





Regulation of Artificial Intelligence systems, databases, and intellectual property**Regulación de los sistemas de Inteligencia Artificial IA, las bases de datos y la propiedad intelectual**Orozco-Orozco, José Zócimo * ^aa  Universidad de Guadalajara •  S-5977-2018 •  0000-0001-5888-0627 •  247561**Classification:**

Area: Social Sciences
 Field: Social Sciences
 Discipline: Legal Sciences
 Subdiscipline: Other Legal Sciences

 <https://doi.org/10.35429/JLE.2025.9.15.1.1.8>**History of the article:**

Received: September 30, 2025
 Accepted: November 30, 2025

* ✉ [\[zocimo.orozco@academicos.udg.mx\]](mailto:zocimo.orozco@academicos.udg.mx)**Abstract**

This Article refers to the regulation of AI systems, databases and intellectual property. Directive 96/9/CE of the European Council of March 11, 1996, which is pioneering legislation for the legal protection of databases and introduces concepts for the study database regulation as well as a sui generis right for the protection of substantial investments made in databases. Next we will review a report on copyright and artificial intelligence issued by the United States Copyright Office.

Resumen

Este artículo se refiere a la regulación de los sistemas de IA, las bases de datos y la propiedad intelectual. La Directiva 96/9/CE del Parlamento Europeo y del Consejo de 11 de marzo de 1996 que es una legislación para la protección jurídica de las bases de datos que introduce conceptos para el estudio de la regulación de las bases de datos así como un derecho sui generis para la protección de la inversión sustancial que se realiza en bases de datos. Después veremos un informe sobre derechos de Autor e Inteligencia Artificial emitido por la Oficina de Derechos de Autor e Inteligencia Artificial emitido por la oficina de Derechos de Autor de Estados Unidos.

Regulating Artificial Intelligence (AI) Systems, Databases, and Intellectual Property

OBJECTIVES	METHODOLOGY	CONTRIBUTION
The international legal protection surrounding databases in the field of AI and intellectual property was analyzed. The study also examines proposals for the use of data in training databases and artificial	A qualitative approach, documentary research, and a comparative legal analysis are used. Conclusions are drawn regarding the legal treatment of data use for AI training databases in the field of intellectual property.	The protection of fundamental rights in the use of AI training databases within the field of intellectual property is examined. The legal requirements regarding the use of data and artificial intelligence in intellectual property law are also studied.

AI System, Databases, Intellectual Property**Regulación de los sistemas de Inteligencia Artificial IA, las bases de datos y la propiedad intelectual.**

OBJETIVOS	METODOLOGÍA	CONTRIBUCIÓN
Se analizó la protección jurídica internacional alrededor de las bases de datos en materia de IA y la propiedad intelectual. Observar las propuestas para el uso de datos en materia de bases de datos de entrenamiento e IA en México	Se utiliza un enfoque cualitativo y la investigación documental y un análisis jurídico comparativo, conclusiones sobre el tratamiento legal del uso de datos para las bases de datos de entrenamiento de IA en materia de propiedad intelectual.	Se observa la protección de los derechos fundamentales en el uso de bases de datos de entrenamiento de IA en materia de propiedad intelectual. Se estudian los requisitos legales en materia de propiedad intelectual para el uso de datos e IA.

Sistema de IA, Bases de Datos, Propiedad Intelectual**Area:** Promotion of frontier research and basic science in all fields of knowledge

Citation: Orozco-Orozco, José Zócimo. [2025]. Regulation of Artificial Intelligence systems, databases, and intellectual property. Journal-Industrial Organization. 9[15]1-8: e1915108.



ISSN 2524-2113/© 2009 The Authors. Published by RINOE-México, S.C. for its Holding Republic of Peru on behalf of Journal-Law and Economy. This is an open-access article under the license CC BY-NC-ND [<http://creativecommons.org/licenses/by-nc-nd/4.0/>]

Peer review under the responsibility of the Scientific Committee MARVID®. in the contribution to the scientific, technological and innovation Peer Review Process through the training of Human Resources for the continuity in the Critical Analysis of International Research.



