Trademark as a Data Message and a Comparative Analysis of the Approaches of Iranian and American Law

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Abstract

Today, electronic commerce, facilitated by the Internet and cyberspace, has become one of the unavoidable phenomena of human life. Cyberspace has created a situation in which an individual or individuals from one corner of the world can communicate with another individual or group on the opposite side of the globe and conclude the largest commercial transactions and contracts without ever having met each other in person. In this context, many of these exchanges and transactions are conducted on the basis of a trademark through which one or both parties introduce themselves to the other party. In contemporary electronic and Internet-based transactions concluded throughout the world, trademarks function as data messages and constitute the central element of electronic and online commercial and economic exchanges. This issue, in itself, is a subject that entails various legal dimensions and aspects and may provide grounds for extensive legal analyses. The objective of the present study is to examine and assess the possibility of recognizing a data message as a trademark and to analyze the approach of Iranian law toward this issue.

Keywords: Trademark, Data Message, Cyberspace, Electronic Transactions, Iranian Law.

Received: 01 January 2026
Revised: 10 May 2026
Accepted: 17 May 2026
Published: 01 November 2026

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Citation: Horri, M. (2026). Trademark as a Data Message and a Comparative Analysis of the Approaches of Iranian and American Law. *Legal Studies in Digital Age,* 5(5), 1-16.

1. Introduction

The profound developments of the last two decades in the expansion of the global electronic network and the conduct of transactions through the virtual world, particularly the Internet, compelled the Iranian legislature to accept these developments separately from the specific concepts of domestic law, especially civil law, and to introduce new legal and commercial concepts into the Iranian legal system. With the widespread development of electronic commerce, the creation of an appropriate legal infrastructure, and the enactment of the Electronic Commerce Law, suitable grounds were created for entering this field. Nevertheless, doubts and ambiguities still remain regarding electronic commerce and its related concepts. For several years, the progress of means of remote communication, aimed at expanding private relations among individuals, such as electronic commerce, and subsequently the emergence of the Internet, placed the concerns of jurists at the forefront. The legal insecurity created by the ambiguous status of electronic documents and evidence ultimately led, following extensive international research and reflection, to the recognition by states and governments of the legal validity of electronic data messages. Accordingly, the United Nations Commission on International Trade Law adopted a Model Law on Electronic Commerce in 1996, which formed

the foundation for the legal recognition of electronic commerce instruments. Iran's Electronic Commerce Law, modeled on the UNCITRAL Model Law on Electronic Commerce of 1996 and adopted with additions and amendments on January 7, 2004, is the most transformative law enacted in the field of commerce and sale. It has introduced significant changes into Iran's civil law system, some of which abrogate or qualify certain provisions of the Civil Code regarding sale and the rules of evidence. The central axis of the said law is based on the data message and its legal effects in terms of evidentiary function and contract formation through it (Savaei, 2011, 2012). In the field of electronic commerce, contracts are concluded electronically; these are contracts created through various electronic means such as telegram, telephone, email, the Internet, and similar tools. The only distinction between these contracts and traditional contracts lies in the use of electronic means to establish contractual relations between the parties to the transaction (Akbari, 2005; Bajaj, 1998). In the Civil Code, declaration of will is not restricted to any specific means, and it is even provided that a gesture indicating intention and consent is sufficient.

The most essential subject in electronic contracts, which constitutes the cornerstone of contract formation, is the data message. This is because the parties to a contract, without having ever met each other even once, communicate, contact each other, negotiate, express their will, and ultimately prepare and sign the contract solely through the receipt and transmission of data messages. Therefore, in such legal relations, issues such as identifying and determining the nature of the data message, the types of data messages, its role in producing legal effects, particularly the formation of electronic contracts, the manner of attribution, the distinction between offer and acceptance, its admissibility and evidentiary value in electronic contracts, the conditions for receiving and sending data messages, and the concept, nature, and function of the electronic signature as a factor guaranteeing the integrity of the data message and ensuring the identity and will of the parties to electronic contracts acquire considerable significance. Given the expansion of communication tools, the increasing use of electronic instruments in daily life, and their growing role in the formation of legal relations, especially the conclusion of contracts electronically, the high importance of the data message as a communicative factor and a modern instrument for transmitting legal concepts becomes clearly evident (Saberi, 2002).

At the same time, another issue related to contracts and commercial activities is the trademark. In the domestic law of states and in international instruments, different definitions have been provided for the concept of trademark, although almost all of these definitions have common and similar elements. A trademark is a name, image, letter, number, or any sign that identifies the products of a factory or the goods of a commercial enterprise. This sign has financial value. Article 15(1) of the TRIPS Agreement defines a trademark as follows: "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." The definition that TRIPS provides of a trademark is general and includes names, words, letters, numbers, images, colors, or a combination of these signs for registration as a trademark (Schware & Kimberly, 1998).

After clarifying the concepts of data message and trademark, it is necessary to examine whether, first, trademarks can be considered data messages. This issue is particularly worthy of consideration because Iran's Electronic Commerce Law has envisaged protection for data messages and especially personal data messages. In fact, the question is whether a trademark may be used as a data message in electronic commercial contracts and, second, if it is used in this way, whether the effects of the trademark differ from its ordinary state. More fundamentally, how should the use of a trademark as a data message in cyberspace be evaluated? Accordingly, the functions of data messages, the reason why a trademark may also be considered a data message, and the approach of our legal system toward the use of trademarks as data messages constitute the most important unknown aspects of the present research.

2. Fundamental Concepts

2.1. Data Message

2.1.1. The Concept of Data Message

Some information technology specialists consider a data message to be a combination of "data" and "message," in the sense that the message is placed within the form of informational data. The Microsoft Computer Dictionary defines data as an informational component (Gholizadeh Nouri, 2000). Data message is translated as the equivalent of "Data message"

(Shabani, 2015). Iran's Electronic Commerce Law, inspired by the UNCITRAL Model Law, defines this concept in Article 2(a) as follows: "A data message is any symbol of an event, information, or concept that is generated, sent, received, stored, or processed by electronic, optical, or new information technology means." Considering all the definitions provided for data message, it may be said that "a data message is an informational component in an electronic environment that carries a message."

