

AI-Assisted Trademark Examination Under the AI Act and the Role of IP Offices as Deployers

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Abstract

Artificial intelligence is increasingly used by intellectual property offices in trademark registration processes, particularly for tasks such as image search, classification of goods and services, and pre-examination support. These tools generally do not replace human examiners but instead help to structure the material they and applicants rely on. This can influence evidence selection, the description of goods and services, and consistency in examination practices. This article examines the role of IP offices under the EU Artificial Intelligence Act, focusing on their role as users of AI systems provided by external providers. It argues that most AI tools used in trademark registration are unlikely to be classified as high-risk systems under the Act, as trademark examination is not among the specified high-risk areas. Despite this classification, the use of AI in trademark processes requires procedural safeguards because it impacts property rights. The article advocates for proportionate governance, suggesting that while IP offices should not be categorised as high-risk AI deployers, they should adopt safeguards for high-risk systems, including transparency, human oversight, documentation, monitoring for bias, and the ability to contest AI-influenced outcomes.

Keywords: *artificial intelligence, trademarks, EUIPO, AI Act, deployers, administrative decision-making, intellectual property.*

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1. Introduction

Trademark offices around the world are facing more administrative work because of globalisation and more frequent mass filings. To handle this, they have started using technology to improve consistency, reduce backlogs, and lower the chance of human error. Artificial intelligence systems, particularly those facilitating image similarity searches, semantic classification of goods and services, and the automated detection of absolute-ground deficiencies, have now been implemented or are under pilot in over thirty national and regional IP offices.⁴ These developments are beginning to transform the epistemic foundations of trademark examination, including the identification of semantically or conceptually similar signs, the prediction of distinctiveness outcomes, and the automation of certain procedural formalities.⁵

The EU Intellectual Property Office (EUIPO) has been a leading institution in this transformation.⁶ Its extended visual search tools, semantic classification engines, automated similarity assessments, and chatbot interfaces reflect a deliberate strategic orientation toward digitalisation.⁷ Several initiatives described in comparative studies — such as IP Australia’s Smart Assessment Toolkit⁸ or Canadian CIPO’s automated pre-examination correspondence⁹ — have also influenced the European trajectory.¹⁰

However, despite the rapid technological advances, the regulatory framework governing AI in the public sector has remained fragmented and uncertain. Until the recent adoption of the Artificial Intelligence Act (AI Act),¹¹ these AI-supported systems

⁴ World Intellectual Property Organization, “Index of AI Initiatives in IP Offices,” accessed October 10, 2026, <https://www.wipo.int/en/web/ai-tools-services/ipos-initiatives>.

⁵ Anke Moerland and Conrado Freitas, “Artificial Intelligence and Trade Mark Assessment,” SSRN working paper, October 29, 2019, accessed October 10, 2026, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3683807; Alpina Roy and Althaf Marsoof, “Removing the Human from Trademark Law,” *IIC—International Review of Intellectual Property and Competition Law* 55 (2024): 727, <https://doi.org/10.1007/s40319-024-01466-4>.

⁶ European Union Intellectual Property Office, “EUIPO Unveils Reorganisation: Focus on AI, Inclusivity and Sustainability of EUIPN,” 2024, accessed October 10, 2026, <https://www.euipo.europa.eu/cs/news/euipo-unveils-reorganisation-focus-on-ai-inclusivity-and-sustainability-of-euipn>.

⁷ European Union Intellectual Property Office, “Early TM Screening,” accessed October 10, 2026, <https://www.euipo.europa.eu/en/help-centre/searches/early-tm-screening>.

⁸ Dev S. Gangjee, “Eye, Robot: Artificial Intelligence and Trade Mark Registers,” in *Transition and Coherence in Intellectual Property Law: Essays in Honour of Annette Kur*, ed. Niklas Bruun et al. (Cambridge University Press, 2021), 184, <https://doi.org/10.1017/9781108688529.020>; World Intellectual Property Organization, *Original Replies from IPOs in English, French or Spanish*, WIPO/IP/ITAI/GE/18/2, February 8, 2018, 2–3, accessed October 10, 2026, https://www.wipo.int/edocs/mdocs/mdocs/en/wipo_ip_itai_ge_18/wipo_ip_itai_ge_18_2.pdf.

⁹ Philip Lapin and Alexandra Johnson Dingee, “You’ve Got Mail: New (Sort of) Automated Analysis of Goods and Services for Nice Classification for Upcoming Trademark Registration Renewals in Canada,” Smart & Biggar Insights, June 6, 2024, accessed October 10, 2026, <https://www.smartbiggar.ca/insights/publication/you-ve-got-mail-new-sort-of-automated-analysis-of-goods-and-services-for-nice-classification-for-upcoming-trademark-registration-renewals-in-canada>.

¹⁰ International Trademark Association, *Use of Artificial Intelligence by IP Registries*, Emerging Issues Committee, October 2019, accessed October 10, 2026, https://www.inta.org/wp-content/uploads/publications/advocacy/committee-reports/AI-Use-by-IP-Registries-Report_-10.18.2019.pdf.

¹¹ Regulation (EU) 2024/1689 (Artificial Intelligence Act), June 13, 2024, *Official Journal of the*

operated primarily under the combined influence of the General Data Protection Regulation (GDPR),¹² administrative procedural rules, and sector-specific soft law. The entry into force of the AI Act introduces a risk-based regulatory model¹³ that explicitly differentiates between providers, deployers, importers, distributors, and affected persons. This differentiation establishes additional responsibilities and liabilities for public administration entities utilising AI systems.¹⁴

Intellectual property offices operating under the harmonised procedures established by Directive (EU) 2015/2436¹⁵ will primarily assume the role of deployers of AI systems rather than providers. These offices will utilise AI systems developed by external vendors. The status of deployer imposes a specific set of regulatory obligations, including comprehensive documentation duties,¹⁶ transparency requirements,¹⁷ the establishment of effective oversight mechanisms,¹⁸ and the implementation of post-market monitoring procedures.¹⁹

The central argument advanced in this article is that AI systems employed in the trademark registration process should not be subject to an artificial reclassification as high-risk AI. Rather, it is preferable to maintain their formal classification as non-high-risk systems, while simultaneously ensuring that the principles of good administration are observed and that contractual standards are adequately protected throughout their deployment and use. This approach is justified by the administrative character of trademark registration procedures, the requirements of Article 41 of the Charter of Fundamental Rights of the European Union,²⁰ and the AI Act's explicit

European Union L, 2024/1689 (July 12, 2024), <https://eur-lex.europa.eu/eli/reg/2024/1689/oj/eng>.

¹² Regulation (EU) 2016/679 (General Data Protection Regulation), April 27, 2016, *Official Journal of the European Union* L 119 (May 4, 2016): 1–88, <https://eur-lex.europa.eu/eli/reg/2016/679/oj/eng>.

¹³ Wolfgang Zankl, ed., *KI-VO: Verordnung über künstliche Intelligenz (Artificial Intelligence Act)* (MANZ, 2025), 152, https://api.shop.manz.at/upload/text/9783214259617/9783214259617_04_01.pdf.