Introduction

This article discusses databases, high-risk AI systems, and intellectual property.

This article is important because it examines the regulation of international AI systems and AI systems in Mexico.

It will review the European Union's leading directives on AI system legislation.

A report from the United States Copyright Office will be examined, and finally, Mexican legislation on this matter will be reviewed.

Regulation of Artificial Intelligence systems, databases, and intellectual property.

European Union. [2019]. Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases

4. Whereas Member States recognise copyright protection in different ways with regard to databases and the lack of harmonisation may affect the free movement of goods and services within the Community if these differences continue to exist in the laws of the Member States.

5. Whereas copyright creates an appropriate form of exclusive rights for the authors of databases.

7. The creation of a database requires a substantial investment in terms of human, technical and financial resources, and databases can be copied or accessed at a cost far below that of creating them independently.

Article 1

This Directive concerns the legal protection of databases, whatever their form.

Article 2

Databases shall be considered to be compilations of works, data or other independent elements arranged in a systematic or methodical manner and individually accessible by electronic or other means.

Article 3

1. Databases which, by virtue of their content, constitute an intellectual creation shall be protected as such by copyright. 2 Copyright protection shall not extend to the contents of the database, notwithstanding any rights that may subsist in those contents.

Article 4

The author of a database shall be the natural person or group of persons who created the database or, where the legislation of the States so permits, the legal person designated by that legislation as the owner of the right.

Article 5

The author of a database has the exclusive right with respect to the form of expression of that database, including the right to perform or authorise:

- a] Temporary or permanent reproduction, in whole or in part, by any means or in any form.
- b] Translation, adaptation, reorganisation and any other modification.
- c] Any form of distribution to the public of the database or copies thereof.

Chapter III Sui Generis Right

Article 7

1. Member States shall provide that the maker of a database may prohibit the extraction and/or re-utilisation of the whole or a substantial part of the contents, where the verification or presentation of such contents represents a substantial investment in quantitative or qualitative terms.

2. For the purposes of this chapter, the following definitions shall apply: a] extraction means the permanent or temporary transfer of all or part of the contents of a database or other medium, regardless of the means by which this is done. b] re-utilisation means any form of making available to the public all or a substantial part of the contents of the database by means of distribution of copies, rental or other means.

Article

The first sale of a copy of a database in the Community extinguishes the right to control subsequent sales of that copy in the Community.

Article 9 Exceptions to the Sui Generis Right

Member States may provide that the lawful user of a database may extract and/or use a substantial part of its contents:

- a. In the case of extraction for private purposes of the contents of a non-electronic database
- b. In the case of extraction for the purposes of illustration for teaching or scientific research, provided that the source is indicated and to the extent justified by a non-commercial purpose.
- c. When the extraction or reuse is for public security purposes for the purposes of administrative or judicial proceedings.

Article 10

1 The right referred to in Article 7 shall arise at the moment when the process of creating the database is completed. It shall expire 15 years after 1 January of the year following the date on which that process was completed.

Article 11

1. The right referred to in Article 7 shall apply to databases whose manufacturers or rightholders are nationals of a Member State or have their habitual residence in the territory of the Community.
2. Paragraph 1 shall also apply to companies and undertakings incorporated under the law of a Member State and having their official headquarters in the Community.

Directive [EU] 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market, amending Directives 96/9/EC and 2001/29/EC

According to Directive [EU] 2019/790 of the European Parliament and of the Council [European Union, 2019], article 3

Text and data mining for research purposes

1. Member States shall provide for an exception to the rights provided for in Article 5[a] and Article 7[1] of Directive 96/9/EC, Article 2 of Directive 2001/29/EC and Article 15[1] of this Directive with regard to reproductions and extractions made by research organisations and cultural heritage institutions for the purposes of scientific research, text and data mining of works or other subject matter lawfully accessible.
2. Copies made in accordance with paragraph 1 shall be stored with an optimal level of security and may be retained for scientific research purposes to verify the results of the research.
3. Right holders shall be authorised to implement measures to ensure the security and integrity of stored networks and databases. These measures may not go beyond what is necessary to achieve this objective.
4. Member States shall encourage right holders, research organisations and cultural heritage institutions to work together to establish common best practices for the obligation of the measures referred to in paragraphs 2 and 3 respectively.