2.1.2. The Nature of Data Message

The nature of a data message has not been fully clarified in the law, and the legislature has merely confined itself to defining it: "A data message is any symbol of an event, information, or concept that is generated, sent, received, stored, or processed by electronic, optical, or new information technology means." Information technology specialists divide information in the electronic environment into three types: text, sound, and image. If information is understood according to this classification, what then does the legislature mean by event and concept? What differences exist among event, concept, and information? Is any difference between them conceivable at all, or has the legislature used these words synonymously without intending different meanings from them? These are questions that must be addressed and answered precisely. Analyzing and examining the nature of the data message, and specifically the legal nature of the data message, is an extensive subject that could itself form the topic of an independent thesis. Some statutory provisions indicate that a data message is textual and appear not to include sound and image. It seems as though the legislature's intention in mentioning data messages in these cases was limited to text. For example, Article 6(b), Article 12, Article 14, Article 18, and Article 65 of the Electronic Commerce Law do not mention audio and visual examples of data messages (Ghiyasi, 2012).

By examining these provisions, one may apparently conclude that the legislature's intention by data message is specifically written text and that other forms of data message have not been considered. However, it must be said that the use of the term data message in general indicates all forms of data message, and a data message, in whatever form and format it is created, falls within the scope of the statutory provisions, while other cases are not excluded (Kinia, 2009). It appears that since the dominant form of data message is written text, in some provisions textual examples have been mentioned as the predominant instance of data message (Zarkalam, 2005). Thus, Note 1 to Article 62 implicitly indicates that a data message may be audio or visual:

"Related Rights, previously known as Neighboring Rights of literary and artistic property, include material and moral rights for elements other than the author, including the rights of performing artists, producers of audio and visual records, and recording and broadcasting organizations and institutions."

For further clarification regarding the nature of the data message, it must be said that although when the contents of memory are transferred to a display screen or paper they appear in written form, it is clear that such outputs do not have originality and merely represent the contents of the computer memory. What is stored in temporary or permanent memory is not in written form; it is merely the result of effects left by differences in electrical voltage on the semiconductor materials that constitute chips. It is true that when working with a computer, human signs and words are entered into the machine as data, but immediately upon pressing a key or any other device, what is transmitted into the machine consists of different electrical currents and the arrangement of their effects alongside one another, which differ for each letter and sign. Therefore, what is stored on a chip or disk bears no resemblance to the inputs and is not intelligible to humans. In this situation, it is clear that as long as information remains in the form of electronic storage, it cannot customarily be regarded as "writing." Thus, on the one hand, the printed page or display lacks originality and is not independently considered a document, and on the other hand, the state existing within the computer chip bears no resemblance to writing. To resolve the problem of conferring validity on these external phenomena, and doing so under the title or equivalent of a document, the matter cannot be left to various scientific and judicial interpretations (Bakhtiarvand, 2005).

In any event, the laws of states must adopt a clear and uniform position in this regard and must not leave the evidentiary valuation of such an important matter, which is a common issue in today's world, to diverse interpretations and inconsistent judicial decisions. For this reason, legislatures in different countries, using methods appropriate to their legal structures and sometimes by borrowing from foreign or international models, have sought to fill this gap in their laws. The French have expressly called it a document in the Civil Code; in the United States, the Utah law refers to it as an electronic record; and in Rule 1001 of the Federal Rules of Evidence (2014), this type of evidence, together with other cases, is defined as follows:

writing means letters, words, numbers, or their equivalent set down in any form. A record means letters, words, numbers, or their equivalent recorded in any manner. Article 2(7) of the Utah law also defines an electronic record as a record created, generated, sent, communicated, received, or stored by electronic means. In the definition provided by the Model Law for data message, a relatively broad range of information generated, sent, received, and stored by various electronic, optical, or similar means is included under this title, and the concept is not limited to standard data exchanges between computers, email, telex, telegraph, and similar means. Following that definition, Article 6(1) of the Model Law provides: "Where the law requires information to be in writing, that requirement is met by a data message if the information contained therein is accessible so as to be usable for subsequent reference." Paragraph 2 provides that paragraph 1 applies whether the content of the data message constitutes an obligation or whether the law merely provides consequences for the absence of writing. Paragraph 3 then states that the provisions of this article do not apply to certain cases. Iran's Electronic Commerce Law first defines data message in Article 2 with some differences, which, despite ambiguities, narrows its scope and appears more appropriate in this respect: "Any symbol of an event, information, or concept that is generated, sent, received, stored, or processed by electronic, optical, or new information technology means." It then provides at the beginning of Article 6: "Whenever the existence of a writing is required by law, a data message is deemed to be writing," followed by certain exceptions. A noteworthy point, which may be raised as a criticism of the language of both laws, albeit with different degrees of intensity, is that both texts state: "Where the existence of a writing is required by law..." The implication of this expression is that where the law does not require it, a data message is not deemed to be writing and will not have such validity. This is while, in the case of documents usually issued by people, there is no legal requirement; rather, people themselves put obligations into writing in order to protect their rights. It is true that in some cases, such as driving, it is the law that requires the existence of a document called a license, which is written, or in instruments such as checks and promissory notes, writing is mentioned as one of their substantive conditions. However, it is not the case that all documents are prepared under legal compulsion or that the legislature has required written evidence in all cases. Certainly, the legislature did not intend that ordinary documents of people, if electronic and not legally required, should not be considered writing. Nevertheless, the apparent meaning of the expressions mentioned does carry such an implication. Of course, in the Model Law, the addition of paragraph 2 to Article 6 partially mitigates this problem, but since that part was not translated into Iranian law, the objection is more serious in Iran (Qajar Qeyounlou, 2002).

2.1.3. Types of Data Message

To better understand the data message, it is necessary to become familiar with its types. In terms of form and format, a data message is divided into sound, text, and image. It may also be a combination of these. In electronic contracts, a data message may be divided into two categories: a data message deemed to be original writing and a data message deemed to be a signature. In terms of message, electronic contracts contain two types of data message: first, the main data containing the terms of the contract agreed upon by the parties, and second, the signature of the contract, which gives validity to the contract, identifies the parties, proves their acceptance of the contractual terms, and confers evidentiary value upon the contract. In electronic contracts, the signature is a data message attached to the contract and, in this respect, is regarded as a separate data message (Naseri, 2010; Nourshargh Dehghani, 2010).

A. Data Message Deemed to Be Original Writing

This is a data message created in an electronic environment and is therefore regarded as a data message deemed to be original writing. In legal literature and in the context of proof, it is referred to as a "document." Since the dominant form of electronic contracts is written text, the predominant form is also the focus of the present discussion. In the past, any writing that indicated a matter was called a document; therefore, electronic writing may also be considered a document. In Article 6 of the Electronic Commerce Law, the legislature, in confirmation of this matter, equates the data message with a written document. Article 6 of the Electronic Commerce Law provides: "Whenever the existence of a writing is required by law, a data message is deemed to be writing."

