademark whose fame has spread beyond the borders of the country in which it was registered to other countries may not be registered for identical or similar goods or services unless a request is submitted by the owner of the well-known trademark or with his approval.
- 2. To determine whether a trademark is well-known, the extent of its knowledge among the relevant public as a result of its promotion, the duration of its registration or use, the number of countries in which it was registered or became wellknown, its value, or the extent of its impact on promoting the goods or services for which the well-known trademark is used to distinguish it shall be taken into account.
- 3. Well-known trademarks may not be registered to distinguish goods or services that are not identical or similar to those distinguished by these trademarks in the following two cases:
- A. If the use of the trademark indicates a connection between the goods or services to be distinguished and the goods or services of the owner of the well-known trademark.
- B. If the use of the trademark is likely to harm the interests of the owner of the well-known trademark.
- 6. For more on artificial intelligence, see Ahmed Abdel Halim Objection to the registration of a trademark according to the provisions of Law 82 of 2002 and international agreements - a research published in the Scientific Journal of Intellectual Property and Innovation Management - Helwan University - Volume One - Issue One - 2018
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15. Article 10 of the UAE Trademarks Law of 2021

- 16. Article 11 of the UAE Trademarks Law of 2021
- 17. A committee called the "Trademark Grievances Committee" shall be established in the Ministry, headed by a specialized judge nominated by the Minister of Justice and including two specialists selected by the Minister. This committee shall be responsible for adjudicating grievances submitted by interested parties against decisions issued by the Ministry in implementation of the provisions of this Decree-Law, its Executive Regulations, and the decisions issued in implementation thereof.

18. Article 5 of the Executive Regulations on Trademarks for the year 2022

19. Article 6 of the Executive Regulations on Trademarks for the year 2022

20. Article 9 of the Executive Regulations on Trademarks for the year 2022