Regulation [EU] 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending various EU Regulations and Directives

Regulation [EU] 2024/1689 of the European Parliament and of the Council [2024], in recital 48 of its preamble, states: The magnitude of the adverse consequences of an AI system for the fundamental rights protected by the Charter is particularly important for classifying an AI system as high risk.

These rights include the right to dignity, respect for private and family life, the protection of personal data, freedom of expression and information, freedom of assembly and association, the right to non-discrimination, the right to education, consumer protection, workers' rights, the rights of persons with disabilities, equality between men and women, intellectual property rights, the right to effective judicial protection and to a fair trial, the rights of the defence and the presumption of innocence, and the right to good administration. In addition to these rights, the rights of minors are enshrined in Article 24 and in the United Nations Convention on the Rights of the Child.

88. Throughout the AI value chain, not only are AI systems, tools and services provided, but also components or processes that the supplier incorporates into the AI system for various purposes, such as model training, software integration or other aspects of model development, model retraining, software integration or other aspects of model development.

The parties must provide the aforementioned supplier, by written agreement, with the information, capabilities, technical access and other assistance necessary to enable the supplier to fully comply with the obligations set out in this regulation without compromising their own intellectual and industrial property rights or trade secrets.

104. Providers of licensed and open-source AI models whose parameters, including weight, information on model architecture and information on model usage made available to the public, should be subject to exemptions from transparency requirements, unless they are considered a systemic risk. In which case the fact that the model is transparent and accompanied by an open-source licence should not be considered sufficient reason for it to be exempt from compliance with the obligations of this Regulation.

Where the disclosure of general-purpose AI models under a free and open-source licence does not necessarily reveal information about the dataset used to train the model or make adjustments, or about how compliance with copyright law was ensured, the above exception should not exempt the obligation to provide a summary of the content used for training the

model or the obligation to adopt guidelines for compliance with Union copyright law, in particular to identify and respect the reservation of rights provided for in Article 4[3] of Directive [EU] 2019/790 of the European Parliament and of the Council.

105. General-purpose AI models, in particular large generative AI models capable of generating text, images and other content, are presented as opportunities for innovation, but they also represent a challenge for artists, authors and other creators in terms of how their creative content is created, distributed, used and consumed.

The development and training of these models requires access to large amounts of text, images, video and other data. Text and data mining techniques are used in this context to retrieve and analyse such content, which may be protected by copyright and related rights.

Any use of copyright-protected content requires the authorisation of the rights holder, unless the relevant exceptions and limitations to copyright apply.

EU Directive 2019/790 introduced exceptions and limitations that allow the reproduction and extraction of works and other performances for the purposes of text and data mining in certain circumstances.

Under these rules, rightholders may reserve their rights in relation to their works or other performances to prevent text and data mining, unless the purpose is scientific research. Where the rightholder has adequately reserved the right of exclusion, providers of general-purpose AI models must obtain authorisation from the rightholders to carry out text and data mining of such works.

106. Providers of AI models must take measures to comply with Union law on copyright and related rights, as well as detect and comply with the reservation of rights expressed by Directive [EU] 2019/790. Any provider placing a general AI model on the Union market must comply with the above obligation regardless of the jurisdiction in which the acts supporting the training of general-purpose AI models take place.

107. In order to increase transparency in relation to the data used in the pre-training and training of general-purpose AI models, including texts and data protected by copyright, providers of such models shall produce and make publicly available a detailed summary of the content used for the training of the general-purpose AI model. This summary should take into account the need to protect trade secrets and confidential business information and, at the same time, should be comprehensive in its technically detailed scope in order to facilitate the exercise and enforcement of rights by parties with legitimate interests under Union law. An example is to list the main data sets or compilations used to train the model, such as large data files or private or public databases, and to provide explanations of the data sources used.