B. Data Message Deemed to Be a Signature

In paper-based contracts and documents, what identifies the parties and declares their will in accepting the contents of the document or contract is the signature placed beneath it. In the electronic environment, the signature is attached electronically to the main text and is called an "electronic signature" or "digital signature." Since an electronic signature is independently

informational data in the digital environment, it is regarded as an independent data message created by the originator and attached to the main text (Karoubi & Eqbal, 2005). All jurists agree that a signature must be a writing. Therefore, written form is an essential attribute of a signature. Consequently, in the virtual environment as well, a signature recorded electronically is considered an electronic writing. In electronic commerce law, electronic documents and records have the same value and validity as paper documents, and an electronic signature also has evidentiary value like a traditional signature. Article 7 of the Electronic Commerce Law emphasizes this meaning as follows: "Whenever the law requires the existence of a signature, an electronic signature is sufficient" (Mazaheri & Nazem, 2009).

2.2. Trademark

2.2.1. The Concept of Trademark

Since trademarks do not involve intellectual creation, they should generally not fall within intellectual property rights, because persons who select a name, letter, shape, sound, or similar sign to introduce their goods and services do not create anything; they merely select, and selection is not creation. But why, then, are trademarks classified among intellectual property rights? It must be said that because trademarks organize competition and create an exclusive right for their owner, trademark law becomes connected to patent law because of the exclusivity present in both. Thus, trademarks must be discussed within the field of intellectual property law, and the World Intellectual Property Organization also regards them as one of the subjects related to this branch of law (Qadak, 2008).

Another answer to the question why trademarks are regarded as matters of intellectual property law is that, given the diversity and dispersion of the branches and divisions of intellectual property law, one must look for a common element among them. Some consider information to be that common element. With respect to trademarks, identifying information is somewhat complex; however, with some tolerance, information may be deemed applicable here, because it seems that trademarks present associations and characteristics of goods and services under the title of information (Jafarzadeh, 2008).

To define a trademark, various but almost similar definitions have been provided at the national and international levels. Among these definitions, the definition in the TRIPS Agreement and the definition in Council Regulation (EC) No. 40/94 of December 20, 1993 are noteworthy because a number of countries are parties to these instruments and follow them in their domestic regulations.

The TRIPS Agreement is an international instrument to which most countries of the world are parties. Thus, its definition of trademark may be said to be highly important. Article 15(1) of TRIPS provides:

"Any sign, or any combination of signs, capable of distinguishing the goods or services of one trademark user from those of other users 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" (Hill, 2006).

In this definition, examples of signs that may be selected and registered as trademarks include personal names, letters, numbers, images, colors, or a combination of these elements, which may distinguish the goods and services of persons from one another.

Another definition, provided in Article 4 of the Council Regulation of the European Community and binding on its member states, states:

"A Community trademark may consist of any signs capable of being represented graphically, particularly words, including personal names, designs, letters, numerals, the shape of goods or their packaging, provided that such signs are capable of distinguishing the goods or services of one undertaking from those of other undertakings."

By comparing these two definitions, it becomes clear that the examples that may be selected as trademark signs and that can distinguish the goods and services of persons from one another are referred to almost identically in both definitions. However, one matter addressed in the definition of the Council Regulation, in addition to personal names, letters, numbers, images, and similar signs, is the shape of goods and their packaging, which is not mentioned in the TRIPS definition.

On the other hand, under the TRIPS definition, for trademark registration, member states may require the sign to be visually perceptible, while the other definition, namely the Council Regulation, refers to the graphic representability of the sign. In some countries, such as Iran, it has also been stated that "a mark means any visible sign capable of distinguishing the goods or services of natural or legal persons from one another." This is provided in Article 30(a) of the Law on the Registration of Patents, Industrial Designs, and Trademarks, adopted on October 29, 2007.

In light of the foregoing, the question arises whether a trademark must necessarily be visible and cannot consist of signs such as smell, sound, and the like. In response, it must be said that according to the definition in the Council Regulation of the European Community, which refers to graphic representability of the sign, and the laws of some countries, such as Iran, which refer to visibility, the answer appears to be affirmative. However, a different interpretation has also been inferred from Article 4 of the Council Regulation, and graphic representation may be interpreted to include smell and sound as well. For example, in 1999 an application was filed in England for the registration of the smell of freshly cut grass. In examining whether the application complied with Article 4 of the Council Regulation on trademarks, the case was referred to the European Community, and the Second Board of Appeal of the Community Trademark Office observed that the smell of freshly cut grass is a distinct scent that everyone immediately recognizes through experience and that, for many people, the smell of freshly cut grass evokes spring or summer, with lawns or playing fields or other pleasant experiences of this kind. Therefore, the Board was convinced that the description requested for registration as an olfactory trademark for tennis balls was appropriate and met the requirement of graphic representation under Article 4 of the Council Regulation. The United Kingdom registry has also accepted auditory marks, such as nursery rhymes for children's goods or services, national anthems, and similar sounds, as registrable sound marks (Hart & Fazzani, 2000).

However, according to the TRIPS definition, where it states that members may make registrability depend on distinctiveness acquired through use, the answer to the question requires reflection, and it may be said that signs other than those capable of being drawn and seen may also be selected as trademarks. One of the characteristics of trademarks is their market and advertising function, and for this reason, the diversity of these marks, such as olfactory, invisible, and auditory marks, which are among the new forms of trademarks, is increasing day by day (Pourmohammadi, 2013). For example, the repeated sound "clop, clop, clop, moo" has been registered as a trademark at the United States Patent and Trademark Office, and if another person seeks to use a similar design, that mark is protected against the similar design (Karimi, 2010). In England, before the 1994 Act, registration of the shape of goods, such as the shape of Coca-Cola, was not considered because it was deemed descriptive. However, under the 1994 Act, which followed the European Community regulations, the shape of goods may also be registered as a trademark (Hart & Fazzani, 2000). Thus, the change in attitude toward accepting the registration of an unusual trademark, namely the shape of goods in England, was influenced by needs and realities such as the existence of blind and visually impaired customers or newer forms of advertising; perhaps this same consideration led them, in practice, to accept non-graphic signs such as smell and sound as well (Hart & Fazzani, 2000).

