

**بحث بعنوان**

**Possibility of acquiring AI Techniques  
legal personality (Analytical and  
. (comparative study**

**الباحث**

**اياد أحمد محمد أحمد عبدالمولى**

**المعيد بقسم القانون المدني**

**كلية الحقوق – جامعة أسيوط**

## Abstract.

Granting legal personality to artificial intelligence and its various applications, especially smart robots, is one of the most important and complex issues and problems that have occupied the minds of many people recently, where opinions have been divided into two directions, One direction sees the necessity of recognizing the independent legal personality of artificial intelligence technologies, similar to natural or legal persons, or considering it in a middle position between them and what this requires in terms of granting it rights and charging it with obligations that are consistent with its unique nature to achieve specific goals and objectives.

The other direction rejects granting legal personality to artificial intelligence technologies due to their incompatibility and unsuitability to the prevailing and stable legal conditions and concepts at present, because recognizing the legal personality of these technologies is a change from the prevailing legal concepts at this time and also a change to the commonly known rules and provisions, which may lead to undesirable results.

The researcher concluded through this study the necessity of keeping these technologies among things and not recognizing their legal personality, as this would achieve beneficial interests for society and avoid the risks that may arise if they are identified as legal.

Keywords: legal personality , artificial intelligence , robot , rights , obligations .

Introduction

## **Preface:**

The use of robots and artificial intelligence programs in various sectors raises many difficulties, especially regarding the extent to which these technologies acquire legal personality or not, as well as responsibility for the actions of these programs, and the suitability of current legislation and their ability to absorb the unique characteristics of this technology.

The lack of harmony between law and technology would create a gap between the theoretical legal framework and technical application, obstructing technical development and the emergence of negative practices that may simultaneously harm the consumer and the

producer. Perhaps the most successful way to create this harmony is to inform technicians from the beginning of relevant legislative systems and legal professionals' familiarity with aspects of the technical process. This requires that legislation keeps pace with technical development so that they go hand in hand instead of waiting for the technical process's outcomes and applying the legal rules to these outcomes.

By referring to the most prominent legislation at the international and local levels to clarify its position on artificial intelligence technologies, we find that these legislations did not include any comprehensive treatment of the various aspects of artificial intelligence technology, even if they included references to its characteristics and role in the contractual process.

Perhaps the common denominator between these legislations is their treatment of these programs called electronic agents as if they all belong to the same group without any distinction between them according to the degree of development, intelligence, and independence. Most of these legislations also mixed these programs' concepts of automation and autonomy. They considered that the actions of all programs are merely extensions of their users, who

question the results of their actions as if they were coming directly from them.

Therefore, it can be said that current legislation has equated the ruling between electronic agents and other programs lacking intelligence, independence, and movement and has considered them merely deaf tools for executing the orders of their users.

Researchers in the legal field disagreed on the extent to which artificial intelligence technologies enjoy legal personality or not. We found a group supporting these technologies acquiring legal personality and another team denying that these technologies acquire legal personality. This difference has affected various legislations that still have not decided their position on the extent to which artificial intelligence technologies have legal personality or not.

Research Significance :

One of the most prominent legal concerns in the era of digital development is recognizing the legal personality of artificial intelligence technologies independently of humans.

Given the independence of artificial intelligence systems in making decisions and the ability to learn independently and deal with others

without referring to humans such as the programmer, manufacturer, or operator, this has led many people to say that these technologies will, at some point enjoy the same rights as humans, as robots based on artificial intelligence will increasingly perform tasks and with more reward than humans, such as driving cars autonomously, which was previously only done by humans.

The remarkable importance of artificial intelligence systems has also raised questions in the halls of the European Parliament about whether robots with human capabilities should be treated like humans. In February 2017, the European Parliament issued a draft report proposing to grant autonomous robots' legal personality. Then, this idea will grant robots legal status to determine their responsibility for their actions.

Given the seriousness of this issue from the legal aspects, which requires radical changes in national legislation to be possible to add a new legal person to the legal status and the resulting acquisition of independent rights such as the right to nationality and to have an independent financial status, capacity, domicile, and other rights, there will also be obligations imposed on him in return such as determining

his responsibility, without others, the manufacturer or operator, for the actions issued by him. For this reason, we tried in this research to reach a solution to this legal problem and to know the extent of the suitability of this concept for artificial intelligence systems, especially since they have become a tangible reality imposed on us in the modern era.

#### Research Problems:

The main problem of this study appears to be the absence of provisions and rules regulating issues related to smart robots in most legislations, most notably the lack of a provision recognizing the legal personality of smart robots, as the Egyptian Civil Code did not address this issue, and the reason for this can be attributed to the novelty of this topic, and thus its lack of legal provisions that regulate its existence and address its problems.

This legislative vacuum had the most significant impact on the emergence of a division of opinion in legal jurisprudence between supporters and opponents of granting legal personality to smart robots, and what deepened the gap of division and disagreement between the two parties; the position of 2017 AD, regarding the rules of civil law related /2/ adopted by the European legislator in its decision issued on

16 to robots, in which it recommended granting smart robots legal personality in the long term, according to specific restrictions and controls, then it backed down and distanced itself from this position in the decision issued in 2020 AD, which included the text that no necessity requires recognizing the legal personality of smart robots.

Research Questions:

- 1- What are the legal difficulties and challenges facing recognizing the legal personality of artificial intelligence technologies?
- 2- What is the benefit or utility behind recognizing the legal personality of artificial intelligence technologies?
- 1-3- What is the legal value of the recommendations and proposals in the European Parliament's resolution dated February 2017 on the rules of civil law relating to robotics?
- 4- Has the European legislator succeeded in establishing the legal foundations and pillars to regulate the legal status of the new being (the smart robot), and finding solutions to the legal problems that it may raise, including the problem of recognizing the electronic personality of this unique being, or have ambiguity and uncertainty characterized its position ?



### Research Methodology:

The research will depend on the comparative analytical approach, as we will analyze the applicable legal texts and provisions to determine their suitability for application to artificial intelligence systems and the extent to which it is possible to grant it a legal personality, by also comparing the position of jurisprudence and legislation whenever possible to show the extent of agreement or opposition with the idea of granting legal personality to this new entity.

### Research Plan:

Preliminary Topic: The Definition and Classification of Legal Personality.

1. The Opposing View on Granting Legal Personality to AI Technologies.
2. The Supportive View on Granting Legal Personality to AI Technologies.
3. The Perspective of National and Comparative Legislation on Granting Legal Personality to AI Technologies.

## The Definition and Classification of Legal Personality

Being a legal person means having the capacity to hold rights and responsibilities. Thus, granting legal rights or imposing legal duties means conferring legal personality.

To talk about legal personality, we must speak of what the right holder in law means, as the right holder is the person who alone monopolizes the benefits conferred by the right.

However, what is meant by a person in the legal framework is every being who has the authority to acquire rights and bear obligations.

The person here does not mean only the human being. ; it may also refer to other groups of people, such as associations and companies, or groups of funds, such as institutions. These groups are called legal or moral persons and correspond to the natural person – the human being – which requires us to talk here about two types of persons:

A. Natural Person.

B. Legal or Moral Person.

A. Natural Person

A natural person is a human being, and every human being has a legal personality, as it is considered the legal capacity that establishes a human being and means his competence to acquire rights and bear obligations.

Despite this, ancient laws deprived some members of society of that status, such as enslaved people, who were considered subjects of rights, just like animals and inanimate objects.

But at present, the legal personality of all people is established on an equal basis without depending on the existence of a conscious will. It is established for the insane or the undistinguished child, just as it is proven for the sane adult as well, without any discrimination.

However, people vary in their ability to acquire rights and bear obligations. Some have full competence to acquire rights and bear obligations, while others have incomplete competence limited to some rights and obligations.

## B. Legal or Moral Person

The law recognizes the legal personality of non-human beings. It is established for groups of people, just as for groups of funds. Therefore, legal personality is no longer limited to the natural person – the human

being – but is also established for other groups, which have their independent entity, and are called legal or moral persons, to distinguish them from natural persons.

The thought of a legal or moral person is based on practical necessities, which require recognition of his independent life from his constituents' lives, making him eligible to acquire rights and assume obligations. Thus, he becomes a creditor or debtor, with a financial liability independent of the liability of his constituents. He also has the right to file lawsuits. Before the courts, he acquires citizenship, and has a name and domicile.

If a legal person is a group of people or funds aiming to achieve a specific purpose, it is granted legal personality to the extent necessary to achieve this purpose.

As for the practical necessities that require the legal person to be recognized as a legal person, they are represented by the fact that there are projects that require much money, which the individual is not able to provide on his own, which requires the addition of the necessary capital to a large number of individuals to carry out this project, and in order for the purpose to be achieved, this group must be recognized as a legal entity.

Likewise, a person may want to achieve a specific goal, and since achieving goals requires a time that exceeds a person's lifespan, some individuals must meet to achieve this goal, and thus their group consists of a legal person independent of each of them, who has an independent life, so that the death of some or all of these individuals does not affect his survival, as he carries out his activity to achieve the desired goal.

For these practical necessities, and to facilitate transactions, alongside man as a legal person, legal or moral persons appeared, with no tangible physical existence, but only a moral existence.

First: The Opposing View on Granting Legal Personality to AI Technologies

The debate over granting legal personality to artificial intelligence is highly contentious in both legal theory and legislation. Advocates argue that AI's capability for independent decision-making and self-learning necessitates a revision of legal frameworks to accommodate its unique characteristics, akin to the legal status enjoyed by natural persons. They argue that this adjustment is crucial due to practical and economic considerations.

However, the notion of granting legal personality to AI is fraught with significant challenges and risks. Foremost among these is the complexity of attributing rights that align with its nature, as well as the difficulty in assigning corresponding responsibilities, particularly in cases where AI causes harm. This raises concerns about potential exemptions from liability for manufacturers or operators of AI systems.