¹⁴ Cary Coglianese, “EU AI Act’s Impact on Public Sector Use of AI,” SSRN working paper, March 1, 2025, accessed October 10, 2026, <https://doi.org/10.2139/ssrn.5369333>.

¹⁵ Directive (EU) 2015/2436 Approximating the Laws of the Member States Relating to Trade Marks, December 16, 2015, *Official Journal of the European Union* L 336 (December 23, 2015): 1–26, <https://eur-lex.europa.eu/eli/dir/2015/2436/oj/eng>.

¹⁶ Mainly, deployers of high-risk AI falling within specific categories, such as public authorities, are required to carry out a Fundamental Rights Impact Assessment under Article 27 of the AI Act, which entails comprehensive documentation of the intended use and the identification of specific risks associated with the deployment. See AI Act, art. 27.

¹⁷ Pursuant to Article 26(7) of the AI Act, employers are under a duty to inform both workers and their representatives prior to the deployment of high-risk AI systems in the workplace. Furthermore, Article 26(11) establishes the obligation to inform natural persons whenever they are subject to decisions rendered by such systems. See AI Act, art. 26(7), (11).

¹⁸ Article 26(2) of the AI Act stipulates that deployers must designate natural persons with the requisite competence, training, and authority to exercise human oversight over high-risk AI systems. See AI Act, art. 26(2).

¹⁹ Although the establishment of formal post-market monitoring systems is primarily the responsibility of providers under Article 72, Article 26(5) imposes on deployers the obligation to continuously monitor the functioning of the AI system. Deployers must promptly notify both the provider and the market surveillance authorities in the event that any risk or serious incident is detected. See AI Act, arts. 26(5), 72.

²⁰ Charter of Fundamental Rights of the European Union, October 26, 2012, *Official Journal of the*

endorsement of voluntary codes of conduct and best practices applicable to non-high-risk AI systems.

Accordingly, the use of AI in trademark examination constitutes a shared regulatory domain in which trademark law continues to provide the substantive foundation for registration decisions. However, the procedural legality and legitimacy of such processes are increasingly contingent upon the implementation of transparency, comprehensive documentation, traceability, effective human oversight, and the clear contractual delineation of responsibilities between the provider and the intellectual property office acting as the deployer.

This article proceeds in four steps. Section 2 maps the main ways AI is used in trademark registration and explains how these tools support, rather than replace, human decision-making. Section 3 reviews how the AI Act classifies these tools, the role of IP offices as deployers, and why procedural safeguards, good administration, and fundamental rights matter. Section 4 discusses the contractual governance model, covering topics like change management, version control, performance standards, traceability, portability, interoperability, and vendor lock-in. Section 5 offers a conclusion.

2. AI in the Trademark Registration Process

2.1. The Transformative Function of AI in Trademark Administration

Trademark registration is a hybrid administrative process: it involves highly routinised procedural steps (formalities, classification, image handling)²¹ combined with interpretative legal judgments (distinctiveness, descriptiveness, likelihood of confusion).²² This duality renders the process particularly susceptible to targeted AI support. The high volume and multilingual nature of trademark filings in the EU — combined with the need for harmonised outcomes across all Member States — create an environment in which data-driven tools can enhance consistency and reduce administrative errors.²³

The use cases emerging globally, documented in WIPO's Index of AI Initiatives²⁴ and in doctrinal work,²⁵ demonstrate that AI does not replace the normative assessment at the core of trademark examination but instead expands the evidentiary

European Union C 326: 391–407, art. 41, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:12012P/TXT>.

²¹ Sonia K. Katyal and Aniket Kesari, “Trademark Search, Artificial Intelligence, and the Role of the Private Sector,” *Berkeley Technology Law Journal* 35, no. 2 (2020): 531, <https://doi.org/10.15779/Z380V89H87>.

²² Ilanah Fhima and Dev S. Gangjee, *The Confusion Test in European Trade Mark Law* (Oxford University Press, 2019), 11ff., <https://doi.org/10.1093/oso/9780199674336.001.0001>.

²³ Gangjee, “Eye, Robot,” 190.

²⁴ WIPO, “Index of AI Initiatives.”

²⁵ Moerland and Freitas, “Artificial Intelligence and Trade Mark Assessment”; Gangjee, “Eye, Robot,” 184.

and analytical tools available to examiners.²⁶ AI systems detect patterns in vast datasets such as semantic proximity of word elements, phonetic equivalence, and conceptual similarity of figurative marks that humans cannot systematically process at scale. They also mitigate examiner subjectivity by pushing examiners toward comparable precedent clusters.²⁷

This is not only a technical improvement. Once AI systems assist with similarity, classification, or distinctiveness, they influence the factual material on which later legal conclusions are drawn. The final decision may remain human, but the set of facts presented to the examiner is partly machine-curated.²⁸ This is why the use of AI in trademark examination requires a specific governance response.

2.2. Key Domains of AI Use in Trademark Law

2.2.1. Image and Conceptual Similarity Search

Image-based trademark search constitutes the most advanced and widely implemented AI application within intellectual property offices.²⁹ AI-powered visual search engines, utilising convolutional neural networks,³⁰ extract high-dimensional features from figurative marks and compare them against registry databases. The extended visual search of the European Union Intellectual Property Office and the World Intellectual Property Organisation's Global Brand Database primarily employ traditional search methods that emphasise lexical similarity, thereby limiting their

²⁶ Gangjee, "Eye, Robot," 180.

²⁷ IP Australia, "TM Checker: Free Trade Mark Availability Check," accessed October 10, 2026, <https://www.ipaustralia.gov.au/trade-marks/search-existing-trade-marks/tm-checker>. The Intellectual Property Office of Singapore (IPOS) has also implemented several AI-driven initiatives relevant to the trademark registration process. Notably, the Distinctiveness Checker utilises machine learning algorithms to support examiners in assessing the inherent registrability of word marks by reference to historical data. See WIPO, "Index of AI Initiatives."

²⁸ Moerland and Freitas, "Artificial Intelligence and Trade Mark Assessment," 19. Where such machine-curated material contains personal data relating to applicants, representatives, opponents or other natural persons, its selection, ranking and subsequent use also constitute processing governed by the applicable data-protection regime. In particular, the principles of fairness, transparency and accuracy (see GDPR, art. 5(1)(a), (d)) require the office to consider whether AI-generated rankings or summaries distort, omit or incorrectly associate personal information with a particular application or procedural party. See Dara Hallinan and Frederik Zuiderveen Borgesius, "Opinions Can Be Incorrect (in Our Opinion)! On Data Protection Law's Accuracy Principle," *International Data Privacy Law* 10, no. 1 (2020): 1–10, <https://doi.org/10.1093/idpl/ipy025>.