Therefore, it appears that under Article 15 of TRIPS, a trademark may be any sign perceptible through one of the five senses, even taste or touch, provided that it can distinguish the goods and services of natural and legal persons from one another. However, in domestic law, as noted in this discussion with respect to Iran and England, this matter depends on the practice of individual countries (Yazdanpanah, 2014).

2.2.2. The Nature of Trademark

Regarding the nature of a trademark, it may be said that the nature of a trademark is the spirit and artificial heart of the trademark, a term that covers the essential nature or position of the trademark and the values represented by the mark. The nature of a trademark is a description that defines the mark, guides its ideal, and functions as an instrument by which a company can distinguish its goods and services from those of its competitors. Trademarks offer customers a unified set of perceived benefits of a product that cannot be found in other products. These perceived benefits essentially facilitate customers' purchase decisions and create a basis for customer loyalty. With these descriptions, the identity and nature of the mark are the very essence of the mark, namely distinctiveness. The most important and unique characteristics of the mark are manifested in the identity of the mark (Zarkalam, 2003).

Professor Jean-Noël Kapferer believes that the essence of the mark determines its individuality, ideals, objectives, values, and identifying signs (Kapfer, 2007).

Laws relating to trademarks have presented this concept of trademark: "A sign used or affixed to the goods of a manufacturer or the merchandise of a merchant in order to distinguish it from similar goods and to identify the goods of a particular manufacturer or merchant." Therefore, a trademark has a unique existence independent of the goods on which it is used or affixed in order to connect those goods to a particular manufacturer or merchant. This connection between the mark and the goods of a manufacturer is not the result of a natural cause; rather, it is the result of the act of the individual manufacturer or merchant. From this analysis, it becomes clear that although any type of sign may be accepted as a trademark, the quality of the goods and their distinguishing characteristics, such as weight, color, shape, and size, cannot be recognized as the nature of a trademark, because these characteristics are not affixed to goods to distinguish them from similar goods but instead constitute part of the goods themselves (Nouri, 2006).

It is obvious that the characteristics, weight, color, and shape of a good are not capable of registration as a trademark or as the essential part of a trademark, and their registration as a trademark has no effect and does not, by virtue of that registration, deprive anyone of the privilege and power to offer similar goods in terms of size, color, shape, and nature. Although the color, size, or shape that a manufacturer gives to its goods may be the subject of a patent application, models, or industrial designs, and imitation or simulation of one of these characteristics of the goods may lead to an action for infringement, unfair competition, or passing off, in no case does the quality, color, shape, or size constitute a trademark, which by its nature is an extrinsic sign used or affixed to goods.

It was formerly believed that the shape and color of a good might constitute the nature of a trademark. For example, a manufacturer of cake or biscuits who obtained registration of the image of a stone mold or an animal resembling a lion or eagle on a cake or biscuit was thought to acquire an exclusive right, by virtue of registration, to produce cake or biscuits in the form of a stone mold or animal. However, this theory is erroneous, because it arose from confusion between trademark rights and patent rights (Gholamreza, 2014).

The wrapper and package of a good that is sold also form part of that good. Many goods, such as soaps, powders, and items that are not handmade, cannot exist without wrappers and packages. Although having packaging is not always necessary, it is desirable, and many goods are not complete without packaging and are not sold without wrappers. Affixing a trademark to wine or other liquids or to most foodstuffs is impracticable unless they are placed in packaging. Consequently, the packaging, wrapper, and container themselves, which most laws distinguish from the goods, cannot be regarded as trademarks. Nevertheless, simulation and imitation of packaging may also lead to an action for passing off (Sillman, 2010).

This point merely refers to the matter that the nature of a trademark is as a sign used or affixed to goods or their packaging in order to determine the connection between the goods and a person, while excluding the possibility that the packaging itself is considered a trademark. An important point is that labels must also not be confused with trademarks. A label is a much broader and more comprehensive concept than a trademark and includes not merely the trademark alone but also the combination of the mark with descriptions of the qualities of the goods, instructions for use, or other expressions and decorations. A trademark may be printed on the label or affixed to the goods separately from the label. Therefore, the label must be distinguished from the trademark. Protection of the trademark is independent, whereas the label is protected through passing off (Ghiyasi, 2012).

2.2.3. Functions of Trademark

Considering the definition provided by the Law on the Registration of Marks and Patents in explaining trademark, it may be said that the principal function of a trademark is its distinguishing capacity, meaning that the mark must provide consumers with a tool through which they can distinguish the goods and services of one commercial enterprise from those of another. Today, however, trademarks have functions beyond their traditional function, as explained below.

A. Function of Distinguishing and Identifying Goods

The first function of a trademark, referred to as the main function in all laws, is that it must be able to distinguish the goods and services offered by one commercial enterprise from those of other enterprises, thereby enabling consumers to choose a

product from among the diverse goods of competing enterprises (Mashayekhi, 2010). Therefore, the positive aspect of the trademark function is the capacity to identify goods and services, and the principal objective of protecting trademarks is precisely their distinguishing aspect. In this way, confusion among trademarks is prevented (Ghiyasi, 2012).

B. Function of Determining the Origin of Goods and Services

The second function of a trademark is to attribute a trademark to a particular commercial enterprise, referring to the offers related to its products or services in the market in which the mark is used on those goods or services. Therefore, the trademark must not mislead the consumer regarding the origin or quality of the goods or services; in other words, it must lack a deceptive aspect, which is the negative aspect of the trademark.

Thus, a trademark may guide the consumer in identifying the quality and origin of the marked goods. In this way, the consumer may assume that the marked goods have relatively stable quality and may rely on that quality. The mark therefore guarantees that the goods have been made and produced at the same level of quality they previously had (Bentes, 1987).

This function of the trademark has two aspects. If the mark is used for high-quality goods, it represents the superiority of those goods; if the goods are of poor quality, it destroys the reputation of the producer and, as some scholars have put it, functions like a double-edged sword (Vesali, 2000). Even where the goods are not produced by the owner of the trademark and the mark is used on the basis of a license granted by the owner, the licensee must observe the quality standards declared by the trademark owner (Karimi, 2010). Such an obligation may also be inferred from Article 44 of the Law on the Registration of Patents, Industrial Designs, and Trademarks. Article 44 provides: "A licensing contract for the exploitation of a registered mark or trademark registration application must effectively include the licensor's control over the quality and excellence of the goods and services provided by the user. Otherwise, or where such control is not effectively exercised, the licensing contract shall be invalid."