108. With regard to the obligations imposed on AI model providers in relation to copyright and making a summary of the content used for training available to the public, the AI office is required to monitor whether the provider has complied with these obligations without individually verifying the training data works for copyright compliance.

167. All parties involved in the application of this Regulation shall respect the confidentiality of the information and data obtained in the performance of their duties. They shall perform their duties and activities in such a way as to protect intellectual and industrial property rights, confidential business information and trade secrets, the application of the Regulation, public and national security interests, the integrity of criminal and administrative proceedings, and the integrity of classified information.

Article 25

1. Any distributor, importer, deployment manager or third party shall be considered a supplier of a high-risk system for the purposes of this Regulation.

5. Paragraphs 2 [requirements for high-risk AI systems] and 3 [obligations of suppliers and persons responsible for the deployment of high-risk AI systems and other parties] shall be understood without prejudice to the need to observe and protect intellectual and industrial property rights, confidential business information and trade secrets, in accordance with Union and national law.

Article 52 Procedure

The provider of a general-purpose AI model that meets the condition in Article 51[1][a] [general risk model with systemic risk] shall notify the Commission without delay.

6. The Commission shall ensure that a list of systemic risk AI models is published and kept up to date, without prejudice to the need to respect and protect intellectual and industrial property rights and confidential business information or trade secrets in accordance with Union and national law.

Article 53

Obligations of providers of general-purpose AI models

[b] They shall develop and maintain information and documentation and make it available to providers of AI systems with the intention of integrating the general-purpose AI model into their AI systems.

This is without prejudice to the need to observe and protect intellectual and industrial property rights and confidential information or trade secrets in accordance with Union and national law.

Article 78 Confidentiality

1. The Commission, market surveillance authorities, notified bodies, including any natural or legal person involved in the application of this Regulation, shall respect the confidentiality of information and data obtained in the performance of their tasks in such a way that, in particular, the following are protected:

[a] the intellectual and industrial property rights and confidential business information or trade secrets of a natural or legal person, including source code, except in the cases referred to in Article 5 [exceptions relating to the protection of undisclosed technical knowledge and business information [trade secrets] against their unlawful acquisition and disclosure] of Directive [EU] 2016/294 of the European Parliament and of the Council.

Annex VII

In accordance with the assessment of the quality management system and the assessment of the technical documentation.

4.5 The notified body shall be granted access to the training model and trained model of the AI system, with their corresponding parameters, once all reasonable means of verifying the substantiated claim have been shown to be insufficient, in order to assess the conformity of the high-risk AI system with the requirements set out in Chapter 3, Section 2.

Such access shall be subject to applicable Union law on intellectual and industrial property and trade secrets.

Report on Copyright and Artificial Intelligence issued by the United States Copyright Office

Part 2 published on 29 January 2025

Report by the Copyright Office

U.S. Copyright Office. [2025, 29 de enero].

This second part of the report addresses the copyright protectability of results generated by AI systems. It analyses the type and level of human contribution required for such results to fall within the scope of protection of US copyright law.

The report reaches the following conclusions:

Copyright issues related to AI can be resolved without changes to existing law.

The use of AI tools as support does not affect the protection of the final work.

Copyright protects original expression created by a human that includes AI-generated material.

Copyright does not extend to purely AI-generated material or material where the human has no control over the elements of expression.

If the person contributes sufficiently to the results generated by AI, authorship should be analysed on a case-by-case basis.

Based on the technology available today, prompts or instructions would not provide sufficient control.

Humans have copyright over their works that are perceptible in AI-generated results, as well as the creative selection, coordination or arrangement of material in the results or in the creative modifications of the output elements.

At this time, there is no justification for a new type of additional or sui generis protection for

AI-generated content.

In the case of Mexico

In Mexico, databases are regulated by the Federal Copyright Law, which states:

According to the Federal Copyright Law [1996].