Based on the above, we will divide this study into two main topics:

First: The content of the trend opposing the idea that artificial intelligence technologies have legal personality.

Second: Arguments for the trend opposing the idea that artificial intelligence technologies have legal personality.

First: The Content of the Trend Opposing the Idea that Artificial Intelligence Technologies Have Legal Personality

Supporters of this trend believe that the recognition of artificial intelligence technologies as legal personality will lead to the abolition of the division known in the law between people and things.

This abolition will lead to ambiguity and also to obtaining illogical results that affect the civil law system itself.

Removing these technologies from the realm of things and entering the realm of people will lead them to gain rights and bear obligations, which will raise many questions.

One of the most important of these questions is the issue of whether these technologies possess the necessary awareness to understand the consequences of their decisions, which will inevitably lead to the occurrence of many problems , including, for example, the robot is programmed to deal cautiously with every person who feels that he poses a threat to him. In contrast, if these technologies had the necessary awareness, they would have been able to differentiate between good treatment and treatment that poses a threat to their lives.

According to the provisions of the Egyptian Civil Code, whoever causes harm to others is obligated to compensate the owner for this harm. However, according to the prevailing opinion, these technologies do not have a financial liability that we can refer to to repair the harm resulting from their misuse.

From a purely social perspective, these technologies do not understand social traditions and customs, which will make the issue of their

integration into society difficult due to the difficulty of their understanding of these traditions and customs.

On the other hand, these technologies will be misused due to the inability to determine who is responsible for this misconduct, whether it is the producer, the programmer, or the designer.

For example, in the famous case of Tesla, which designed a self-driving car and that car collided with a person, causing him serious injuries, in this case, who will the injured party refer to? Will he refer to the owner of Tesla? Or to the programmer of the self-driving technology in the Tesla car? Or to the designer of that technology in the first place?

Also, the inability to determine who is responsible in these cases will cause the manufacturers of these technologies to neglect to comply with safety instructions because they will escape responsibility.

The European Economic and Social Council also opposed, in an opinion published in May 2017, the establishment of a legal personality for robots and defended the human approach to driving artificial intelligence, justifying this by saying that such recognition would empty civil responsibility of its content and create moral risks in the use of these technologies.



It is worth noting that the European Parliament, in the face of these arguments rejecting the recognition of the legal personality of intelligent robots, announced in its session held in October 2020 its explicit rejection of recognizing the digital legal personality of artificial intelligence, based on the statement that this recognition may be premature, in addition to the unacceptable moral risks that could result if the legal personality of artificial intelligence is recognized at present.

#### Second: Arguments for the Trend Opposing the Idea that Artificial Intelligence Technologies Have Legal Personality

Supporters of the trend opposing granting artificial intelligence technologies a legal personality have held on to justify their position with several arguments, including:

1: The absence of awareness and consciousness of these technologies:

Supporters of this trend believe that the point in granting legal personality to these technologies is the aspect related to awareness and perception, not the aspect related to thinking. In the absence of awareness regarding these technologies, it is inconceivable to attribute error to them. However, human beings will always be responsible, even if indirectly, because this intelligence acts based on the algorithms that

human beings have fed it. Thus, human beings are always responsible, whether they are programmers, manufacturers, or owners.

From another perspective, granting legal personality to artificial intelligence technologies has significant risks, as represented by the conflict with the general rules of liability, as the basis of liability is the awareness and necessary understanding that enables a person to distinguish between right and wrong. Since this is inconceivable for these technologies, it has become impossible to hold these technologies accountable for their mistakes due to the absence of the awareness and necessary understanding to distinguish between right and wrong.

2: Measuring the granting of legal personality to legal entities and granting it to these technologies is a flawed measure:

Supporters of this trend believe that granting legal personality to artificial intelligence technologies in comparison to granting it to legal entities such as companies is a flawed comparison for many reasons, which are:

A. There is no natural robot that can legally represent the smart robot, as is the case for companies as a legal entity where there are many legal representatives from natural persons.

B. The basis for recognizing the legal personality of both is different. When recognizing the legal personality of legal entities, the goal is to create a distinct interest for the legal entity from the interest of its founders, unlike artificial intelligence technologies that were created and manufactured to achieve the goals of their producers and manufacturers, and it does not have a collective goal or interest to protect it, unlike the legal entity.

A.C. The legal person does not enjoy any independence in the face of its founders, as it is just an abstract idea, unlike artificial intelligence technologies that enjoy a great deal of independence in the face of their makers and founders, as it is a legal diagnosis with a tangible physical entity.

### 3: Conflict with international human rights agreements

Supporters of this trend believe that granting these technologies a legal personality will result in them enjoying some rights specific to humans, such as the right to work, the right to equality, intellectual property rights such as patents, and other rights, which will result in an apparent conflict with human rights agreements and the Charter of Fundamental Rights of the European Union.

In the future, this will result in many problems, perhaps the most prominent of which is knowing what rights these technologies enjoy and what rights they do not enjoy as a logical result of their acquisition of legal personality.

4: Independence and freedom in decision-making is an insufficient standard

The refusal to grant legal personality to artificial intelligence and robots, and the insistence on classifying them as mere things, stems from the view that these technologies lack true independence from humans and remain under human control. Here's why:

Independence is defined as self-reliance . According to the French electronic dictionary Larousse, independence means a person's ability to function without relying on others.

Currently, artificial intelligence is still in its preliminary stages and has not yet reached the level of superintelligent AI. It relies heavily on accumulated knowledge and does not possess consciousness, awareness, perception, or thinking akin to human intelligence.

The AI we have today depends on programmed information stored in databases and utilizes a complex network of algorithms. These algorithms enable it to perform two main functions: first, to evaluate multiple options and select the best method for task execution, and second, to learn from past experiences.

For AI to make inferences and decisions, a vast amount of data must be developed and improved. Smart robots today exhibit only relative independence and cannot perform tasks or make decisions without human input and direction. Their functionality is determined by intricate programming and relies on human-provided data, decisions, and operational parameters.

The abilities and skills of advanced robots are fundamentally derived from human input. Regardless of how advanced a robot's intelligence may be, it remains under human control for programming, power supply, task specification, and shutdown.

Therefore, it can be confidently asserted that smart robots are still subject to human oversight and have not yet achieved the level of autonomy needed to operate according to their own rules without human intervention. Some argue that robots possess a form of behavioral independence based on their functional capabilities.

This scientific understanding was reinforced by the European Parliament's 2017 decision on civil law rules for robots, which suggested that electronic personality might be considered for future generations of robots capable of complete independence and self-learning. However, whether smart robots are independent or not is irrelevant in determining their legal status, as independence is not the criterion used to recognize or deny legal personality to robots.

5: There is no need to grant these technologies an independent legal personality:

The opposing viewpoint argues against granting legal personality to smart technologies, citing several reasons. Firstly, it contends that such recognition conflicts with existing legislative frameworks and undermines the traditional distinction between humans and non-human entities . Additionally, it points out the practical difficulties in establishing legal responsibility for these technologies, whether civil or criminal.

Moreover, granting legal personality to smart technologies would lead to undesirable legal consequences. It could imply extending human rights—such as the right to life, equality, privacy, and dignity—to artificial intelligence, which are considered inherent to human beings.

Rights are typically reserved for beings that possess a certain level of social value and independent existence, which smart technologies lack. Unlike living beings with material, real, and sensory existence—such as animals, which are seen as subservient to humans—smart technologies are created to serve human needs and provide benefits. They do not have the characteristics that justify acquiring rights or bearing obligations. Therefore, according to this perspective, recognizing the legal personality of these technologies is unnecessary and inappropriate, as it would create an artificial legal entity without justification.

6: Attempting to exclude the responsibility of some people and transfer it to these technologies:

Proponents of granting legal personality to smart robots argue that it would assign civil liability to the robots themselves for their actions, potentially absolving designers, manufacturers, owners, or users from responsibility. They suggest that this shift is a goal for companies developing and programming smart robots.

However, this approach poses significant risks. If designers and manufacturers are excluded from liability, it could lead to the proliferation of advanced smart robots that might prioritize performance

over safety. This could result in robots entering the market without adequate safety, security, and precautionary measures, thereby increasing risks.

Shifting responsibility to the robots themselves might lead to serious consequences for society, particularly if dangerous or unsafe robots are introduced. The burden of accountability would fall solely on the robots, potentially neglecting the need for rigorous safety standards.

Moreover, manufacturers might push for the recognition of robots' legal personality to avoid accountability, thereby influencing decision-makers to support this change. Users of smart robots might also be less cautious in their use if they believe they will not be held responsible for the robots' actions.

Ultimately, recognizing the legal personality of robots could facilitate their widespread adoption across various sectors, not necessarily for societal benefit, but to shield humans from the consequences of robot-induced harm. If robots are legally accountable, manufacturers and other stakeholders may avoid liability for errors in design, updates, or use, diminishing the role of civil liability and its intended function.

#### 7: Recommendations of the European Parliament:



The European Parliament has made several attempts to address the issues arising from technologies powered by artificial intelligence, such as smart robots. On October 20, 2020, the Parliament issued recommendations to the European Commission, noting that artificial intelligence systems—whether physical or virtual—can directly or indirectly cause harm. However, such damage is often attributable to the individuals or entities involved in developing, publishing, or managing these systems.

The Parliament concluded that granting legal personality to artificial intelligence systems is unnecessary. The inherent complexity and lack of clear independence in these systems make it challenging, and sometimes impossible, to trace actions that cause harm back to specific individuals or design flaws. Instead, existing liability frameworks can address these challenges by holding all parties involved with the artificial intelligence systems—such as developers, manufacturers, and operators—accountable for damages caused.

The decision also highlighted that the civil liability provisions for defective products, effective for the past thirty years, should be updated to handle the unique challenges posed by digital technology. This includes clarifying whether digital content and services fall under the

definition of "products" and expanding this definition to cover all parties involved, including manufacturers, developers, and service providers.