Formerly, trademarks were used to determine and identify the physical source of the goods on which they were used. However, with the substantial growth of production, the role of trademarks changed; instead of informing consumers about the identity of a specific source, they began to indicate goods associated with that trademark that emanated from a single source. This idea was based on the notion that consumers should be encouraged to purchase goods originating from a single source rather than purchasing from an unknown source (Gholamreza, 2014).

A question that may arise here is how consumers may intend to purchase goods under the assumption that they know those goods have a common source without knowing what that source is. Such a tendency is reasonable only where a series of goods from that common source exist in the market and are believed by consumers to be desirable. For example, that source may have reputable and well-known goods, or consumers may have previously experienced goods from that source and wish to repeat the purchase. Such reasoning brings us closer to the function of guaranteeing the quality of goods, which is one of the functions of the trademark (Gholamreza, 2014).

C. Quality-Guarantee Function of Trademark

This function of the trademark assumes that consumers use the mark to identify goods with which they have previously had a satisfactory experience. Consumers who have had a positive experience using goods bearing a particular trademark will search for the same mark again when purchasing that good in the future. Moreover, if they see that mark on different goods, they assume, based on their previous pleasant experience, that the new goods also have the same quality as the earlier goods, even if the goods differ in nature. Essentially, this function of the trademark creates the expectation that all goods sold under that mark will have the same quality. Nevertheless, the quality-guarantee function of the trademark is debatable, because there is no legal mechanism to ensure that the owner of the mark will use it on goods of uniform quality. If the owner acts contrary to this expectation, the only consequence is that the owner loses consumers and pays no penalty under trademark law. In addition, even if the mark is used on goods of uniform quality, there is no necessity that all goods be of good quality.

The logic of this theory requires that all goods belong to the category of quality known to consumers. In this way, the mark neither introduces an enforceable guarantee of quality nor guarantees that the goods will have that specific quality. It is more appropriate to call this theory the theory of natural obligation (Land & Posner, 2003). Therefore, the function of guaranteeing the quality of goods expressed through the trademark has an economic aspect in addition to its legal aspect (Edalat, 2002).

D. Marketing and Advertising Function

There is no consensus as to what the advertising function of a trademark is. However, the best explanation that can be offered is that where a trademark is used in advertising, it surrounds the goods separately from their physical nature and causes consumers, whenever they wish to indicate the goods, to display that mark (Bresners, 2009). This advertising function was subject to severe criticism. Some argued that these images and marks were not based on the distinctive qualities of goods and were unrealistic, and that any investment in producing and managing a visual animation and trademark was wasteful and should not be encouraged. However, this idea conflicts with the view that quality is based on the distinctive and exclusive characteristics of goods that lead consumers to prefer the goods of one commercial enterprise over those of another. On the other hand, owners' efforts to develop different images on their goods may be beneficial for consumers, because it allows them to express their views about the image of goods that convey their value or nature by purchasing the goods they desire.

On the other hand, if a trademark is selected in accordance with the social, economic, and cultural conditions prevailing in society, it increases the attractiveness of the enterprise and its products in public opinion and attracts more customers for the owner of the mark. For this reason, this function is sometimes called the "attractive function" (Najafi Esfad & Davari, 2012). Nevertheless, in advertising and marketing, any excess must be avoided, and misleading the consumer must be refrained from; otherwise, the mark will not only be deprived of legal protection but may also become subject to legal prosecution.

E. Defensive Function of Trademark

The owner of a mark may register a mark but, because at the time of registration there is no product to introduce through it, may not use the mark for a long time. This causes the trademark to acquire a reserve capacity, so that after registration the mark is preserved and, upon the emergence of a new product, the owner of the mark uses it to introduce that product (Shams, 2009). Under Article 41 of the Law on the Registration of Patents, Industrial Designs, and Trademarks, adopted on January 23, 2008, the time limitation for preserving this right for the owner of the mark is three years. Therefore, if the owner of the mark does not use it within three years from the date of registration, such non-use is deemed abandonment, and any interested party has the right to request its cancellation. Article 13 of the amended Regulations of the Law on the Registration of Trademarks and Patents, adopted in 1958, had also provided for this sanction, which was later abrogated by the Court of Administrative Justice; however, the legislature has now also included it in Article 41 of the 2007 Law on Registration of Patents.

Sometimes the owner of a mark registers a new mark similar to the earlier mark. In this way, the owner prevents competitors from registering a mark similar to the earlier mark. This defensive capacity of the trademark is limited by time under the laws of some countries, and after the expiration of the period, ownership of the mark is removed from its owner; France, for example, imposes a five-year limitation. Registration of a mark in this way is carried out with the motive of obstruction, by preventing competitors from selecting the mark (Jafarzadeh, 2011).

F. Industrial Function of Trademarks

Producers, by using the different capacities of trademarks in offering homogeneous or heterogeneous goods and services, can expand their activities. They may use several trademarks to offer a single product; they may use one mark on a set of complementary goods that have a common position in the market; or they may offer various heterogeneous products with different market positions under one general mark. Through investment in the general mark, they may cover various other marks, such as the BIC mark, which was previously used on pens but is now also used on lighters and perfume (Jafarzadeh, 2011).

G. Cultural Function of Trademark

Some believe that trademarks have a cultural function, meaning that socially formed images are used in discourse to designate ideas and strengthen arguments because of their effect on consumer recognition. Jason Bosland believes that a trademark can perform this function only when it refers to a known and definite phenomenon that is both the subject of theory and the means and instrument for providing theory (Bosland, 2005). The foregoing recognized functions of trademarks are neither all flawless nor all globally accepted, and many of them are debatable, particularly the functions of determining origin and quality, which have almost merged.

3. Trademark as a Data Message and Its Legal Analysis in Cyberspace

3.1. Rights of the Trademark Holder in Cyberspace

Trademarks make it possible for buyers to identify goods and services and therefore facilitate consumers' selection of goods. In the digital environment, this issue becomes more important because consumers act more cautiously in this context, since suppliers or traders may be located far away and beyond easy access, and the goodwill and financial security of companies may not be easily ascertainable. Therefore, in the digital environment, consumers rely more heavily on trademarks. Despite this reliance, the likelihood of trademark infringement in these environments is also greater, and for this reason, trademark owners endure considerable difficulty in preserving their rights in such environments.