²⁹ Some offices have already deployed AI systems. For example, the Norwegian Industrial Property Office (NIPO) uses Accepto, an AI-powered tool, to prioritise results based on image property coding. The Intellectual Property Office of Singapore (IPOS) offers an AI-powered image search through its e-services portal and mobile app (IPOS GO) to find visually and conceptually similar trademarks. WIPO's Global Brand Database also helps trademark owners find visually similar trademarks among millions of records. Other offices are still developing or testing their systems. Russia is working on a neural network-based search engine for image similarity and word recognition. Spain is testing cloud-based AI tools for image comparison to detect earlier distinctive signs. Austria is planning more AI applications for trademark image search. See WIPO, "Index of AI Initiatives."

³⁰ Gangjee, "Eye, Robot," 181.

capacity to detect deeper conceptual or semantic relationships.³¹ In contrast, AI systems are capable of identifying conceptual similarities between stylised elements, such as depictions of predatory animals, geometric motifs, or dynamic shape elements, regardless of superficial graphical differences.³²

From a legal perspective, this functionality extends beyond improving search efficiency and may contribute to redefining the parameters of perceptual similarity as articulated in Article 8(1)(b) of the European Union Trade Mark Regulation (EUTMR).³³ As examiners are increasingly presented with a more nuanced and comprehensive set of similar trademarks, their interpretation and application of similarity standards are likely to evolve. This development represents a subtle yet significant doctrinal shift.³⁴

2.2.2. Semantic Classification of Goods and Services

Semantic search engines for goods and services, such as those used in EUIPO's *EasyFiling* form³⁵ change how applicants interact with the Nice Classification.³⁶ Instead of browsing lists, applicants enter free-text descriptions, and AI suggests harmonised terms.³⁷ This helps reduce clerical errors and improves initial compliance with classification requirements.

From a doctrinal perspective, AI-assisted semantic classifiers are more than just neutral administrative tools. Their main role goes beyond improving the technical accuracy of goods and services classification under the Nice Classification.³⁸ They also shape the language applicants use to describe the scope of protection they seek under Articles 31 and 33 of the EUTMR (Articles 39 and 40 of EUTMD). By recommending standardised terminology, suggesting semantically related expressions, or discouraging certain descriptions, AI systems may gradually harmonise the language of trademark applications across jurisdictions.

³¹ Rubén Manrique et al., “Oportunidades y desafíos en la aplicación de Inteligencia Artificial a procesos de Validación Marcaria,” *Revista Ibérica de Sistemas e Tecnologías de Informação*, no. E24 (2019): 226, <https://www.risti.xyz/issues/ristie24.pdf>; Gangjee, “Eye, Robot,” 184.

³² Gangjee, “Eye, Robot,” 185; Katyal and Kesari, “Trademark Search,” 532.

³³ Regulation (EU) 2017/1001 on the European Union Trade Mark, June 14, 2017, *Official Journal of the European Union* L 154 (June 16, 2017): 1–99, <https://eur-lex.europa.eu/eli/reg/2017/1001/oj/eng>.

³⁴ Julien Cabay et al., “Looking through the Crack in the Black Box: A Comparative Case Law Benchmark for Auditing AI-Powered Trade Mark Search Engines,” *Computer Law & Security Review* 59 (2025): 6 (PDF), <https://doi.org/10.1016/j.clsr.2025.106167>.

³⁵ WIPO, “Index of AI Initiatives”; European Union Intellectual Property Office, “Apply Now: Easy Filing,” accessed October 10, 2026, <https://www.euipo.europa.eu/nl/trade-marks/how-to-apply/apply-now>.

³⁶ World Intellectual Property Organization, *Nice Classification, 13th Edition, Version 2026—NCL(13-2026)*, 2026, accessed October 10, 2026, https://www.wipo.int/nice/its4nice/ITSsupport_and_download_area/20260101/revision_files/ncl-20260101-EF-information.pdf.

³⁷ Gangjee, “Eye, Robot,” 180.

³⁸ Graeme B. Dinwoodie and Dev S. Gangjee, “The Image of the Consumer in EU Trade Mark Law,” in *The Images of the Consumer in EU Law: Legislation, Free Movement and Competition Law*, ed. Dorota Leczykiewicz and Stephen Weatherill (Hart Publishing, 2016), 339–380, DOI: 10.5040/9781474202510.ch-015.

This standardisation of language has wider legal effects. Under Article 8(1)(b) EUTMR (Article 5(1)(b) EUTMD), assessing the likelihood of confusion requires considering both the similarity of the marks and the goods or services involved.³⁹ While AI systems do not determine the legal outcome, they can shape the facts used in that assessment. Suggestions from semantic classifiers may affect how applicants write their specifications, how opponents view the claimed protection, and how examiners judge the conceptual closeness of goods and services.⁴⁰ In practice, AI acts not only as a classification tool but also as a technology that shapes the evidence and language used in legal assessments.

The growing use of generative AI agents makes these effects even stronger. These agents can suggest alternative specifications, rewrite descriptions of goods and services, or create arguments about the similarity of marks or products. While these features make the process more efficient, they also risk causing mental fixation. This means applicants, third parties in opposition or cancellation proceedings, or even administrative staff might unknowingly rely on AI-generated wording or assessments. These considerations highlight why transparency under the AI Act has such importance. Where AI systems contribute to the formulation of specifications or otherwise influence the administrative examination of trademark applications, applicants and other parties should be informed of their use. Such transparency is needed not just to comply with the requirements imposed by the AI Act, but also to keep the administrative process fair and to ensure that legal assessments are made by human decision-makers, not by hidden algorithms.

2.2.3. Automated Pre-Examination Assessment and Pattern Detection

Some intellectual property offices, such as those in Australia⁴¹ and Canada,⁴² now use artificial intelligence systems to identify potential deficiencies prior to the formal examination process. These deficiencies may include, for example, marks that

³⁹ Annette Kur and Martin Senftleben, *European Trade Mark Law: A Commentary* (Oxford University Press, 2017), 220ff., <https://doi.org/10.1093/oso/9780199680443.001.0001>.

⁴⁰ World Intellectual Property Organization, “AI-Based Classification for IP Data,” accessed October 10, 2026, <https://www.wipo.int/en/web/ai-tools-services/classification-assistant>.

⁴¹ IP Australia offers the Australian Trade Mark Search, which enables users to find existing trademark phrases and images. This system uses Clarivate Image Recognition software along with automated business rules and Natural Language Processing techniques like keyword extraction, segmentation, lemmatisation, spelling correction, and character replacement. These features ensure that automated queries capture relevant variations of the trade mark being searched. See WIPO, “Index of AI Initiatives.”

⁴² In April 2022, the Canadian Intellectual Property Office (CIPO) began issuing pre-assessment letters for all national, unexamined trademark applications. Applications undergo an automated analysis that considers only the description of goods and services. Following this analysis, CIPO issues correspondence to the applicant indicating either that the goods and services are acceptable or identifying potential issues. These issues may include goods or services not classified into the appropriate Nice class or described using an unacceptable term. See WIPO, “Index of AI Initiatives.”

lack inherent distinctiveness⁴³ or that contain prohibited terminology.⁴⁴ These systems are trained on past refusals and objections, which allows them to provide estimates such as “high likelihood of objection under descriptiveness.”⁴⁵

Within the European Union, such predictive systems carry significant legal implications. Primarily, they relate to the absolute grounds for refusal under Article 7 of the EUTMR. Furthermore, they also connect to rules on automated decision-making in Article 22 of the GDPR.⁴⁶ Additionally, these systems may influence applicant behaviour before formal examination processes.