The decision reinforces the view that artificial intelligence, despite its advanced capabilities, remains within the realm of objects rather than persons. Therefore, assigning legal personality to smart robots is deemed unnecessary.

Similarly, the European Commission's Expert Committee, established in 2020, rejected the idea of granting legal personality to smart robots. The committee cited the risks and complexities associated with such a move and affirmed that responsibility for robot-induced harm can be assigned to existing individuals or organizations. This stance followed the earlier rejection of a proposal by the European Commission on April 25, 2018, concerning the legal personality of smart robots.

## Second: The Supportive View on Granting Legal Personality to AI Technologies

Since the nineties of the last century, with the increasing talk about artificial intelligence and its ability to shine and occupy the era, and with the growing research explaining its content, American jurisprudence began to call for the necessity of granting those technologies that operate with artificial intelligence legal personality in order to assign legal responsibility for the damages that they can cause in light of the inability to apply the traditional rules of responsibility, whether to the user or the producer.

This also extended to European jurisprudence, which also called for the necessity of granting those technologies legal personality, and their argument for that is that they have qualities close to the qualities of humans in a way that gives them the right to similar recognition before the law.

In fact, granting legal personality to artificial intelligence, by virtue of which it can acquire rights and bear obligations, is no longer a figment of the imagination, but has become a necessity that appears in the legal arena and must be researched and in its circumstances and its scope determined. ( )

In this section, we will examine the views of those advocating for the recognition of legal personality for these technologies, as outlined below:

1. An overview of the position favoring the attribution of legal personality to these technologies.

The rationale and reasoning behind the support for granting legal personality to these technologies.

1- An overview of the position favoring the attribution of legal personality to these technologies

There is no doubt that the development of artificial intelligence technologies, as well as the expected and hoped-for development in the future to the point that these technologies mimic humans, is a matter that calls for thinking about strengthening the current legal system to confront the challenges raised by artificial intelligence.

For this reason, there is a need to prepare a legal system that is compatible with the tremendous technological change in order to achieve optimal interaction between humans and these intelligent beings when new generations emerge with the ability to think, learn, adapt, and make decisions independently without human intervention.

A large part of Egyptian and French jurisprudence has gone to say that it is possible to grant legal personality to artificial intelligence technologies as they are strong artificial intelligence and under the pretext of the necessity of separating human nature from legal personality since what is relied upon in granting legal personality is not human nature but the ability to acquire rights and bear obligations, it is conceivable to grant digital legal personality to independent artificial intelligence systems because they enjoy some rights and can bear some obligations like humans.

Although proponents of granting legal personality to artificial intelligence technologies generally agree on the concept, they diverge on the nature of this personality. Some argue that AI should be afforded a full legal personality. However, it is suspended on the condition that artificial intelligence must enjoy a high degree of independence since this independence cuts the causal relationship between the artificial intelligence error and the person responsible for it, whether he was a contributor to its manufacture or a beneficiary of it . At the same time, another part of jurisprudence went on to say that the European Parliament granted that personality to those technologies but to a deficient degree, as is the case for the personality of the indiscriminate,

but this does not mean that it is impossible to question him and demand compensation in the event of harm to others.

Therefore, the time has come for us to acknowledge the existence of a tangible electronic entity that issues some actions, including self-sourced actions. Perhaps this is what sparked the jurisprudential controversy, as the independence that describes the phenomena of artificial intelligence and the problems that result from it became, for example, the relationship of the robot with the parties to the robotic crime, such as the manufacturer, programmer or user on the one hand, and between the victims and the victim on the other hand. They found that the solution to the problem of responsibility for the actions of the robot lies in granting it an electronic personality and not in creating new innovative liability rules.

In fact, granting the robot a legal personality is not a grant bestowed upon it by the legislator or a privilege that distinguishes this electronic entity because this entity has become a reality, and granting it a legal personality is a solution to some legal problems.

The European Civil Code for Robots has confirmed that the independence of the robot from other parties requires changing the nature of the current legal environment that arises in terms of the

nature, capabilities, and special features of the robot. Among the implicit meanings that this independence suggests is the robotic character, which means the distinctive character of the incoming electronic person, which implicitly suggests the meaning of necessity of recognizing the full capacity of this non-human person, according to the European legislator.

In view of the role played by artificial intelligence technologies, many calls have emerged for these technologies to acquire legal character in comparison to associations, institutions, and companies due to the prominent and effective role played by these beings, so the legislator granted them a legal personality that differs from the natural personality enjoyed by the human being.

But how can artificial intelligence technologies be granted legal personality?

Based on the characteristics of artificial intelligence, it cannot be considered a thing because this conflicts in one way or another with its ability to learn on its own, develop, and be independent in making decisions, which qualifies it to be eligible to acquire rights and bear obligations.

However, the legal rules that must be relied upon to grant these technologies legal personality do not depend on the same general legal rules that govern human actions and behaviors, especially since we are now living in a transitional phase in enabling these technologies, as they will not remain subject to the will of their human owner in the future but will be granted some freedom.

The European Union rules have summarized this situation when they stipulated the creation of a special legal status for robots in the long term when the capacity of advanced robots in the future reaches the status of electronic persons who can be held responsible for compensation for successive damages resulting from their activities.

It seems that this science fiction has turned into a reality today, which will lead to the application of the provisions of the legal personality of the robot in its relationship with the manufacturer, producer, programmer, or user on the one hand and the other hand with the victims who are harmed by its dangerous actions on the other hand. Then, the current image of the law will become just a part of the past or history.

Based on this, the European Union has begun to establish a new entity for the legal personality of the fully qualified electronic person who will



gain citizenship and independent financial status through the profits from the sale of these technologies, the value of databases, and the revenues from their use. Then, the robot will be questioned about its actions, which was a kind of legal fantasy in the recent past. Hence, the question has become about what future image might justify the existence of this new legal person.

The rules of European civil law have confirmed that the current legal framework will not be sufficient to confront the responsibility for the damages that new generations of artificial intelligence technologies may cause, as they will be equipped with high-tech adaptive and learning capabilities, which will result in fluctuations in their behavior and will make them completely out of control of traditional human control, which requires restricting them by imposing prohibited matters on the robot, as French jurisprudence has seen.

On the other hand, the reason behind granting these technologies a legal personality is due to two different and complementary reasons:

First: Bearing responsibility: as there will be someone to whom we can refer in the event of an error that causes harm.

Second: Ensuring reward: that there is someone whom we can reward and grant rights related to the things he makes.

What supports and confirms these previous ideas is the recommendation issued by the European Parliament on February 16, 2017, in which it called on the European Commission in Brussels to recognize a special legal personality for robots, especially autonomous robots capable of repairing damages and dealing with others. Also, many initiatives have emerged that support this idea, including the Kingdom of Saudi Arabia granting the robot Sophia Saudi citizenship , as well as granting a robot the right to reside in Tokyo, which is a robot with the personality of a six-year-old child.

2- The rationale and reasoning behind the support for granting legal personality to these technologies

Supporters of the trend in favor of granting legal personality to artificial intelligence technologies relied on many arguments to support their opinion, and these arguments can be summarized as follows:

1. Recently, legal personality has been extended to some non-human entities:

The side supporting granting legal personality to artificial intelligence technologies also sees that some legislations, supported by the judiciary, have recently begun to expand in granting some aspects of legal personality to some non-human entities, whether by recognizing a

special legal status for them, such as animals, or by explicitly recognizing their legal personality, such as some elements of nature.

#### A. Granting a special status to animals in some modern legislation

Under pressure from associations defending environmental and animal rights in the modern era, a robust jurisprudential trend has emerged in the West calling for the necessity of granting some rights to non-human entities such as animals to protect them from human aggression through destructive activities such as poaching or cruel treatment of these animals, considering them living beings with feelings. Supporters of this trend believe that there is no way to establish these rights except by granting legal personality to these animals, and the basis for this is the characteristics that animals enjoy that are close to humans, such as feeling, awareness, and independence.

This proposal was met with strong opposition at first for religious and social reasons. Then, the situation changed as the French legislator recently went to members of a special status for animals as living beings with feelings, which is what was stipulated in the Animal Rights Law issued in February 2015.

However, it is noted that despite granting animals a special legal status in French legislation, it remained committed to the traditional binary

division as a category of things, which is the same approach followed by the judiciary, as the French Court of Cassation went in its ruling issued in December 2015 to the fact that the animal is considered a unique living being with no alternative . Despite that, the ruling confirmed that it is regarded as one of the things. Therefore, it can be said that the French legislator and judiciary have taken the same approach by emphasizing that animals are unique legal entities that do not represent things or people, but rather fall in a middle area between them due to their possession of feelings and awareness, but they agreed that they remain classified as things.

However, the Swiss civil legislator went to explicitly exclude animals from the category of things until a special law was issued to regulate them, which made the ruling to keep animals within the category of things suspended until there is a special rule for them.

#### B. Granting legal personality to some elements of the environment

With regard to environmental elements, legislation and the judiciary in some countries have supported what jurisprudence has gone to regarding granting legal personality to some elements of nature in order to protect them and grant them some rights or for the purpose of preventing their ownership. In India, for example, the Supreme Court

issued a ruling in March 2017 granting legal personality to the Yamuna and Gange rivers based on religious and cultural beliefs that are primarily based on ties between peoples and the land. This was not the first precedent, as it was preceded by the issuance of a law by the New Zealand Parliament granting legal personality to the Whanganui River.

## 2. Analogy to the legal personality of legal persons:

This argument is an extension of the previous argument because artificial intelligence systems have become more complex and advanced and play a prominent role in society, so many calls have emerged for them to gain some legal personality. These calls began from the standpoint of comparison with legal persons such as companies, associations, and institutions. The owners of these calls have also based their opinion, whether explicitly or implicitly, on the proximity of artificial intelligence systems and the inability to distinguish between their actions and the actions of humans, which makes them deserving of a legal status similar to and comparable to natural persons.