The exclusive right of the trademark owner to use the mark, such as advertising the goods or services bearing that mark; the right to prevent others from unauthorized use of the mark, such as the right to prevent distribution and dissemination of the trademark and to prevent public offering of the mark through websites; and the right to transfer the mark to another person and exploit its material rights may be considered among the most important rights of the owner of the mark, which trademark owners seek to protect.

The infringement of these rights in the virtual world has taken new and diverse forms and is generally committed by persons whose identification also entails many difficulties and complexities. Today, the Internet has become a network for commercial advertising, and in this regard, trademarks have acquired a special position for Internet users, particularly consumers. Trademarks are instruments serving consumers and commercial and industrial competitors and, by being placed on a product, implicitly guarantee its quality. With the expansion of the borderless Internet environment throughout the world and the emergence of access for millions of users to the global network, discussion concerning trademarks and their infringement has become increasingly important, because with the expansion of international markets, countless consumers and customers from different countries have become able to become familiar every day with trademarks belonging to various goods and services. This has caused the parties to an electronic contract in virtual environments, located at remote points, to rely solely on commercial signs, which has created numerous problems for trademark owners (Vesali Naseh, 2006).

In addition to traditional examples of trademark infringement, such as the placement of a misleading trademark or a mark similar to a registered trademark, which is also frequently observed in online Internet markets, or the widespread advertising of counterfeit goods in cyberspace, trademark infringement on the Internet has special examples. For instance, in virtual environments, trademark owners have encountered new forms of infringement of their rights, such as metatags, unauthorized links, and, most importantly, infringement of trademarks through a domain name (Hamideh, 2008).

Owners of registered trademarks have the exclusive right to prevent all third parties who, without their consent, use identical or similar signs in the course of trade for identical or similar goods or services for which the mark has been registered, provided that such use leads to consumer confusion (Amiri, 2009). Article 41(a) of the 2007 Law provides: "The use of any mark registered in Iran by any person other than the owner of the mark is subject to the consent of its owner." Therefore, if a person infringes the personal rights of the owner of the mark, the owner has the right to pursue legal action. What may be inferred from this article is the material rights of the trademark owner, which include the exclusive right to use the trademark and the right to license its exploitation to another person. The distinctive feature of these rights is their temporal limitation.

Accordingly, each of the rights of trademark holders will be discussed in turn.

3.1.1. The Right to Advertise Goods or Services Bearing the Mark

Advertising in the contemporary world, with extraordinary scope and influence, has taken social life under its control. In today's world, which has been called the age of mass production and consumption, a significant part of the purpose of advertising is to inform people about new products, influence opinions, attitudes, and behaviors, and ultimately attract the audience's attention to purchase a product or use a service. In general, advertising is communication intended to inform potential customers about goods and services and how to use them, how to obtain the advertised goods and services, and to persuade audiences to purchase and consume those goods and services. Advertising, whether conducted in the real world or the virtual world, plays various roles in the process of commerce, such as informing consumers about the price, quality, characteristics, and method of use of goods and services, influencing audiences and consumers, and persuading them to

consume goods and services. It is also an influential factor in sales and in achieving greater profit in marketing. Businesses are finding increasingly innovative ways to advertise their goods and services. With every level of complexity in advertising, more intellectual property rights arise. Therefore, the simplest advertising may include only a logo or a trademark, whereas advanced audiovisual works may give rise to many complex intellectual property issues (Verbauwhede, 2002). Thus, the trademark holder has the right to advertise the mark and to attract customers for the goods or services.

3.1.2. The Right to Prevent Others from Unauthorized Use of the Mark

On the basis of the exclusive right enjoyed by the trademark holder, this holder may also be considered entitled to prevent others from unauthorized use of the mark owned by him or her. The exclusivity of the owner's use of the trademark is the natural consequence of the absolute nature of the owner's authority and the requirement that others respect this ownership right. On the basis of this right, the owner may exercise any form of disposition over it. The owner of a registered trademark has the exclusive right to prevent all third parties who, without the owner's consent, use identical or similar signs in the course of trade that have previously been registered by the owner, provided that such use leads to confusion. Neither the TRIPS Agreement nor the Paris Convention specifies the examples of "use." Article 19(1) of TRIPS provides regarding the requirement of use: "If use of a trademark is required to maintain a registration, the registration may be cancelled only after an uninterrupted period of at least three years of non-use, unless valid reasons based on the existence of obstacles to such use are shown by the trademark owner" (Yazdanpanah, 2014).

Given that the economic value of a trademark is not confined to its registration, but rather use of the mark creates the economic value of the mark, non-use of a trademark renders it valueless. In trademark registration, the good faith of the applicant for registration in using the mark is presumed. Therefore, even after registration, if it becomes clear that the applicant registered the mark with the intention of stockpiling it and preventing competitors from accessing a desirable mark, such a mark may be cancelled. Regarding cancellation of a registered trademark that has been used, Article 5(C)(1) of the Paris Convention provides: "If, in any country, use of the registered mark is compulsory, the registration may be cancelled only after a reasonable period, and then only if the person concerned does not justify his inaction."

In light of the above paragraph, any interested party may request cancellation of another person's mark on the ground of non-use. In this situation, the court issues a judgment cancelling the registered mark because of non-use only if the owner of the mark cannot produce reasons and evidence indicating use of the mark. The Law on Marks and Patents of 1931 made no reference to non-use of a registered trademark, but Article 41 of the Law on the Registration of Patents, Industrial Designs, and Trademarks adopted in 2007 provides in this regard: "Any interested party who proves that the owner of a registered mark, personally or through a person authorized by him, has not used that mark for at least three full years from the date of registration until one month before the date of the interested party's request may request its cancellation from the court." Therefore, non-use of a registered mark causes the invalidation of the mark.

3.1.3. The Right to Transfer the Mark to Another Person and Exploit Its Material Rights

One of the most important rights that the trademark owner has in legal dispositions concerning the mark is the right to transfer the trademark. The holder of the ownership right over a trademark may decide, instead of using the mark personally, to assign this right to another person. This assignment may include all rights in the mark and transfer the mark completely and permanently to another person, or it may include part of the mark and be limited to a specific period. Alternatively, the trademark owner may, by contract, license the exploitation of the mark to another person in exchange for payment or gratuitously, whether exclusively or non-exclusively. Pursuant to Article 139 of the Law on the Registration of Patents, Industrial Designs, and Trademarks adopted in 2007, all such transfers are valid against third parties only if they are registered in accordance with the provisions of the law upon a written application submitted to the legal authority. To protect the rights of the trademark owner, prevent trademark infringement, and compensate for possible damages inflicted on the trademark owner, civil and criminal sanctions have been provided in the laws. Regarding legal protection of the trademark owner, it may be said that a trademark owner whose mark has been infringed may request damages in addition to cancellation of the conflicting mark.