While predictive tools cannot make final decisions, their deployment requires strong oversight, as set out in the Artificial Intelligence Act.⁴⁷ This becomes especially important given that applicants often adjust their submissions in response to the outputs generated by these systems.⁴⁸ Such modifications may affect the outcomes of the decisions; therefore, clear guidelines and accountability are necessary.

2.2.4. AI as a Tool for Examiner Consistency

IP offices often struggle with inconsistent decisions from examiners, which may vary depending on their backgrounds, workloads, or simply personal approaches.

This inconsistency makes the effort to ensure fairness and predictability in intellectual property rulings much harder. However, AI systems that identify “precedent clusters” can help address the problem by linking decisions to similar past cases, which

⁴³ EUTMR, art. 7(1)(b); EUTMD, art. 4(1)(b); Kur and Senftleben, *European Trade Mark Law*, 217ff.; Gangjee, “Eye, Robot,” 186.

⁴⁴ EUTMR, art. 7(1)(f); EUTMD, art. 4(1)(f); Kur and Senftleben, *European Trade Mark Law*, 121ff.

⁴⁵ Ilanah Fhima and Catrina Denvir, “An Empirical Analysis of the Likelihood of Confusion Factors in European Trade Mark Law,” *IIC—International Review of Intellectual Property and Competition Law* 46, no. 3 (2015): 313, 319, <https://doi.org/10.1007/s40319-015-0311-6>.

⁴⁶ Article 22(1) of the GDPR applies to decisions made solely by automated processing that have legal effects on a person or similarly significant impacts. In the SCHUFA decision, the ECJ held that generating a probability value through automation can count as a decision if a third party relies on that value to make the final call. By analogy, we may assume that an AI-generated recommendation used in trademark proceedings could become relevant under Article 22 of the GDPR where, in practice, it predetermines an outcome affecting a natural-person applicant or another data subject. The decision stipulates that merely formal human involvement is insufficient: human oversight must be meaningful and carried out by someone with the power and knowledge to effect change. See also Article 29 Data Protection Working Party, *Guidelines on Automated Individual Decision-Making and Profiling for the Purposes of Regulation 2016/679*, WP251rev.01, revised February 6, 2018, 21, accessed October 10, 2026, <https://ec.europa.eu/newsroom/article29/redirection/document/49826>; *SCHUFA Holding (Scoring)*, Case C-634/21, December 7, 2023, ECLI:EU:C:2023:957, paras. 60–73, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62021CJ0634>; Bjorn Aslak Juliussen, “The Right to an Explanation Under the GDPR and the AI Act,” in *MultiMedia Modeling: MMM 2025, Proceedings, Part IV*, ed. Ichiro Ide et al. (Springer, 2025), 184, https://doi.org/10.1007/978-981-96-2071-5_14.

⁴⁷ Michèle Finck, *The EU Artificial Intelligence Act: A Commentary* (Oxford University Press, 2026), 301ff., <https://doi.org/10.1093/law/9780198925705.001.0001>; Zankl, *KI-VO*, 494; Mario Martini and Christiane Wendehorst, eds., *KI-VO: Verordnung über künstliche Intelligenz. Kommentar*, 2nd ed. (C. H. Beck, 2026), 488, <https://katalog.slub-dresden.de/en/id/0-1935499017>.

⁴⁸ Katyal and Kesari, “Trademark Search,” 505.

serves to reduce differences in examiner choices.

The implications of using AI in this way are important. By promoting consistency in legal interpretation through grouping similar cases, certain interpretative approaches may become more standardised.⁴⁹ For example, different national views on geographical names or suggestive marks could become less pronounced if examiners consistently receive AI-selected examples of similar cases.

2.2.5. Generative AI for Knowledge Retrieval and Examiner Support

Generative artificial intelligence, particularly retrieval-augmented generation models, is now increasingly used to assist examiners in different ways.⁵⁰ This technology can summarise opposition filings, extract important facts, and analyse foreign trademarks across languages. Additionally, it provides explanations of procedural requirements.

An illustrative example of this progress is NIPO's retrieval-augmented chatbot prototype.⁵¹ Such generative systems can help examiners find, organise, or summarise information, but they also risk leading users to over-rely on outputs that appear legally authoritative.⁵² The main concern is not just technical mistakes, but also the slow shift in legal reasoning toward systems not designed to make legal judgments.⁵³ Thus, IP offices need to use generative AI tools within a strong public governance framework that ensures real human oversight, regular monitoring, traceability, and transparency for users.⁵⁴

⁴⁹ Cabay et al., "Looking through the Crack," 7 (PDF).

⁵⁰ WIPO, "Index of AI Initiatives."

⁵¹ WIPO, "Index of AI Initiatives."

⁵² Cary Coglianese and David Lehr, "Regulating by Robot: Administrative Decision Making in the Machine-Learning Era," *Georgetown Law Journal* 105, no. 5 (2017): 1174, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2928293.

⁵³ The AI Act states that systems used by or for judicial authorities to help research, interpret, or apply the law, or used similarly in alternative dispute resolution, are considered high-risk under Article 6(2) and Annex III, paragraph 8. Recital 61 explains that these systems are high-risk because they can have a significant impact on democracy, the rule of law, individual freedoms, and the right to an effective remedy and fair trial, and because of the risks of bias, errors, and lack of transparency. Annex III, paragraph 8(a), also covers AI systems intended to be used in a similar way in alternative dispute resolution. See AI Act, art. 6(2), annex III, point 8(a), recital 61; Zankl, *KI-VO*, 463; Finck, *EU Artificial Intelligence Act*, 231; Giorgio Resta and Cristina Frattone, "Classification of High-Risk AI Systems and Its Update (Articles 6, 7, 50, 71, Annex I and Annex III)," in *The EU Artificial Intelligence Act: A Thematic Commentary*, ed. Gianclaudio Malgieri et al. (Hart Publishing, 2026), 208, <https://www.bloomsbury.com/uk/eu-artificial-intelligence-act-9781509988594/>.

⁵⁴ Where generative or retrieval-augmented systems process procedural submissions containing personal data, the office must additionally ensure that only the data necessary for the relevant administrative purpose is entered into the system. The provider should not reuse this data for unrelated model training without an independent lawful basis. These requirements follow from the principles of purpose limitation and data minimisation and apply independently of the risk classification under the AI Act. See GDPR, arts. 5(1)(b)–(c), 6, 25; European Data Protection Board, *Opinion 28/2024 on Certain Data Protection Aspects Related to the Processing of Personal Data in the Context of AI Models*, December 17, 2024, accessed October 10, 2026, https://www.edpb.europa.eu/system/files/2024-12/edpb_opinion_202428_ai-models_en.pdf; Dominik Dworniczak, "Overview of the General Data Protection Regulation (GDPR) in the Context of

2.3. Interim Conclusion on AI Assistance and Human Decision-Making in Trademark Examination

In summary, AI systems used in trademark examination do not replace human decision-making. They rather support and structure it. They help examiners find relevant evidence, focus on potentially similar signs, standardise the wording of goods and services, and make the office's internal practice more consistent. This also means that AI can indirectly influence how trademark law is applied in practice. For this reason, its use should be governed by clear rules, especially regarding transparency, human oversight, and the division of responsibilities between the AI provider and the IP office acting as a deployer under the AI Act.