Let's look at the legal person as a subject of law without a human body. We will be dealing with a vessel for rights and duties, so that

robots become like companies, provided that each robot is registered in a register equivalent to the commercial register of companies and obtains legal personality from the time of registration. From that time, it can compensate others who caused harm to them and bear responsibility for the crimes they commit.

Although companies have a legal personality, they do not exercise their rights directly, but rather through a legal representative, and this role is equivalent to the representative of the robot during registration. We must consider that the more the robot is able to make decisions individually and independently, the more its responsibility increases. It is noted that the electronic legal personality that we will give to artificial intelligence systems is distinguished from the legal personality granted by law to legal persons from the legal point of view, in that these systems will grant automatic, not human, thinking, which justifies granting them a financial status by granting them financial assets such as the market value of these programs and databases, revenues from their use, profits from their sale and exploitation. All of these are considered financial assets that justify granting them a legal personality, like companies with an independent financial status.

3. Going beyond the idea of the binary division between people and things:

The supporters of the trend in favor of granting artificial intelligence technologies legal personality went to the fact that the way to achieve this is to go beyond the traditional division of things and people, and the supporters of this side put forward proposals to go beyond the conventional division recognized since the days of Roman law , as follows:

A: Proposal to create a third intermediate legal category:

There is currently no place in French law for a third category other than people and things, so a part of French jurisprudence went to the necessity of creating a third legal category under which some entities that fall in terms of their characteristics in that intermediate area can be included. On the one hand, they cannot be considered persons in the traditional sense, and on the other hand, they cannot be kept among inanimate objects due to their characteristics. Examples of these are animals, which some jurisprudence considered non-human persons or limited persons in order to grant them some rights to protect them.

This aspect of jurisprudence sees that to remove this third category from the scope of things and place it in an intermediate area between

things and people, ; we must also remove it from the ownership system. Therefore, they see that we can replace the concept of ownership with a system similar to adoption, where the adopter is responsible for this animal instead of the owner in the traditional system of responsibility for the animal's actions.

By applying this trend to smart devices that operate with artificial intelligence, which are artificial intelligence technologies, we see that we can remove them from the scope of things and place them in that intermediate area due to their characteristics, which are represented by independence and freedom in decision-making. This is regarding advanced independent robots, but it is challenging to apply the adoption system to them because these devices were initially made to serve humans and facilitate their lives.

B: Proposal to develop a new division:

Another aspect of jurisprudence proposed a new division based on a biological basis, which was divided between natural things, which are found in nature without human intervention, and artificial things, which are manufactured by humans and are the result of human work, such as machines and others.



4. The existence of legal and realistic necessities that require recognition of the legal personality of these technologies:

The proponents of this trend believe that recognition of the legal personality of artificial intelligence and its applications has become a necessity and not a luxury based on its performance of many roles that only humans can perform and even excel in their implementation and performance. Precise surgical operations that only the most skilled doctors can perform, such as driving cars and airplanes, internal auditing work in all institutions, decision-making, creativity, and innovation, are all areas in which artificial intelligence has become a strong competitor to humans. This has prompted some jurisprudence to say that the solution to all problems resulting from artificial intelligence machines lies in granting them legal electronic personality.

We should not also ignore the fact that it has imposed itself forcefully on the ground, which is that a new generation of artificial intelligence has begun to emerge that will compete with humans, and its existence may entail countless challenges and risks. This requires the intervention of states to set the necessary conditions and controls to recognize the legal personality of these technologies, considering the specificity of technological and digital development, determining the

responsibility of the robot, and drawing the boundaries between it and humans to ensure the protection of the rights and security of individuals and society.

The recognition of the legal personality of the smart robot is based on many considerations, including necessity and legal appropriateness. The first is (necessity), meaning the social and legal need calling for recognition of the legal personality. At the same time (appropriateness), is a state that allows the legislator to intervene by assigning a legal personality to robots to protect individuals from their actions that lead to harm to them, especially in the event that the manufacturer, owner, or others evade responsibility. Among other considerations is (social capacity), meaning the ability to link to social interaction and adapt to the surrounding environment.

The proponents of this trend relied on supporting and strengthening their position calling for the necessity of recognizing the legal personality of artificial intelligence technologies, especially smart robots, on the recommendations issued by the European Parliament in February 2017 regarding the rules of civil law related to robots, which included a proposal to grant legal personality to smart robots and artificial intelligence systems, especially with regard to civil liability for

damages to others caused by robots, provided that these provisions include an insurance system that guarantees coverage of potential risks caused by these robots.

This proposal included establishing a specific legal status for smart robots in the future and not at present, as it can at least be proven that more advanced and independent robots enjoy the status of electronic persons responsible for redressing damages that they may cause or when they interact with others independently.

Attributing limited legal personality to smart robots entails granting them rights and bearing obligations, but to a limited extent in line with the nature of the robots' work and their operating environment. The personality to be recognized for smart robots can be called the electronic or digital personality.

5. Inadequacy of current legal rules to hold AI technologies accountable for the damages they cause:

Proponents of the trend in favor of granting AI technologies legal personality argued that the rules of European civil law, according to the current legal framework, are insufficient to address criminal liability for damages that may be caused by new generations of robots that will be equipped with high-tech adaptive and learning capabilities, which will

generate fluctuations in their behavior and make them completely free of human control.

This prompted the European Union Legal Affairs Committee to establish a working group to answer the questions raised by the operation of robots and artificial intelligence in Europe in 2015. After a long discussion, the working group issued its final report, which included a set of recommendations to the Legal Committee, which in turn issued the rules of civil law in February 2017 from the European Parliament.

However, this does not mean that there are no penalties that suit a robot if it commits crimes, and that the claim that the penalties stipulated in the Penal Code were specifically designed for humans and cannot be applied to robots is a false claim because this claim does not apply to financial penalties such as fines or confiscation, given that a robot has an independent financial status. The legislator can deprive it of some of its elements. On the other hand, legislators can set penalties that suit a robot, such as disabling or preventing it from being used.

6. Limiting the scope of rights to a limited extent that is consistent with the nature of artificial intelligence technologies:

Proponents of this trend believe that acknowledging the establishment of a legal personality for artificial intelligence technologies would recognize its rights and burden it with obligations and duties of a nature different from that of humans.

For example, one of the most important rights inherent in the human person is the right to life, but for robots, which are one of the most important models of artificial intelligence technologies, this right is known as the right not to be destroyed.

Third: The Perspective of National and Comparative Legislation on Granting Legal Personality to AI Technologies

The use of artificial intelligence technologies in all aspects of life has demonstrated the need to establish legal frameworks and preventive measures that govern the activity of these technologies and robots to avoid the negative effects that they may have on societies, which most countries in the world have realized and are seeking to develop legislatively for them. In this context, we will talk about the position of foreign legislation, and then we will follow it with the position of Arab legislation. We will mention some judicial rulings, and finally, we will conclude our discussion with the position of the national legislator on the development of these technologies, in the following detail:

1: The position of foreign legislation:

A. The position of the American legislator

In December 2017, the United States of America issued the Future of Artificial Intelligence and its Prospects in the World Act, which is the first federal law focused on artificial intelligence. Based on this law, a specialized committee will be established to study all aspects of artificial intelligence and issue special decisions in this regard, as well as to study the effects of this use of artificial intelligence systems on the workforce in the United States of America.

In addition, the Illinois State Legislature passed the Video Conferencing Interviews in Recruitment Act in May 2019, which came into effect on January 1, 2020.

B. The position of the British legislator:

On June 29, 2017, the British House of Lords appointed a Select Committee on Artificial Intelligence to consider the economic, ethical, and social implications of developments in artificial intelligence. This committee issued its first report in April 2018.

C. France:

The French Parliamentary Institute for Scientific and Technological Assessment considered in its report dated March 15, 2017, that the appropriate legal system, or more precisely the most appropriate one, for determining who is responsible for damages caused by artificial intelligence technologies is represented by the rules of liability governing the actions of defective products. Therefore, the person obligated to compensate is either the designer, the designer, or the owner of the robot, as the case may be. This is confirmed by the European Economic and Social Committee's report published on May 31, 2017, albeit in a less clear manner.

#### D. United Nations:

We refer here to Article 12 of the United Nations Convention on the Use of Electronic Communications in International Contracts, which allows contracts to be formed as a result of actions performed by information systems (electronic agents) even if no natural person has reviewed the individual actions performed by those systems or reviewed the contract resulting from those actions, knowing that this agreement, similar to the UNCITRAL Model Law on Electronic Commerce, focused only on automatic contracts that are created automatically by smart software systems. However, it did not stipulate

the possibility of contracts being formed independently by smart software systems without the user knowing the terms of these contracts or knowing when they were originally concluded.

This agreement also did not include any provisions for automatic errors, but rather only addressed errors committed by a natural person in the course of using the automated system, such as human error in data entry. Therefore, it can be said that errors committed by a computer system should, according to the Convention, be attributed to its users or the persons for whom the system works, even if the errors are of a type that cannot logically be anticipated or avoided in a timely manner.

#### E. European Legislator:

In February 2017, the European Parliament adopted the human deputy system responsible for compensating the person harmed by the operation of the robot on the basis of proven error, knowing that the deputy may be the manufacturer, owner, user, or operator, which means that the robot is not something subject to guardianship, which heralds the possibility of granting it a legal electronic personality. Accordingly, according to European legislators, robots, as the most important artificial intelligence technology, are not considered inanimate



objects or beings, as the human responsible for the robot was described as a deputy and not a guard or supervisor.

The European legislator considers that the problem in not imposing responsibility on the robot is not the robot itself, but the current legal framework, as evidenced by using the term deputy and not the term guardian or trustee.

However, European law did not address the problem of the robot's capacity due to the inapplicability of the current legislative framework, and it was satisfied with granting it legal status in the future.