Infringement of a trademark may occur at the stage of applying for trademark registration or after registration of the trademark. Therefore, the trademark owner may request cancellation of the trademark registration application or cancellation of the registered trademark with respect to the matter infringed by third parties. Since protection of the registered mark begins from the date of submission of the application and, following acceptance of the registration application by the Registration Office, a certificate of exclusive rights is granted to the owner of the mark, any interested party may, upon submission of the trademark registration application to the Industrial Property Office, announce its objection within thirty days from publication of the notice in the Official Gazette. In that case, registration proceedings are suspended, and the matter is notified to the registration applicant within ten days so that, if desired, the applicant may submit a written response to the Registration Authority within twenty days. Failure to respond within the prescribed time is deemed acquiescence by the applicant to the decision of the Office. The 2007 Law and its Implementing Regulations contain no express provision regarding cancellation of a trademark registration application, but it may be inferred from Articles 37 and 38 of the Law and Articles 124 and 125 of its Implementing Regulations that a trademark registration application is subject to cancellation (Hamideh, 2008).

Another right of the trademark owner is cancellation of the registered trademark. This arises where the trademark owner, during the registration process, does not become aware of infringement of the mark and notices the conflict only after completion of the registration formalities. Therefore, the law allows interested persons to object to the registration within three years after the registration of the mark, and the civil courts of Tehran have jurisdiction to examine the matter and determine whether to cancel the registration or reject the objection (Vesali, 2000). Sometimes the objector requests cancellation of the mark on the basis of prior continuous use of the mark. This matter was considered in the Law on the Registration of Patents and Trademarks adopted in 1931. Article 20 of that law provides: “Whenever the objector proves that, with respect to the mark, he has priority by reason of continuous prior use before the registration application, the court shall order that the mark be registered in the name of the objector; and if the contested mark has previously been registered at the Registration Office, the court shall order that the earlier registration be cancelled and the mark registered in the name of the objector.”

The objector may seek cancellation of the registered trademark because of non-use of the mark, since registration of a mark is intended for its use. Article 5(C) of the Paris Convention provides in this regard: “If, in any country, use of the registered mark is compulsory, the registration may be cancelled only in cases where a sufficient period has elapsed and the interested party cannot justify non-use.” Article 19(1) of the TRIPS Agreement and Article 41 of the 2007 Law also expressly refer to this matter.

Another example of cancellation of a trademark is expiration of the term of validity of the trademark. If the applicant does not pay the renewal fee for the trademark within the statutory period, the registration of the mark loses validity. This may be inferred from Article 40(d) of the 2007 Law and the note under Article 131 of its Implementing Regulations. Regarding legal sanctions in international rules, there has not been much discussion; only Articles 9 and 10 of the Paris Convention provide for the seizure of goods unlawfully bearing a trademark (Qajar Qeyounlou, 1995). Article 10ter also obligates member states of the Convention to provide legal recourse for prosecution and conviction regarding the acts mentioned in Article 9(b) and Article 10 of the Convention.

The most important damage suffered by the trademark owner as a result of use of the infringed trademark relates to the sale of the owner’s goods, because the infringer sells his or her own goods as the goods of the owner. Since the infringing goods may be of lower quality than the goods of the trademark owner, this may reduce the value of the trademark, or because of consumer confusion and inability to distinguish goods bearing the counterfeit mark, the owner may have fewer sales. Such loss of profit is itself considered a form of damage (Katouzian, 1995).

Given the civil rules of Iran and the fact that compensation for damages in Iranian courts is generally based on the rules of destruction and causation, the infringer’s knowledge or lack of knowledge that his or her act constitutes infringement of another’s trademark, or whether the act was committed intentionally or unintentionally, has no effect on civil liability. It is sufficient that the damages caused be attributable to the infringer for him or her to be liable for compensation. Therefore, the trademark owner may seek damages under Iran’s domestic laws.

Regarding criminal protection of trademarks, it may be noted that infringers of industrial property rights may also be subject to criminal prosecution. If, in the course of infringing a trademark, the infringer commits a criminal offense, such as forgery, a criminal complaint may be brought through the prosecutor’s office. This is the best method of protecting the exclusive

ownership right over trademarks and preventing abuse by opportunistic persons. Although Articles 529 and 530 of the Iranian Penal Code refer to forgery of the mark of a factory or company, they contain no express reference to forgery of a trademark. However, under the TRIPS Agreement, member states are required to apply penalties for the general crime of trademark counterfeiting (Amani, 2008).

3.2. Conditions for the Admissibility of a Trademark as a Data Message in Cyberspace

Certain conditions may be considered for a trademark when it is used as a data message. First, registration of the trademark must not be prohibited, because a mark whose registration is prohibited cannot serve as the source of legitimate contractual effects; otherwise, this would amount to a contradiction in purpose. Second, use of the trademark must also not be prohibited, because rationally, where the use of a subject matter is prohibited in law, legal and legitimate effects cannot be expected from that subject matter. Third, there must be no misuse or deception in the use of the trademark, because otherwise there would be no intention and will free from defect or flaw that could serve as the source of legal effects. In summary, it may be said that if any of these prohibitions are not observed and, in the course of using a trademark as a data message, the law is violated, the fundamental defect returns to the intention to conclude the transaction based on that trademark and prevents a valid declaratory will for the formation of the contract from taking shape. Thus, the legitimacy and validity of the contract are seriously challenged (Yazdanpanah, 2014).

By combining these conditions, a reliable and trustworthy trademark that can serve as the basis for concluding an electronic and Internet-based contract is in fact formed. Of course, in our country's law, no law has yet been enacted to determine this matter, although it appears that legislative action in this regard could better guide the courts. However, in many countries, including most of those whose approach to the use of trademarks as data messages has been recognized, the three conditions mentioned above have generally been considered and enacted as conditions for using a trademark as a data message. Another point is that in these countries, where the trademark is a well-known mark, the matter is treated with greater sensitivity (Yazdanpanah, 2014).