3. The AI Act and the Provider–Deployer Relationship in Trademark Administration

3.1. The Analytical Importance of the Provider–Deployer Distinction

The Artificial Intelligence Act sets out different roles for those involved with AI: providers, deployers, importers, distributors, and affected persons.⁵⁵ In trademark registration, the most important are providers, who develop and market the AI system,⁵⁶ and deployers (the entities that use the AI system under their authority).⁵⁷

This distinction is strategically significant. Without it, public bodies like IP offices would have to assume the same responsibilities as providers, which would not work and would contradict the legislator's intent. Providers design and train the systems, while deployers use them in their organisations.⁵⁸

In the IP offices context, they act as deployers because their AI tools are provided by external software vendors or shared WIPO technologies.⁵⁹ Even in projects involving internal participation, such as the EUIPO's extended visual search, the main

AI," in *JuLIA Handbook—Artificial Intelligence and Data Protection*, ed. Fabienne Jault-Seseke and Agathe Missakian (JuLIA Project, 2025), 22, <https://www.julia-project.eu/sites/default/files/2025-12/Handbook%20JuLIA%2012%20Dec%202025%20rev.2.pdf>.

⁵⁵ Finck, *EU Artificial Intelligence Act*, 59ff.; Christiane Wendehorst, "Art. 3: Begriffsbestimmungen," in *KI-VO: Verordnung über künstliche Intelligenz. Kommentar*, 2nd ed., ed. Mario Martini and Christiane Wendehorst (C. H. Beck, 2026), 96ff., <https://katalog.slub-dresden.de/en/id/0-1935499017>.

⁵⁶ AI Act, art. 3(3).

⁵⁷ AI Act, art. 3(4).

⁵⁸ Christoph Krönke, "Legal Requirements for the Use of AI in Public Administration," in *Buying AI: The Legal Framework for Public Procurement of Artificial Intelligence in the EU*, ed. Christoph Krönke and Patricia Valcárcel Fernández (Edward Elgar Publishing, 2025), 40, <https://doi.org/10.4337/9781035311736.00008>; Gabriela Zafir-Fortuna, "Definitions in the AI Act—Main Actors and Key Concepts (Article 3)," in *The EU Artificial Intelligence Act: A Thematic Commentary*, ed. Gianclaudio Malgieri et al. (Hart Publishing, 2026), 45, <https://www.bloomsbury.com/uk/eu-artificial-intelligence-act-9781509988594/>.

⁵⁹ James Nurton, "Transformation of IP Offices through Responsible Use of AI," EUIPO, 2024, accessed October 10, 2026, <https://www.euipo.europa.eu/cs/news/transformation-of-ip-offices-through-responsible-use-of-ai-by-james-nurton>.

system is developed by external providers.⁶⁰ This means IP offices may possibly have certain obligations under Articles 26–27 of the AI Act.

This is also important in practice because the legality of using AI in trademark examination is not solely about complying with the EUTMR (EUTMD). It also depends on whether the office can show that the AI tool was used transparently, under human control and within a reliable governance framework.

3.2. AI in Trademark Administration and Its Divergence from the High-Risk Definition in Annex III

Given the potential influence of artificial intelligence systems on decisions affecting the fundamental right to property, as enshrined in Article 17 of the Charter of Fundamental Rights, one might anticipate that trademark examination systems would qualify as high-risk under Annex III of the AI Act. However, a closer look at the legal provisions and structure of the AI Act shows otherwise.

Annex III encompasses AI systems used in essential public services, including welfare, healthcare, emergency assistance, law enforcement, biometric identification, and the administration of justice. Trademark examination does not fall within these specified categories.⁶¹ While trademark rights are constitutionally protected, the process for their registration is not comparable to adjudicating legal disputes or providing essential services. Consequently, most AI systems used by intellectual property offices are likely to be classified as limited- or minimal-risk.

This classification is important for two reasons. First, the strict rules for high-risk AI systems, such as those in Articles 9 to 15 and the deployer duties in Articles 26 and 27 of the AI Act, will not normally apply. Second, the governance of these systems becomes mainly contract-driven. Thus, IP offices must use service contracts, internal rules and voluntary standards to comply with safeguards that the AI Act does not impose directly on non-high-risk systems.⁶²

⁶⁰ European Union Intellectual Property Office, *AI Work Instructions*, accessed October 10, 2026, https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/contentPdfs/about_euipo/AI_at_EUIPO/AIWorkInstructions_en.pdf.

⁶¹ AI tools used in trademark registration should normally fall outside the high-risk category under Art. 6(2) AI Act and Annex III. Trademark examination is not listed among the sensitive areas covered by Annex III, and point 8(a) concerns AI systems used by or on behalf of judicial authorities for legal research, interpretation and application to concrete facts, as well as similar uses in alternative dispute resolution. The final text does not extend this category to administrative bodies, despite the European Parliament's earlier proposal to do so. See AI Act, recital 61, annex III, point 8(a); European Parliament, *Amendments Adopted on June 14, 2023 on the Proposal for an Artificial Intelligence Act*, P9_TA(2023)0236, June 14, 2023, accessed October 10, 2026, https://www.europarl.europa.eu/doceo/document/TA-9-2023-0236_EN.html; Resta and Frattone, "Classification of High-Risk AI Systems," 208; Guillaume Couneson, "Article 6: Classification Rules for High-Risk AI Systems," in *The EU Artificial Intelligence (AI) Act: A Commentary*, ed. Ceyhan Necati Pehlivan et al. (Wolters Kluwer, 2025), 214, <https://law-store.wolterskluwer.com/s/product/the-eu-artificial-intelligence-ai-act-a-commentary/01tPg000007gkK9IAI>.

⁶² For low-risk AI tools used by IP offices as deployers in trademark registration, the main direct obligations are AI literacy under Art. 4 AI Act and, where the system interacts with natural persons, transparency requirements under Art. 50 AI Act. The detailed deployer duties in Art. 26 and Art. 27 of the AI Act apply only to high-risk AI systems and therefore do not affect standard trademark registration tools.

3.3. Procedural Safeguards and Fundamental Rights in AI-Assisted Trademark Registration

Nevertheless, the fact that AI tools used in trademark registration typically fall outside the AI Act's high-risk category does not imply that their use is legally neutral. Trademark registration is still an administrative procedure conducted by public authorities since EUIPO and national intellectual property offices act only within the limits of the law, and their decisions may affect the legal position of applicants, opponents and proprietors of earlier rights. This is a crucial fact. Particularly in examination, opposition, invalidity, and revocation proceedings, where the office evaluates evidence, applies legal criteria, and issues decisions affecting intellectual property rights.