According to the European Parliament report, it considers that the electronic person is any robot that intelligently makes independent decisions or interacts independently with others.

In 2018, the European Parliament proposed to the member states of the Union to develop legislation on the legal aspects of developing the use of robots and artificial intelligence, so that this would be done within a period of 10 to 15 years. In the scope of civil liability, the civil liability of robots and artificial intelligence systems for damages they cause to others is approved under conditions, namely the independence of robots and artificial intelligence systems in work, as well as their ability to learn independently or automatically.

In the scope of insurance for these risks, a compulsory insurance system was created through a fund that guarantees compensation in the event of the absence of insurance coverage for these accidents. In the end, the European Parliament approved civil liability for the work of artificial intelligence systems and robots with a future vision based on establishing an independent legal personality for robots and artificial intelligence systems in the long term.

In October 2020, the European Parliament issued a resolution containing recommendations to the European Commission in Brussels, stressing the need to define a harmonized civil liability system for artificial intelligence. In this resolution, the European legislator acknowledged the possibility of considering artificial intelligence as a product and called for the need to update and develop the legislation of the European Union countries on liability for defective products so that the definition of products is extended to include artificial intelligence. This means expanding the concept of the product in the laws on liability for defective products in line with the specificity of the independence of artificial intelligence technologies, thus making the actors in the chain of artificial intelligence systems of all kinds responsible for compensating for the damages that these systems may cause.

From the above, it is clear that the European legislator, in its decision issued in October 2020, has retreated and abandoned the previous approach that it had adopted in its decision issued in February 2017 when it invented a new legal term and adopted the theory of the human representative, which assumes the existence of a legal representative between the robot equipped with artificial intelligence and the human, whether a manufacturer, operator, owner or user, who was responsible for compensating for damages arising from the actions of the smart robot. The decision issued in 2017 confirmed the inadequacy of the legal framework for traditional liability rules. It granted artificial intelligence a special legal status, such that a new category should be created with characteristics that are consistent with the subjectivity of smart systems.

Finally, it is worth noting that when the European legislator, in the decision issued in October 2020, retracted the idea of granting legal personality to robots equipped with artificial intelligence and returned to embracing the concept of the sufficiency of the general rules of tort liability and liability for defective products in regulating artificial intelligence, he meant the existing artificial intelligence systems and their expected effects in light of the capabilities of weak artificial intelligence. Accordingly, the European legislator, in his decision issued

in 2020, was satisfied with calling for updating and developing the current legal rules, especially the rules of liability for defective products, to include artificial intelligence systems within their scope.

However, the researcher believes that the European Parliament's decision in February 2017 regarding the rules of civil law for robots came as an innovator for a new and unique legal case that represents a new legal thought and is based on the idea of granting special legal status to artificial intelligence and recognizing smart robots as a special legal personality. This forward-looking approach is based on the idea of the expected emergence in the not-too-distant future of strong and superior artificial intelligence systems, and some call this type super artificial intelligence.

## 2. The Position of Arab Legislation:

It has become clear to us that most Arab countries, including the Arab Republic of Egypt, have not addressed the development of a detailed legal regulation for artificial intelligence technologies that regulate transactions in which artificial intelligence technologies are a party or show the extent to which they enjoy a natural or legal personality, with the exception of the United Arab Emirates, which addressed this issue

in simple detail. We will show in the following lines the few attempts in light of Arab legislation as follows:

#### A. United Arab Emirates:

The Emirati legislator addressed the electronic agent or intermediary in the Federal Electronic Transactions and Commerce Law No. 1 of 2006 in Article 1 thereof, defining it as an electronic program or system for an information technology that operates automatically and independently without supervision or intervention from any natural person at the time the work is carried out or responded to.

This law also recognized the validity of contracts concluded between electronic media even in the event of no personal or direct intervention by any natural person in the process of concluding contracts in this manner, and the law considered that everything issued by such systems is as if it was issued by the creator personally.

The United Arab Emirates, specifically the Emirate of Dubai, has set a set of national principles governing the work of artificial intelligence systems in 2019, setting the principles and guidelines for artificial intelligence based on the following principles:

1. Artificial intelligence systems must be fair, transparent, accountable, and understandable.
2. Accountability for the results of the artificial intelligence system does not lie in the system itself, but rather is divided between those responsible for design, development, and implementation.

#### B. Algeria:

Algeria also had a small share in talking about these technologies. In the midst of the laws recently issued within the framework of regulating electronic transactions, especially the Electronic Commerce Law No. 5 of 2018, the Algerian legislator did not refer at all to artificial intelligence and its applications directly or indirectly, which makes us confused about the beliefs that are criticized for this law, unlike some positive legislation that referred indirectly to artificial intelligence through the validity of electronic transactions for the electronic agent or as some legislation called it the electronic intermediary, such as the United Arab Emirates.

#### C. Kuwait:

The Kuwaiti legislator views the robot as a dangerous machine that needs a human to guard it and be held accountable for its illegal

actions according to the system of presumed error, while the robot has the intrinsic ability to overcome risks, which differs from traditional dangerous machines.

Finally, the Kuwaiti Court of Cassation approved a principle stating that any group of funds that the law does not recognize as a legal entity is not considered a financial liability independent of the financial liability of its owner, and its owner in the case of artificial intelligence is the owner of the robot.

This ruling means that the court before which any opponent raises the responsibility of the robot as a legal person must reject his argument and ignore it for its invalidity, as no court can approve a principle that contradicts mandatory legal texts, but the smart machine must have legal rules that govern its illegal work, so the facts of damage that robots may cause cannot be left without legal basis.

### 3. Judicial Decisions:

When talking about court rulings that dealt with artificial intelligence technologies, we find that the judiciary has a wise role in adjudicating cases in which one of the parties is these technologies, as follows:

On the level of the French judiciary, the Paris Court of Appeal ruled that granting the robot a legal personality does not lead to anything other than a mere transfer of the problem, meaning that the people who are responsible for contributing to feeding the robot's financial status in order to enable compensation for victims will most likely be the same people whose responsibility will be established in the event of applying the general rules of liability.

This means that the result will be the same in the end. If we grant the robot a legal personality as one of the most important artificial intelligence technologies, this means that the robot will be responsible for paying compensation to the injured party, which requires the robot to have an independent financial status. So, where does the robot get that money from? The answer will be deducted from the percentage of the profits from trading the robot, i.e., from the financial status of the manufacturer, programmer, owner, and user, which means that the result will be the same in the end. There is no justification for granting artificial intelligence technologies a legal status, according to what the Paris Court of Appeal ruled.

The French Court of Cassation also ruled on June 30 that igniting a self-story machine in a public park indicates beyond a reasonable



doubt that the igniter of the machine had the intent to cause harm because he deliberately set the machine to cause damage and thus held him fully responsible for the error of the artificial intelligence technology.

It is clear to us from this judicial position that artificial intelligence technology is considered a mere thing, and the user of that thing is only liable for the resulting damages.

As for the American judiciary, we present to you this case, the facts of which are summarized as follows: First, the opponent, in this case, is a number of patients, and the defendant is the Da Vinci system, which is a robot invented by the American company Surgery, where the patient, Marasik, in the United States, sued the hospital and the smart surgery system due to the problems he suffered in his reproductive system and the pain in his abdomen after the surgery performed on him using the Da Vinci system to remove his prostate, noting that the system suffered from technical problems when it was operated during the surgery. However, the defendants were acquitted at first glance without going into the details of the trial.

The judges based their decision on the fact that the medical expert report was not sufficient to hold the smart surgery system accountable

for the damage caused to the patient, even though the Da Vinci system made a mistake by stopping receiving messages from the human operator and also issued messages in error. The court decided that the most important thing, in this case, is not only proving a causal relationship between the robot's behavior and the damage suffered by the patient, but also providing an expert testimony that establishes evidence that the surgery system suffered a functional malfunction during the surgical procedure. It is worth noting that the patient insisted on the messages issued by the device during the operation, which he considered sufficient to prove the error, but the court rejected his argument.

In another case, the facts are summarized in the death of Robert Williams, an employee of the Ford Motor Company, after he was run over by a robot in the robot storage area after entering this area while the robot was moving. The Williams family insisted that the design and manufacturing were negligent on the part of the robot manufacturer because, although the robot was performing a task for which it was programmed during the accident, it should have stopped in the presence of the human. The robot manufacturer denies negligence on its part, saying that Ford Motors should have informed its employees of the dangers of the robot. The court ruled in favor of the Williams robot

family. It concluded its decision by saying that while manufacturers are obligated not to introduce defective products to the market, employers are obligated to provide reasonable supervision and provide employees who operate dangerous machines with appropriate instructions. Even if the employer violates its commitment to the manufacturer to subject employees to product training programs and its commitment to take certain other precautionary measures and does not do so, the liability of the manufacturer will remain as a result of its negligence.

Finally, before that, we would like to point out that robots appear to be discussed in matters that raise the issue of judicial bias. Many opinions are now being voiced in the American judiciary. Judges are men of flesh and blood, and litigants also believe that it may be resorted to using a robot as a judge in the future, but that does not exist. They do not like its presence. It is not permissible to dispense with human arbitration, and we do not hope to reach the stage where we find the machine wearing a black robe and sitting inside the court as a judge.