Regarding the position of Iranian law on the use of trademarks as data messages, it must be said that until the necessary laws and regulations in this regard are adopted in our country, it appears that the same three conditions determined in other countries may also be applied in Iran. That is, in Iran too, use of a trademark as a data message is possible when, first, registration of the trademark is not prohibited; second, use of the trademark is not prohibited; and third, there is no misuse or deception in the use of the trademark.

4. Conclusion

A trademark is essentially used to introduce products and services to consumers and to distinguish products and services from those of other producers. With this function in mind, in response to the question of the status of trademarks in cyberspace, it may be stated that trademarks may be used in cyberspace in the form and format of data messages, and no prohibition is observed in this regard.

Of course, such use is subject to fulfillment of all legal conditions. It appears that by consolidating the positions of some other countries that have accepted the use of trademarks as data messages in their electronic contract laws, three conditions may be identified and mentioned for this matter. First, the trademark must have been legally registered in accordance with legal regulations, and in this respect there must be no legal impediment. Second, the underlying transaction intended to take place in cyberspace must be lawful and protected by law. Third, the law must not prohibit the use of the trademark as a data message in economic and commercial exchanges and transactions. These three conditions are usually the necessary prerequisites for using a trademark as a data message in cyberspace in most countries of the world, especially developed countries.

In this regard, attention must be paid to an important point: in most countries, legal or judicial practices concerning the use of trademarks as data messages in cyberspace and in economic and commercial transactions and exchanges are mostly observable with respect to well-known trademarks and signs, or marks that are technically considered "famous." The use of non-famous trademarks as data messages in commercial and economic transactions and exchanges in cyberspace is very rare. In any case, the position of our country's law on this matter has not yet been clarified, and we have not encountered any specific

legal or judicial practice in this regard. However, until the relevant law is enacted or a specific judicial practice is adopted in courts, it seems possible to apply the three above-mentioned conditions to the use of trademarks as data messages in electronic and Internet exchanges in our country as well. Accordingly, it may be said that if the three stated conditions are observed, trademarks may also be used as data messages in Internet-based and electronic contracts and exchanges in our country.

Another question that may be raised is how a trademark in the form of a data message in electronic commercial contracts differs from a trademark in ordinary commercial contracts. In response, it may be said that except for the instrument of contract formation, which in ordinary contracts consists of written documents or oral negotiations, while in electronic contracts it consists of computers and the Internet, no particular difference can be recognized between ordinary and electronic contracts. Therefore, trademarks have the same capacities in cyberspace and in the form of data messages that they enjoy in the real world and in non-electronic and non-Internet contracts. In this regard, one of the most important effects of recognizing trademarks as data messages is that these marks acquire sufficient evidentiary force, validity, and status, because they are data messages; admissibility, attribution, and evidentiary value are among the most important characteristics of data messages, which here, and in the hypothesis examined in the present research, serve in the form of a trademark as the basis of the electronic contract.

The results obtained in the present research, each of which was also based on the hypotheses under consideration, are as follows:

1. A trademark is essentially used to introduce products and services to consumers and to distinguish products and services from those of other producers. Thus, the main functional property and effect of a trademark is to introduce products and services to consumers or to anyone who is, in some way, the audience of the presentation and use of the trademark. A trademark may have other uses as well, but because of the need to observe the principle of competition in the market, every provider of services and products in this market must have its own specific trademark and can introduce its work to others only through that mark.
2. The use of trademarks is principally in the real world and in transactions and exchanges that occur in reality and in the external world. Nevertheless, the emergence of the Internet in our age makes the use of trademarks in cyberspace inevitable. Thus, just as trademarks are used in the real world and in real-world transactions, and economic exchanges are formed on the basis of them, they may also be used and exploited in cyberspace and in exchanges that occur through the use of Internet tools. Therefore, one of the functions of trademarks in our age is that they may be used in cyberspace in the form and format of data messages.
3. Nevertheless, the use of trademarks in cyberspace and on the Internet for the purpose of concluding electronic contracts is subject to certain conditions, and the requirements and necessities of this matter must be observed. These may sometimes create certain differences and distinctions between the real world and cyberspace in the use of trademarks. Thus, there is no prohibition regarding the use of trademarks in cyberspace for the purpose of concluding electronic contracts; however, such use is subject to fulfillment of all legal conditions.
4. Of course, when it was stated that the use of trademarks in cyberspace may lead to certain differences and distinctions between contract formation in the real world and in cyberspace, this does not mean that the conditions for the formation and validity of contracts differ in these two different environments. Rather, based on the studies conducted in the present research, except for the instrument of contract formation, which in ordinary contracts consists of written documents or oral negotiations and in electronic contracts consists of computers and the Internet, no other specific difference can be recognized between ordinary and electronic contracts.
5. Another important point that may be mentioned as a significant result of the present research is that the use of trademarks as data messages in electronic contracts does not appear to face any obstacle from the perspective of domestic laws and regulations. It was observed that in many other countries of the world that have coherent and advanced legal systems and bodies of laws and regulations, the use of trademarks as data messages in electronic exchanges and contracts is not subject to any specific legal prohibition; the existing requirement is only that the legal limits and conditions in this regard be observed.
6. The most important conditions that most countries of the world have considered for the use and application of trademarks as data messages in electronic and Internet-based exchanges and contracts are, first, that the mark be registered and that all legal formalities in this regard have been completed. Second, registration of the trademark must not be prohibited under domestic laws and regulations. Third, use of trademarks in exchanges and contracts must not

be prohibited for various reasons. Fourth, in the course of using a trademark as a data message in electronic and Internet-based exchanges and contracts, there must be no misuse or deception in the use of the trademark.

7. Another result that may be drawn is that in most legal systems in which the validity of electronic contracts has been accepted, and where the trademark has all legal conditions in terms of registration and nature, the use of the trademark as a data message has also been accepted.
8. It appears that the approach that may be considered for our own country regarding the use of trademarks as data messages in electronic contracts and exchanges is no different from what has been stated. Accordingly, in our country, first, the use of trademarks as data messages in electronic and Internet-based contracts and exchanges is permissible; second, this is subject to observance of the necessary legal conditions in this regard. The necessity of observing the legal conditions in this matter is particularly due to the need to remove obstacles to the admissibility of trademarks in exchanges and transactions conducted through the Internet.

Ethical Considerations

All procedures performed in this study were under the ethical standards.

Acknowledgments

Authors thank all who helped us through this study.

Conflict of Interest

The authors report no conflict of interest.

Funding/Financial Support

According to the authors, this article has no financial support.

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