The use of AI in this context may therefore have an influence over procedural guarantees. Even where the final decision remains formally human, AI may shape the material on which the examiner relies. It may select similar earlier marks, structure evidence, suggest classifications of goods and services, or indicate possible absolute grounds for refusal. These functions might affect the applicant's ability to understand the case against registration, to react to relevant evidence and to challenge the reasoning of the office. Hence, the deployment of AI tools must be assessed not only from the perspective of technical efficiency but also from the perspectives of fair administrative proceedings, the duty to state reasons, and the right to be heard.⁶³

This conclusion is reinforced by the property dimension of trademark rights.

See AI Act, arts. 4, 26–27, 50, 95.

⁶³ The right to be heard (Art. 41 (2)(a) of the EU Charter) constitutes a fundamental principle of EU law (Art. 6(3) TEU), binding upon both the EUIPO and national intellectual property offices in the exercise of their administrative functions. Accordingly, the EUIPO is required to base its decisions exclusively on facts, legal provisions, and evidence in respect of which the parties have been afforded the opportunity to submit observations. Furthermore, the EUIPO is obliged to uphold the principles of equal treatment and good administration. As a result, the examination process must be rigorous, ensuring that each case is assessed with due care and thoroughness. The EUIPO's decisions must be written and explained clearly so that parties can defend their rights and courts can review them. See EUTMR, art. 94; Charter of Fundamental Rights, arts. 41, 51; Consolidated Version of the Treaty on European Union, June 7, 2016, *Official Journal of the European Union* C 202: 13–45, art. 6(3), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:12016M/TXT>; *Kamino International Logistics and Datema Hellmann Worldwide Logistics, Joined Cases C-129/13 and C-130/13*, July 3, 2014, ECLI:EU:C:2014:2041, paras. 38–39, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62013CJ0129>; *Kaatsu Japan v. OHIM (KAATSU)*, Case T-567/12, November 7, 2014, ECLI:EU:T:2014:937, paras. 50–51, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62012TJ0567>; *Indo Internacional v. OHIM—Visual (VISUAL MAP)*, Case T-260/08, January 24, 2012, ECLI:EU:T:2012:23, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62008TJ0260>; *Agencja Wydawnicza Technopol v. OHIM*, Case C-51/10 P, March 10, 2011, ECLI:EU:C:2011:139, para. 73, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62010CJ0051>; *Aitic Penteo v. OHIM—Atos Worldline (PENTEO)*, Case T-585/10, May 22, 2012, ECLI:EU:T:2012:251, para. 37, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62010TJ0585>; *Beifa Group v. OHIM—Schwan-Stabilo Schwanhäuffer (Instruments for Writing)*, Case T-608/11, June 27, 2013, ECLI:EU:T:2013:334, para. 67, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62011TJ0608>; European Union Intellectual Property Office, *Guidelines for Examination: Part A, Section 2, General Principles of Procedure, “Right to Be Heard”*, accessed October 10, 2026, <https://www.euiipo.europa.eu/en/guidelines>.

Intellectual property is protected as a possession under Article 1 of Protocol No. 1 to the ECHR.⁶⁴ The European Court of Human Rights has accepted that intellectual property rights may constitute protected assets, and in *Anheuser-Busch v Portugal* it held that a trademark application may fall within the scope of property protection.⁶⁵ Thus, trademark registration proceedings concern not only administrative efficiency but also the creation, denial, or limitation of protected economic assets.

In formal terms, standard AI tools used for trademark registration are not included in Annex III, paragraph 8(a) of the AI Act, because this category is limited to systems used by or on behalf of judicial authorities for researching and interpreting facts and law and applying the law to concrete facts.⁶⁶ Recital 61 also confirms that purely administrative activities should not be considered high risk. However, a purpose-driven interpretation suggests a more careful approach.

If judicial AI is considered high risk because it can affect fundamental rights, the rule of law, and procedural fairness, then similar concerns may arise when AI is used by IP offices in proceedings affecting property rights and procedural guarantees. Nevertheless, instead of formally labelling trademark AI as high risk, IP offices should adopt the key safeguards from the high-risk regime through their internal rules and contracts with providers.

3.4. Deployer Obligations of IP Offices

The deployer framework establishes an important set of obligations for public authorities regarding the integration of AI systems into administrative processes. At the same time, the AI Act seeks to balance two objectives. On the one hand, it encourages the development and adoption of beneficial AI systems across the private and public sectors. On the other hand, it aims to ensure a high level of protection of health, safety and individual freedoms.⁶⁷

Recital 58 highlights this balance by stating that the AI Act should not hamper the development and use of innovative approaches in public administration, since a broader use of compliant and safe AI systems may benefit public authorities, provided these systems do not pose high risks to natural or legal persons.

⁶⁴ Council of Europe, *Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms*, ETS no. 9, opened for signature March 20, 1952; entered into force May 18, 1954, art. 1, accessed October 10, 2026, <https://www.coe.int/en/web/conventions/full-list?module=treaty-detail&treaty-num=009>.

⁶⁵ Christophe Geiger and Elena Izyumenko, “Shaping Intellectual Property Rights Through Human Rights Adjudication: The Example of the European Court of Human Rights,” *Mitchell Hamline Law Review* 46, no. 3 (2020): 538, <https://open.mitchellhamline.edu/mhlr/vol46/iss3/3/>.

⁶⁶ Couneson, “Article 6,” 213; Hannah Ruschemeier, “Art. 6: Einstufungsvorschriften für Hochrisiko-KI-Systeme,” in *KI-VO: Verordnung über künstliche Intelligenz. Kommentar*, 2nd ed., ed. Mario Martini and Christiane Wendehorst (C. H. Beck, 2026), 359, <https://katalog.slub-dresden.de/en/id/0-1935499017>; Hannah Ruschemeier, “Anhang III: Hochrisiko-KI-Systeme gemäß Artikel 6 Absatz 2,” in *KI-VO: Verordnung über künstliche Intelligenz. Kommentar*, 2nd ed., ed. Mario Martini and Christiane Wendehorst (C. H. Beck, 2026), 1352, <https://katalog.slub-dresden.de/en/id/0-1935499017>.

⁶⁷ AI Act, recital 61; Ruschemeier, “Art. 6,” 359; Couneson, “Article 6,” 213.