But we know very well that the judge may laugh because of a funny behavior issued by the witness or be affected by the ordeal that the victim is going through, which affects his neutrality and integrity, or get bored and annoyed because of the length of discussions and

arguments between the opponents during the session. Sometimes, it may even appear that the judge is biased against one of the opponents. Assuming that this talk about judges is true, the litigants wonder about the reason for the existence of biased jurisprudential writings for a certain group. Therefore, we present to you the facts of a case that can be summarized in that one day, the Federal Court received several lawsuits from 12 black men complaining of racial discrimination by a white worker. The Federal Court believed that the judge who was managing this dispute within his district was not qualified on the basis that he was a black judge. Therefore, this dispute was rejected because his integrity was questionable. Therefore, one of the judges suggested that it is difficult for a white or black judge to leave their historical heritage to maintain integrity and neutrality. Hence, the need for a robot judge appears in such tendencies, especially since he is isolated from his heritage. History and human beliefs are not concerned with these matters, so we wonder about the possibility of assigning these disputes to a robot judge, especially since there is an application in the United Arab Emirates where there is a judge who has become a legal notary . Are we entering a new era in which these technologies control our social and personal lives?

Also, the issues in the case of Klein vs. the U.S., whose facts are summarized by the pilot placing the plane on the drone during landing despite the regulations warning against using it, which led to serious damage to the plane due to the bad landing by the drone. Despite the presence of an error on the part of the drone, the human pilot was behind this error and was, therefore, responsible for the damage to the plane.

Likewise, in 2021, the Paris Court of Appeal issued a ruling obligating Twitter to pay financial compensation of 1,500 euros to a number of anti-racism associations after its programs based on artificial intelligence mechanisms resent thousands of tweets inciting hatred and racism.

In addition, in April 2019, the European Union issued a set of guidelines on how companies and governments should follow when developing artificial intelligence applications. The most important of these guidelines are the following:

Human control and oversight of artificial intelligence systems, should be ensured so that artificial intelligence systems do not exceed human control.

People should not be manipulated or coerced by artificial intelligence systems, and humans must be able to intervene and supervise every decision made by artificial intelligence.

Finally: The Position of the National Legislator.

In light of this increasing spread of artificial intelligence technologies and systems, the eyes of the Egyptian state were not asleep, as it was keen to interact with the data of this digital age in which technological developments continue every day to create promising opportunities in establishing the foundations of a national economy based on the emerging technologies produced by the Fourth Industrial Revolution, the most prominent of which is artificial intelligence. Therefore, the Egyptian state was keen to achieve a balance in how to interact and deal with this technology and try to benefit from it and avoid its dangers through three things:

A. Supporting and encouraging emerging companies that manufacture artificial intelligence systems and removing obstacles for companies that rely on artificial intelligence technology systems in their work in all sectors and fields.

B. Establishing the National Council for Artificial Intelligence, affiliated to the Cabinet, pursuant to Prime Ministerial Resolution No.

2889 of 2019. This council is responsible for developing the national strategy for artificial intelligence, supervising its implementation, following up on it, and updating it in line with international developments in this field. In particular, this council performs the following tasks :

1. Develops policies and recommendations related to technical, legal, and economic frameworks for artificial intelligence applications.
2. Prepares recommendations for legislation related to the fields of artificial intelligence and proposes to amend them in a manner that supports implementation mechanisms and ensures the necessary protection and insurance, as well as participation in relevant national committees.

C. Issuing Law No. 5 of 2022 regarding the regulation and development of the use of financial technology in non-banking financial activities, which referred for the first time in the history of Egyptian legislation to artificial intelligence systems and technologies in more than one article.

For example, Law No. 5 of 2022 in Article No. 2, Paragraph Four, allowed the Financial Regulatory Authority, in order to achieve the purposes of this law, to use technological applications with the aim of

collecting data digitally, verifying it, and analyzing its indicators through programs prepared for this purpose, and using artificial intelligence mechanisms and other digital models to detect facts that constitute violations of the laws regulating non-banking financial activities and suspicion of money laundering, in addition to early warning of risks related to liquidity, financing, or other matters related to financial stability.

Law No. 5 of 2022 also made sure to define the term financial technology as a mechanism that uses modern and innovative technological technology in the non-banking financial sector to support and facilitate financial, financing, and insurance activities and services through applications, programs, digital platforms, artificial intelligence, or electronic records.

In addition to the above, the law explicitly referred to some electronic technologies that companies wishing to use financial technology in non-banking financial activities will rely on, relying on artificial intelligence applications, as is the case in Article No. 1, Paragraph 14, which defined the electronic applications of the Financial Advisor Program as an innovative automated system used by entities licensed by the Authority to practice non-banking financial activities in analyzing



customer data, their current financial status and future financial goals to provide them with technical advice regarding non-banking financial activities through the use of artificial intelligence applications.

The researcher's opinion on the extent to which artificial intelligence technologies enjoy legal personality.

After we presented to you the pro- and anti-idea trend of artificial intelligence technologies acquiring legal personality, we needed to present to you the researcher's opinion on this issue, as the researcher believes that it is better not to grant artificial intelligence technologies legal personality, whether natural or legal, for the following considerations:

First: The European Parliament's withdrawal from its recommendation issued in February 2017

The recommendations issued by the European Parliament in February 2017 regarding the rules of civil law related to robots are nothing more than a forward-looking view of the future that conflicts with the reality in which we live. This view came only as an expression of the fears that hide in the chest of the European Union and revolve in its head, fearing that smart robots will reach the stage of complete independence from the human element and get out of control.

We must recall what we mentioned earlier, that the recommendations included in the European Parliament's decision concluded that robots do not have an independent legal personality at present. Rather, the European Parliament recommended granting legal personality to robots in the long term, specifically when new generations of robots appear to be completely independent of humans. This recommendation was only a prelude to recognizing the legal personality of smart robots in the future as the most important model of artificial intelligence technologies. Even this recommendation is not binding on countries, as we did not find any country that amended its legislation and took this recommendation into account because they were aware of the consequences of granting this legal personality to these technologies. However, the European Parliament quickly changed its mind and came to its senses and insight, as only a little time passed. We saw it in 2020 demolishing all those recommendations that it had spread among minds, as the European legislator came out to us publicly deciding to abandon the ideas and convictions that form its conscience and belief, including its decision issued in 2017, to announce publicly in 2020 that there was no necessity or need to grant legal personality to smart robots, thus erasing with this last decision what had preceded and

burying it with all the ideas and ambitions it carried in the graveyard of the past.

Second: Fear of intense competition between business owners:

Perhaps it is appropriate not to ignore the severe fears and potential risks that may result from granting legal personality to these technologies, as this will lead to increased competition between companies in order to reach the highest degree of material profit. Each business owner will seek to increase the capabilities of the robot produced by him to reach the high material profit that guarantees a monopoly on the robotics manufacturing market. This will then push business owners to disregard security and safety instructions when manufacturing these robots, because the speed of rushing to profit will make business owners forget the security and safety of the users of these robots and technologies, which will lead to falling into the forbidden, which is the emergence of a new group of robots with dangerous technologies that threaten human health and safety.

Third: Conflict with the inherent rights of humans:

It is not hidden from the mind that the recognition of artificial intelligence technologies, especially robots, with legal personality will lead to opening the door for them to acquire rights and bear

obligations. Accordingly, these technologies will acquire the rights inherent to the human person, such as the right to freedom, the right to marriage, and the right to ownership, which will lead to a threat to the interests of human beings in the near future because humans will find a competitor with a high and strong financial reputation as a result of the increase in the sale of copies of the robot, which will threaten their interests.

Fourth: The absence of guarantees to protect the injured party in the event of damage:

Granting legal personality to artificial intelligence technologies does not mean protecting humans when damage occurs from those technologies. Let me give you a simple example: If Company X manufactured Robot Y and that company fed that robot a criminal algorithm that makes it kill a person, then when that robot found a person, it killed that person based on the algorithm fed to it by the human. Here, who will we refer to in terms of responsibility? Is it the programmer of that technology, the human who fed that robot with that algorithm, or the company that manufactured that robot? At first glance, we will notice that the responsibility here is a joint responsibility between the company and the one who fed that algorithm, but we will

also notice the robot's evasion and escape from that responsibility. How can granting those technologies a legal personality guarantee protection for the injured party from the harm of those technologies?

Fifth: The claim that legal personality should be granted to super-intelligent technologies, rather than other abstract machines whose goal is to serve humans only in a specific subject, based on their enjoyment of awareness and perception, is a comparison with a difference:

Since robots were and will continue to depend on algorithms that humans feed them, since robots are still captive to human orders, how can it be said that super-intelligent robots will enjoy a degree of independence that makes them capable of making decisions? In one of the famous cases, based on which they punished and imprisoned the robot, which an American company produced called (S Not Play Inc. Do), accusing it of practicing law without a license . Where is the meaning of punishment in that, since the robot is not married to feel the torment of being away from his family and household? Also, this is not a punishment for the company, since the company can, after the court issued an order to imprison the robot that practiced the law profession without a license, manufacture another robot and feed it the same algorithm, and then there is no Any harm to the company's interests.

Finally, we would like to say that the arguments of the pro-direction supporting granting legal personality to robots will not rely on strong arguments. However, on the contrary, the European Parliament backed down from its decision to grant legal personality to robots when it found that these technologies will remain under human control and that it is better to control their development from the first moment so that we do not reach a robot that competes with humans in their practical life and also in their social life, avoiding disasters and risks that will not be praised.

## Conclusion

After I have finished, thank God, researching the extent to which artificial intelligence technologies enjoy legal personality, I have reached a set of results and recommendations as follows:

### First: Results

The most important results that I have reached after an analytical study are the extent to which artificial intelligence technologies enjoy legal personality as follows:

1. Artificial intelligence, with its various applications and uses, is the backbone of daily life in the modern era, as it affects the human race in

its present and future. It has become a tangible reality that is indispensable in light of the final technical development that occupies the entire world.

2. Artificial intelligence aims to understand the nature of human intelligence by means of computer programs capable of simulating human behavior characterized by intelligence so that the computer program can solve a problem or reach a decision by referring to a set of algorithms that were previously fed to it.

3. The jurisprudential opinion regarding the legal personality of artificial intelligence technologies was divided into two trends, one of which sees the necessity of recognizing the legal or electronic personality of these technologies, and the second calls for the necessity of not recognizing the legal personality of these technologies and for them to remain among things because they are not qualified to acquire rights or bear obligations.