Art. 108

Databases that are not original are protected for exclusive use by the person who created them for a period of five years.

Art. 109

Access to private information relating to individuals contained in the databases referred to in the previous article, as well as the publication, reproduction, disclosure, public communication and transmission of such information, shall require the prior authorisation of the individuals concerned.

Exceptions shall be made for investigations by the authorities responsible for the prosecution and administration of justice, and access to public archives by persons authorised by law, provided that the consultation is carried out in accordance with the respective procedures.

Article 110

The holder of the economic rights to a database has the exclusive right with respect to the form of expression of the structure of said database to authorise or prohibit:

I. Its permanent or temporary reproduction, in whole or in part, by any means and in any form;

Article

II. Its translation, adaptation, rearrangement, or any other modification;

III. The distribution of the original or copies of the database;

IV. Its communication to the public; and

V. The reproduction, distribution, or public communication of the results of the operations mentioned in section II of this article.

Federal Law on the Protection of Industrial Property

According to the Article 5 of the Federal Law on the Protection of Industrial Property [2020], states that the Mexican Institute of Industrial Property, the administrative authority in matters of industrial property, is a decentralised body with legal personality and its own assets, whose powers include:

Section XXVIII. To promote international cooperation through the exchange of administrative and legal experiences with institutions responsible for the registration and legal protection of industrial property in other countries, including, among others: the professional training and education of personnel, the transfer of work methodologies and organisation, the exchange of publications, and the updating of documentary collections and databases.

Sui generis law in Mexico

Dice De la Parra Trujillo, [2004], states that while the European directive protects non-original databases in terms of their substantial investment, in Mexico we cannot presume that the legislator intended to protect the content of non-original databases, but only their structure.

Conclusions

In conclusion, intellectual property is an institution that must be safeguarded in the development of AI to ensure respect for intellectual property rights holders.

Intellectual property must be respected in the training databases of AI systems.

Generative AI poses a challenge for AI system providers when training models; the documentation must include a description of the data used to train the AI.

Mexico has adequate legislation for the protection of intellectual property, but it must continue to work on updating and adapting its regulatory framework to technological advances.

Declarations

Conflict of interest.

The author declares that there is no conflict of interest.

Author contribution

The author contributed to the entire research process, including study design, data analysis, writing, and results expressed in conclusions and proposals.

Funding

The research was supported by a grant to improve researcher conditions, as a member of the National System of Researchers Level I of the 2025 Research Support Program [PROSNI] of the University of Guadalajara.

Abbreviations

AI, Artificial Intelligence.

References

Background

[Directiva 96/9/CE del Parlamento Europeo y del Consejo de 11 de marzo de 1996 sobre la protección jurídica de las bases de datos.](#)

Basics

[Unión Europea. \[2024\]. Reglamento \[UE\] 2024/1689 del Parlamento Europeo y del Consejo, de 13 de junio de 2024. Diario Oficial de la Unión Europea, L 2024/1689.](#)

[De la Parra Trujillo Eduardo, \[2004\], *El derecho sui generis sobre las bases de datos en México y la Unión Europea*, Instituto de Investigaciones Jurídicas UNAM, México.](#)

Support

Unión Europea. [2019]. Directiva [UE] 2019/790 del Parlamento Europeo y del Consejo, de 17 de abril de 2019, sobre los derechos de autor y derechos afines en el mercado único digital, y por la que se modifican las Directivas 96/9/CE y 2001/29/CE. *Diario Oficial de la Unión Europea*, L 130, 92–125.

Defferences

U.S. Copyright Office. [2025, 29 de enero]. *Copyright and Artificial Intelligence: Part 2 – Copyrightability* [Informe]. Biblioteca del Congreso, Oficina de Derechos de Autor.

Discussions

Ley Federal de Derechos de Autor. [1996]. DOF 24 de diciembre de 1996,

Ley Federal de Protección a la Propiedad Industrial. [2020]. DOF 1 de Julio de 2020,