Thus, a clear distinction must be drawn between high-risk AI systems and those not classified as such. Under Article 26 of the AI Act, deployers of high-risk AI systems are subject to a range of obligations, including the requirement to ensure human oversight by suitably qualified individuals, to verify that input data under their control are both relevant and sufficiently representative, to monitor the operation of the system, to retain automatically generated logs, and to suspend the use of the system where there is reason to believe that its continued operation may pose a risk as defined by the Regulation.⁶⁸ These obligations are not, as a rule, imposed on deployers of non-high-risk AI systems. In the case of such systems, principles relating to risk management, data governance, record-keeping, transparency, and human oversight may be implemented voluntarily through codes of conduct in accordance with Article 95.⁶⁹ Nevertheless, certain horizontal obligations remain applicable, most notably the AI literacy requirement under Article 4⁷⁰ and, where the relevant criteria are fulfilled, the transparency obligations set out in Article 50.⁷¹

It should be noted that the differentiation between categories of AI does not imply a general exclusion of all AI systems deployed in public administration from the high-risk classification. On the contrary, Annex III of the AI Act explicitly enumerates several public-sector applications as high-risk, including those systems utilised by or on behalf of public authorities for the assessment of eligibility for essential public assistance benefits and services, as well as for the granting, reduction, revocation, or recovery of such benefits and services. In this regard, Recital 58 also highlights that individuals applying for social security benefits and other essential public services are often dependent on those benefits and are in a vulnerable position in relation to the competent authorities. Therefore, AI-supported decision-making in this context may have a substantial impact on individuals' livelihoods and infringe on fundamental rights, including human dignity, non-discrimination, social security, and effective

⁶⁸ Ruschemeier, "Art. 6," 338ff.; Couneson, "Article 6," 203ff.

⁶⁹ Arnd Haller et al., "Article 95: Codes of Conduct for Voluntary Application of Specific Requirements," in *The EU Artificial Intelligence (AI) Act: A Commentary*, ed. Ceyhun Necati Pehlivan et al. (Wolters Kluwer, 2025), 1305ff., <https://law-store.wolterskluwer.com/s/product/the-eu-artificial-intelligence-ai-act-a-commentary/01tPg000007gkK9IAI>; Sarah Hartmann, "Art. 95: Verhaltenskodizes für die freiwillige Anwendung bestimmter Anforderungen," in *KI-VO: Verordnung über künstliche Intelligenz. Kommentar*, 2nd ed., ed. Mario Martini and Christiane Wendehorst (C. H. Beck, 2026), 1249ff., <https://katalog.slub-dresden.de/en/id/0-1935499017>.

⁷⁰ Elora Fernandes et al., "Article 4: AI Literacy," in *The EU Artificial Intelligence (AI) Act: A Commentary*, ed. Ceyhun Necati Pehlivan et al. (Wolters Kluwer, 2025), 95, <https://law-store.wolterskluwer.com/s/product/the-eu-artificial-intelligence-ai-act-a-commentary/01tPg000007gkK9IAI>; Christiane Wendehorst, "Art. 4: KI-Kompetenz," in *KI-VO: Verordnung über künstliche Intelligenz. Kommentar*, 2nd ed., ed. Mario Martini and Christiane Wendehorst (C. H. Beck, 2026), 267, <https://katalog.slub-dresden.de/en/id/0-1935499017>.

⁷¹ Mario Martini, "Art. 50: Transparenzpflichten für Anbieter und Betreiber bestimmter KI-Systeme," in *KI-VO: Verordnung über künstliche Intelligenz. Kommentar*, 2nd ed., ed. Mario Martini and Christiane Wendehorst (C. H. Beck, 2026), 893ff., <https://katalog.slub-dresden.de/en/id/0-1935499017>; Thomas Gils, "Article 50: Transparency Obligations for Providers and Deployers of Certain AI Systems," in *The EU Artificial Intelligence (AI) Act: A Commentary*, ed. Ceyhun Necati Pehlivan et al. (Wolters Kluwer, 2025), 781ff., <https://law-store.wolterskluwer.com/s/product/the-eu-artificial-intelligence-ai-act-a-commentary/01tPg000007gkK9IAI>.

judicial protection.⁷² Other public-sector uses considered high-risk encompass specific law enforcement applications, as well as AI systems that support judicial authorities in the research and interpretation of facts and law, and in the application of legal norms to particular factual circumstances,⁷³ as reflected in recitals 59 and 61 and in Annex III.

In this context, Article 27 introduces an additional layer of obligations for deployers by mandating a fundamental rights impact assessment prior to the deployment of certain high-risk AI systems defined in Article 6(2) of the AI Act.⁷⁴ This obligation is particularly relevant for entities governed by public law as well as private actors entrusted with the provision of public services, within the parameters and exceptions outlined in Article 27. The assessment must address matters such as the intended use of the system, the categories of persons likely to be affected, the specific risks to fundamental rights, the human oversight arrangements, and specify the measures to be implemented if such risks materialise.

Since AI systems used by the EUIPO or national IP offices for trademark examination are not listed as high-risk systems in Annex III, Article 27 usually does not apply to them, unless their intended purpose or manner of use puts them in another high-risk category. Still, just because they are not formally classified as high-risk does not mean the safeguards in those provisions are irrelevant.⁷⁵

We argue that public administrative authorities deploying non-high-risk AI systems should use Articles 26 and 27 as benchmarks for good administration and institutional best practice. This approach does not transform voluntary measures into legally binding obligations under the AI Act. Rather, it treats the AI Regulation's high-risk governance framework as a relevant reference point for ensuring the lawful, transparent, and accountable use of AI by public bodies.

For intellectual property offices, this would mean going beyond compliance with generally applicable duties such as those set forth in Articles 4 and 50 of the AI Act. In circumstances where a full fundamental rights impact assessment under Article 27 is not formally mandated, an office should carry out at least a proportionate assessment of the potential effects of the system on fundamental rights and legally protected interests.⁷⁶ Depending on the particular application, such an assessment

⁷² AI Act, recital 58; Ruschmeier, "Anhang III," 1351; Couneson, "Article 6," 211.

⁷³ Ruschmeier, "Anhang III," 1352; Couneson, "Article 6," 213.

⁷⁴ Tünde Fülöp and Philipp Poindl, "Article 27: Fundamental Rights Impact Assessment for High-Risk AI Systems," in *The EU Artificial Intelligence (AI) Act: A Commentary*, ed. Ceyhan Necati Pehlivan et al. (Wolters Kluwer, 2025), 556ff., <https://law-store.wolterskluwer.com/s/product/the-eu-artificial-intelligence-ai-act-a-commentary/01tPg000007gkK9IAI>; Iris Eisenberger and Thomas Binder, "Art. 27: Grundrechte-Folgenabschätzung für Hochrisiko-KI-Systeme," in *KI-VO: Verordnung über künstliche Intelligenz. Kommentar*, 2nd ed., ed. Mario Martini and Christiane Wendehorst (C. H. Beck, 2026), 675, <https://katalog.slub-dresden.de/en/id/0-1935499017>.

⁷⁵ "Ombudsman notes that the AI Act's requirements regarding the development and deployment of high-risk AI systems largely correspond and give effect to general principles of good administration that the EU administration must uphold when using any AI systems, not only those that are deemed 'high-risk' under the AI Act." See European Ombudsman, "Closing Note on the Strategic Initiative on How the European Commission Decides on and Uses Artificial Intelligence (SI/4/2024/MIK)," December 6, 2024, accessed October 10, 2026, <https://www.ombudsman.europa.eu/en/doc/closing-note/en/196934>.

⁷⁶ European Ombudsman, "Closing Note," SI/4/2024/MIK. In circumstances where the deployment of

should include consideration of non-discrimination, access to effective remedies, protection of confidential information and personal data, as well as the potential impact of AI-assisted examination on property and economic interests.