4. The legal or electronic personality of these technologies cannot be recognized by analogy with the recognition of the legal personality of natural or legal persons because this is a corrupt analogy. As for the trend towards granting them an independent legal personality that serves as a middle position between the legal personality of the natural

person and the legal personality of legal persons, this trend will empty the goal of granting this personality of its essence and content because this recognition, if translated into reality, will lead to the occurrence of many problems and obstacles in the legal aspect.

5. Recognizing the legal personality of technologies that operate with artificial intelligence is likely to lead to the exclusion or limitation of the responsibility of the companies that manufacture and design these technologies and the responsibility of their programmers and users. Perhaps the manufacturing companies will find in this legal trend a pretext to evade their responsibility and manufacture technologies, especially robots, that are dangerous or uncontrollable, either due to the lack of precision in their manufacture or in response to achieving purely material ambitions without subjecting them to the necessary scientific studies or experiments before putting them on the market.

6. The European legislator has moved away from recognizing legal personality at present, despite issuing a decision in February 2017 that included recommendations to grant digital legal personality to smart robots in the future. However, it quickly retracted its decision in October 2020, and it has become established in its conscience and belief that the general or traditional rules in civil law can accommodate the actions



resulting from the actions of artificial intelligence and its various applications.

Second: Recommendations:

This study recommends the following:

1. The researcher sees the necessity of not assigning legal personality to these technologies and that they remain under the umbrella of things without stripping them of their object-oriented nature. However, this does not prevent the legal trend towards amending the provisions and rules of the current civil law or formulating new rules aimed at addressing the shortcomings and deficiencies in solving legal problems resulting from artificial intelligence and its various applications in a manner that is consistent with the technological and digital development witnessed by the current era and includes the absorption of these rules of artificial intelligence and its applications and the problems they raise that require legal solutions for them and also includes individuals of smart robots as the most important artificial intelligence technologies with a special legal system that regulates the provisions related to them, taking into account their privacy, basic features and future developments, provided that it stays far away from touching their object-oriented nature.

2. Moving towards international solidarity in order to impose very strict legislative and international restrictions and controls on global and multinational electronic companies specialized in the field of artificial intelligence and the manufacture of its various technologies and applications, with the necessity of establishing the necessary frameworks to tighten supervision and control over these companies, including the use of committees composed of the best experts and specialists in this field who are known for their integrity and competence to monitor the extent of compliance and obedience to the terms, controls and restrictions imposed on these companies to ensure the achievement of the desired goal of taking this step so that these companies do not move towards developing or manufacturing new generations of robots that are characterized by danger, whether this danger is the result of not observing the security and safety controls and rules that must be complied with or was the result of the desire for competition that drives these companies to create technologies that were not known before without subjecting them to repeated and sufficient experiments even before they are put into circulation in the markets for the purpose of collecting huge profits and so that we do not find ourselves facing great and unbearable risks that threaten the security and safety of human society as a whole.

## References and Sources

### First: Arabic References

- 1- Abdul Nasser Tawfiq Al-Attar: Introduction to the Study of Law and the Application of Islamic Sharia, no publisher mentioned, second edition, no year of publication mentioned.
- 2- Muhammad Saad Khalifa, Introduction to the Study of Law (The Theory of Right).
- 3- Khaled Jamal Ahmed: Introduction to the Principles of Bahraini Law, Publications of the University of Applied Sciences, Kingdom of Bahrain, Fourth Edition, 2022 Edition.
- 4-Muhammad Al-Sayyid Al-Dasouqi: Legal personality between jurisprudence and law, research published in the Journal of the College of Sharia and Islamic Studies, Qatar University, Issue No. 19, 2001 .
- 5- Hossam El-Din Mahmoud Hassan, The Reality of the Legal Personality of Artificial Intelligence, The Spirit of Law Magazine, Issue 102, April 2023.

6- Heba Ramadan Ragab, The Legal Personality of the Super-Intelligent Robot, The Spirit of Law Magazine, Special Issue of the Eighth Scientific Conference on Law and Technology.

7-Mohamed Ibrahim Mohamed Allam, The Extent of the Possibility of Granting Legal Personality and Assigning Civil Liability to Artificial Intelligence, Ruh Al-Qawawin Magazine, Special Issue – The Eighth International Scientific Conference – Technology and Law.

8- Muhammad Muhammad Abd al-Latif, Responsibility for Artificial Intelligence between Public and Private Law, Journal of Legal and Economic Research, Faculty of Law, Mansoura University, Special Issue, May 2021.

9- Muhammad Irfan Al-Khatib: Civil Liability and Artificial Intelligence, the Possibility of Accountability, an In-Depth Analytical Study of the Rules of Civil Liability in French Law, Kuwait International Law School Journal, Eighth Year, First Issue, 2020.

10- Abdul Razzaq Wahba Sayed Ahmed Mohamed: Civil Liability for Artificial Intelligence Damages, An Analytical Study, Journal of Generation of In-depth Legal Research, Issue 43, 2020.

11- Maha Mohamed Ramadan Battikh: Civil Liability for Damages of Artificial Intelligence Systems, a Comparative Analytical Study, Legal Journal of the Faculty of Law, Ain Shams University, 2011.

12- The Kuwaiti Jurisprudence Encyclopedia, Publications of the Ministry of Awqaf and Islamic Affairs, Kuwait, Second Edition, 1437 AH/2016 AD, Part 7.

13-Muhammad Ibrahim Hassanein: Artificial Intelligence and Civil Liability for the Damages of Its Application, a Comparative Analytical Study, research published in the Legal Journal issued by the Faculty of Law, Cairo University, Khartoum Branch, Volume (15), Issue (1), February 2023 AD.

14- Mayada Mahmoud Al-Azab: Civil Liability in the Field of Electronic Surgeries, a Comparative Study, PhD Thesis Submitted to the Faculty of Law, Mansoura University, 1443 AH / 2022 AD.

15-Khaled Jassim Al-Hindani: The legal status of robots in terms of personality and civil liability in Kuwaiti law, research published in the Journal of Law issued by the Scientific Publication Council at Kuwait University, Volume 45, Issue 4, December 2021 .

16–Talal Hussein Al–Raoud: Civil Liability for Damages of Artificial Intelligence Technology Operators, a Comparative Study, PhD Thesis Submitted to the Faculty of Law, Mansoura University, 1443 AH/2022 AD.

17– Eyad Mutasher Sayhoud: Anticipating the Legal Impact of Artificial Intelligence Technology (Humanity – Intelligent Robot) Beyond Humanity, Dar Al Nahda Al Arabiya, Cairo, First Edition, 2021 Edition.

18– Elgamil S. Eladawi: Civil Liability for Damage Caused by Autonomous and Artificially Intelligent Robots. Pub in Journal of Legal and Economic Research, Mansoura University, Volume (2), Issue (76), June 2021.

19– Mohamed Rabie Fath El–Bab: The Legal Nature of Civil Liability for Robot Damages, a Comparative Analytical Study, a paper submitted to the Conference on Legal and Economic Aspects of Artificial Intelligence and Information Technology, held at Mansoura University from (23–24) May, May 2021.

20–Reda Mahmoud Al–Abd: The virtual legal personality, towards recognizing the legal personality of robots equipped with artificial intelligence, research published in the Journal of Law and Technology,

issued by the Faculty of Law at the British University in Egypt, Volume (3), Issue (2), October 2023 .

21–Muhammad Ahmad Al–Sharairi: Smart Civil Liability for Artificial Intelligence Damages, a Comparative Survey Study, research published in the Kuwait International Law School Journal, Tenth Year, Issue (2), Rajab 1443 AH / March 2022 AD.

22– Abdullah Saeed Abdullah Al Wali, Civil Liability for Damages of Artificial Intelligence Applications in Emirati Law, a Comparative Analytical Study, Arab Renaissance Studies, 2021.

23– Mustafa Sidni: Proof of Original Moroccan Nationality by Possession of Apparent Status, Al–Baheth Journal for Legal and Judicial Studies, Issue 5, April 2018.

24–Ahmed Belhaj Jarad: The legal personality of artificial intelligence, a misleading anticipation, research published in the Journal of the Kuwait International Law School, Year (11), Issue (2), Serial Issue (42), Shaaban 1444 AH / March 2023 AD.

25–Muhammad Al–Qutb Masoud: The legal value of the technical personality of the robot and its legal representative in intellectual property systems and provisions, research published in the Journal of

Law, issued by the College of Law, University of Bahrain, Volume (19), Issue (2), October 2022 AD.

26–Jihad Mahmoud Abdel–Mobdi, The Legal Personality of Smart Robots between Granting and Prohibiting, an Analytical Study, research published in the Journal of Jurisprudential and Legal Research, April 2024 issue.

27– Mahmoud Salama Abdel Moneim Sharif, Criminal Responsibility of Man: A Comparative Study, research published in the Arab Journal of Forensic Sciences and Forensic Medicine, Issue Three, Journal (1), 2021.

28– Mona Muhammad Al–Atris Al–Dasouqi, Artificial Intelligence Technology Crimes and the Independent Electronic Legal Personality, a Comparative Study, Issue 81, September 2022.

29– emad Abdul Rahim Al–Dahiyat, Towards a Legal Regulation of Artificial Intelligence in Our Lives: The Problematic Relationship between Humans and Machines, a research published in the Journal of Economic and Legal Research, Volume 8, Issue 5, 2013.

30– Sayed Zarif Atta Sayed, The Extent to Which Artificial Intelligence Technologies Have Legal Personality: A Comparative Study, a



Research Published in the Journal of Legal Studies, Issue No. 11 – Part 1 – September 2023.

31– Hamam Al-Qawsi, The Problem of the Person Responsible for Operating the Robot, The Impact of the Human Deputy Theory on the Feasibility of the Law in the Future, A Prospective Study in Light of the Rules of European Civil Law on Robotics, a Research Published in the Journal of Generation of In-Depth Legal Research, Issue 25, 2018.

32– Abdul Karim Mustafa Muhammad Mahmoud, The Responsibility of the Guardian of Artificial Intelligence-Driven Machines and What Egyptian Legislation Should Be, Journal of Legal and Economic Research, Faculty of Law, Mansoura University, Special Issue, May 2021.

33–Reda Mahmoud Al-Abd, The Virtual Legal Personality Towards Recognizing the Legal Personality of Robots Equipped with Artificial Intelligence, research published in the Journal of the Spirit of Laws, Issue 105, January 2024 issue, Part Two.

34– Ben Othman Farida, Artificial Intelligence: A Legal Approach, research published by Dar Al-Manzomah, Policy and Law Notebooks, University of Kasdi Merbah, Ouargla, Faculty of Law and Political Science, Volume 12, Issue 2, 2020.

35- Aisha bint Butti bint Bishr, Principles and Guidelines for Ethics of Artificial Intelligence, Smart Dubai Magazine, United Arab Emirates, 2019.

36- Kuwaiti Court of Cassation, Civil and Commercial Rulings, Appeal No. 1127 of 2004, Decision issued on 9/28/2005.

37- Mustafa Abu Mandour Musa Issa, The Adequacy of the General Rules of Civil Liability in Compensating for Artificial Intelligence Damages: A Comparative Analytical Study, research published in Damietta Law Journal for Legal and Economic Studies, Issue Five, January 2022.

38- Look at :

<https://arabi21.com/story/1033354/%D9%85%D8%AD%D9%85%D8%AF-%D8%A8%D9%86-%D8%B1%D8%A7%D8%B4%D8%AF-%D9%8A%D8%AF%D8%AE%D9%84-%D8%B2%D9%88%D8%A7%D8%AC-%D8%A7%D9%84%D8%B1%D9%88%D8%A8%D9%88%D8%AA-%D8%A5%D9%84%D9%89-%D8%AF%D8%A8%D9%8A-%D8%B4%D8%A7%D9%87%D8%AF>.

39- Yasser Muhammad Al-Lami, Criminal Liability for Artificial Intelligence Acts: Between Reality and Hope, an Analytical and Prospective Study, Journal of Legal and Economic Research, Special Issue, May 2021.

40- Egyptian Prime Minister's Decision No. 2289 of 2019 regarding the establishment of the National Council for Artificial Intelligence, Official Gazette No. 47 bis issued on November 24, 2019.

41- Law No. 5 of 2022 regulating and developing the use of financial technology in non-banking financial activities, issued on February 8, 2022.

Second: English References:

1- GRAY, THE NATURE AND SOURCES OF THE LAW (2d ed. 1921).

2- European Parliament resolution of 12 February 2019 on a comprehensive European industrial policy on artificial intelligence and robotics.

3- Harry Surden: Artificial Intelligence and the Law, an Overview, a research paper published in the Dubai Judicial Institute Journal, Issue No. 11, Year 8, Sha'ban 1441 AH/April 2020 AD.

- 4- Jenna Burrell: How the Machine “Thinks”: Understanding Opacity in Machine Learning Algorithms. Pub in Big Data & Society, (3), January 2016.
- 5- European Parliament resolution of 16 February 2017.
- 6- European Parliament resolution of 20 October 2020.
- 7- Council Directive 85/374/EEC of 25 July 1985 on the approximation of the laws, regulations, and administrative provisions of the Member States concerning liability for defective products.
- 8- D. Robert SIEMENS, “On ne Peut se PermettreD’Accuser du Retard”, Canadian Urological Association Journal, Vol. 6, Issue 3, June 2012.
- 9- The European Parliament, Civil Law Rules on Robotics of 2017.
- 10- David Marc ROTHENBERG, “Can SIRI 10.0 Buy your Home? The Legal and Policy Based Implications of Artificial Intelligence Robots Owning Real Property”, Washington Journal of Law, Technology & Arts, Vol. 11, Issue 5, Spring 2016.
- 11- Simon Chesterman, Artificial intelligence and the problem of autonomy, Notre Dam Journal of emerging technologies, 2020.

12- Anthony Cuthbertson: Tokyo: Artificial intelligence ‘Boy’ Shibuya Mirai Becomes world’s First AI Bot to Be Granted Residency”, <https://www.newsweek.com/tokyo-residency-artificial-intelligence-boy-shibuya-mirai-702382> .

13- Brian Favre, is there a need for a new, an ecological, understanding of legal animal rights? Journal of Human Rights & The Environment, Available at <https://www.elgaronline.com/view/journals/jhre/11-2/jhre.2020.02.07.xml>.

14- Marie Laffineur Pauchet, First Animal Code in France: A Response to A Dissonant Animal Law. Derecho Animal. Forum of Animal Law Studies, Available at <https://revistes.uab.cat/da/article/view/v10-n2-laffineur-pauchet>.

15- Cédric Riot, Legal Personhood of Animals (I): The case for the legal personhood of companion animals. Synthesis of doctrinal developments, Forum of Animal Law Studies , Available at: <https://revistes.uab.cat/da/article/download/v9-n2-riot/341-pdf-en>.

16- Pompeu Casanovas and Giovanni Sartor: The Laws of Robots. Crimes, Contracts, and Torts, Law, Governance and Technology Series, Vol (10), 2013, Springer Science & Business Media Dordrecht.

17- Joanna Bryson, Mihailis Diamantis, Thomas D. Grant: Of, for, and by the People: The Legal Lacuna of Synthetic Persons. University of Cambridge Faculty of Law Research Paper No (5), 2018.

18- The European Parliament, Committee report tabled for plenary, 2103(INL), 2015.

19- FUTURE of Artificial Intelligence Act of 2017 , Available at: <https://www.congress.gov/bill/115th-congress/house-bill/4625/text>.

20- Available at: <https://www.turing.ac.uk/news/publications/house-lords-select-committee-artificial-intelligence>.

21- the Federal Electronic Transactions and Commerce Law No. 1 of 2006 .

22- Pagallo , The laws of Robots: Crimes, Contracts, and Torts, 2013.

23- rayan Calo, University of Washington School of Law, Legal Studies Research,04-no-,2016.

Third: French References:

1- Saleilles , De la personnalité juridique 2 éd- 1922 ; Michoud, La théorie de la personnalité morale et son application au droit francais , 3e éd, partotabas , 2 vol. 1932 ; Sébag, La condion juridique des

personnes physiques et des personnes morale savant leue naissance, these paris 1938 ; Coulombel (p) , Le partioularism de la condition juridique des personnes morales de droit privé, these nancy, 1949 .

2- Magali Bouteille-Brigant, Intelligence artificielle et droit: entre tentation d'une Personne juridique du troisième type et avènement d'un « transjuridisme », p. disponible à <https://www.actu-juridique.fr/ntic-medias-presse/intelligence-artificielle-et-droit-entre-tentation-dune-personne-juridique-du-troisieme-type-et-avenement-dun-transjuridisme/>.

3- Arnaud Dumourier, Le CESE n'est pas favorable à la creation d'une personnalité juridique pour Les robots ou l'IA, article dans: Le Monde du Droit, 14 Juin 2017, Sur le site: <http://www.lemondedudroit.fr / decryptages / 44205-cese-pas-favorable-creation-personnalite-juridique-robots -ou-ia.html>.

4- Thibault de Ravel d'Esclapon, Intelligence artificielle: nouvelle résolution du Parlement européen, Dalloz actualité, 2019.

5- Simon Simonyan, Le droit face à l'intelligence artificielle: analyse croisée en droits français et arménien ,2021 , p. 58 .

- 6- Document de la Commission (2020) 65 final du 19 février 2020, Livre Blanc Intelligence artificielle, Une approche européenne axée sur l'excellence et la confiance.
- 7- "Capacité de quelqu'un à être autonome, à ne pas être dépendant d'autrui".
- 8- Flavia Reille: Les robots autonomes et la responsabilité civile. Thèse de Master, Panthéon-Assas, Université Paris, 2021.
- 9- Alain Bensoussan: Droit des robots, science-fiction ou anticipation? Entretien issu du Recueil Dalloz n°28 du 30 Juillet 2015.
- 10- Sara Andrade: Intelligence artificielle: réflexion sur la responsabilité du fait des logiciels d'aide à la décision médicale. Thèse présentée à Faculté de droit, des sciences criminelles et d'administration publique, Université de Lausanne, Juin 2021.
- 11- Cécile Crichton, Union européenne et intelligence artificielle: état des propositions, le 5 février 2020.
- 12- Muhammad Ahmed Mujahid: Responsabilité civile des robots dotés d'intelligence artificielle, une étude comparative, Legal Journal, Université du Caire, Volume Neuf, Numéro 2.



- 13- Donovan Méar, L'évolution de la Responsabilité Civile face à l'émergence de l'intelligence artificielle.
- 14- Cass. ère civ. 9déc.2015, pourvoi n 14-25910 Delgado » case.
- 15- Alexandra Bensamoun, L'intégration de l'intelligence artificielle dans l'ordre juridique en droit commun: questions de temps.
- 16- Laurent Archambault et Léa Zimmermann, La réparation des dommages causes par L'intelligence artificielle : le droit française doit évoluer, Gaz. Pal. 6 Mars 2018.
- 17- Nathalie MAXIMIN, Vers des règles européennes de droit civil applicables aux robots, résolution du parlement européen, 16 févr, 2017, Communiqué de presse, Dalloz actualité, 1 mar, 2017.
- 18- e. Paris, Rappot er groups e. travail sur «,: / é rs/h. er droit r/:o çais de.: responsabilité t/l/.. .o. o ..R relations économiques»,25 Juan 2019.
- 19- Vincent Vantighem, Twitter Condamné à dévoiler ses outils pour lutter contre la haine en ligne Lexbase pénal, 2022.