In accordance with the principles of good administration and the best practices outlined in Article 95 of the AI Act, the office should also establish appropriate human-oversight arrangements, document the system's intended purpose and limitations, and retain relevant records or logs to the extent permitted by technical and legal constraints. To ensure that the human-oversight is effective, the office should establish procedures enabling officials to disregard or override recommendations deemed unreliable. Any material errors, discriminatory patterns, or other adverse effects should be documented, investigated, and followed by corrective measures, even including suspending the system where its continued use could undermine lawful administration.

3.5. Provider Obligations and Contractual Dependencies

IP offices, while rarely acting as direct AI providers, are still affected by the obligations that Article 16 of the AI Act places on providers, mainly due to contractual dependencies. Providers of high-risk AI systems must ensure technical robustness and cybersecurity, guarantee data quality, thoroughly document training data, implement effective risk management systems, conduct post-market monitoring, and enable logging and auditability.⁷⁷ These requirements cannot be waived, creating a complex compliance landscape because deployers depend on providers to meet these standards. In this regard, the main practical problem is the information gap between the provider and the IP office. Providers understand how the system was trained, updated, and tested, but the office needs to explain and justify its administrative process. Even though Articles 26 and 27 of the AI Act do not directly apply to non-high-risk trademark tools, IP offices should still require enough information through contracts to perform a proportionate assessment of fundamental rights and good administration, especially

AI also involves personal-data processing likely to result in a high risk to the rights and freedoms of natural persons, a data protection impact assessment may be independently required under Article 35 of the GDPR or, in the case of the EUIPO, under the corresponding provisions of Regulation (EU) 2018/1725. The data protection impact assessment and the fundamental rights impact assessment required by Article 27 of the AI Act constitute separate, yet complementary, legal instruments. Article 27(4) of the AI Act expressly permits the FRIA to complement an already conducted DPIA, rather than requiring the same information to be assessed twice. See GDPR, art. 35; Regulation (EU) 2018/1725 on the Protection of Natural Persons with Regard to the Processing of Personal Data by the Union Institutions, Bodies, Offices and Agencies, October 23, 2018, *Official Journal of the European Union* L 295 (November 21, 2018): 39–98, art. 39, <https://eur-lex.europa.eu/eli/reg/2018/1725/oj/eng>; AI Act, art. 27(4); Tytti Rintamäki et al., “High-Risk Categorisations in GDPR vs AI Act: Overlaps and Implications,” OSF preprint, September 3, 2024, accessed October 10, 2026, <https://doi.org/10.31219/osf.io/6qhzj>; Eisenberger and Binder, “Art. 27,” 695.

⁷⁷ Iris Eisenberger and Thomas Binder, “Art. 16: Pflichten der Anbieter von Hochrisiko-KI-Systemen,” in *KI-VO: Verordnung über künstliche Intelligenz. Kommentar*, 2nd ed., ed. Mario Martini and Christiane Wendehorst (C. H. Beck, 2026), 548ff., <https://katalog.slub-dresden.de/en/id/0-1935499017>; Finck, *EU Artificial Intelligence Act*, 320ff.; Stavros Tsipras, “Article 16: Obligations of Providers of High-Risk AI Systems,” in *The EU Artificial Intelligence (AI) Act: A Commentary*, ed. Ceyhan Necati Pehlivan et al. (Wolters Kluwer, 2025), 387ff., <https://law-store.wolterskluwer.com/s/product/the-eu-artificial-intelligence-ai-act-a-commentary/01tPg000007gkK9IAI>.

when AI could affect examination, opposition, or cancellation cases.

For this reason, contracts with AI providers should require full cooperation and the sharing of all information.⁷⁸ Providers should be required to supply technical documentation, information on training data and data quality, change logs, model-update notifications, performance metrics, bias assessments, and incident reporting.⁷⁹ These safeguards help fill the gaps left by a low-risk classification and allow the office to assess whether the system can be used without compromising transparency, equal treatment, the right to be heard, or the protection of fundamental rights.

3.6. Transparency Duties and Applicant Rights under Article 50 of the AI Act

Article 50 establishes transparency obligations that become particularly significant when artificial intelligence systems engage with natural persons.⁸⁰ In the context of trademark registration, these obligations extend to various automated tools such as chatbots integrated into the *EasyFiling* interface, automated pre-examination feedback mechanisms, and AI-driven classification assistants.

Users should be told when they are interacting with an AI system, unless this is obvious from the circumstances.⁸¹ However, the criterion of “obviousness” is not inherently clear and should be applied carefully; for example, a classification suggestion labelled as a “recommended term” may not be enough to tell the applicant that the suggestion is AI-generated.

To comply with Article 50 of the AI Act and keep administrative processes clear, IP offices should let applicants and other users know when they interact with AI-

⁷⁸ Phil Lee, “Deployers—Key Obligations (Article 26),” in *The EU Artificial Intelligence Act: A Thematic Commentary*, ed. Gianclaudio Malgieri et al. (Hart Publishing, 2026), 54, <https://www.bloomsbury.com/uk/eu-artificial-intelligence-act-9781509988594/>.

⁷⁹ Coglianese and Lampmann explain that, even before the AI Act and primarily in the US public procurement context, public authorities can use contracts to secure algorithmic accountability. Such contracts should, in particular, cover risk assessment, bias testing, documentation, transparency, audit rights, data governance, monitoring, reporting, and safeguards against overreliance on proprietary or opaque systems. Cary Coglianese and Erik Lampmann, “Contracting for Algorithmic Accountability,” *Administrative Law Review Accord* 6, no. 3 (2021): 175–99, https://administrativelawreview.org/wp-content/uploads/sites/2/2021/10/Coglianese-Lampmann_For-ACCORD-1.pdf. If the service involves access to applicants’ or representatives’ personal data, the contract must also reflect the applicable data-protection allocation of responsibilities. Depending on the provider’s actual influence over the purposes and means of processing, they may act as a processor, a separate controller or, exceptionally, a joint controller. Nevertheless, such a classification cannot be determined solely by the contractual label chosen by the parties. The agreement should therefore regulate permitted purposes, access controls, retention and deletion, security, assistance with data-subject rights and impact assessments, sub-processing, international transfers and, in particular, any plans to reuse application data for model development. See GDPR, arts. 5, 24–26, 28; Tobias Rothkegel and Laurenz Strassmeyer, “Joint Control in European Data Protection Law—How to Make Sense of the CJEU’s Holy Trinity: A Case Study on the Recent CJEU Rulings (Facebook Fanpages; Jehovah’s Witnesses; Fashion ID),” *Computer Law Review International* 20, no. 6 (2019): 161ff., <https://doi.org/10.9785/cri-2019-200602>; EDPB, *Opinion* 28/2024.

⁸⁰ Martini, “Art. 50,” 903; Finck, *EU Artificial Intelligence Act*, 468; Gils, “Article 50,” 787.

⁸¹ Finck, *EU Artificial Intelligence Act*, 471; Gils, “Article 50,” 789; Martini, “Art. 50,” 904.

based tools, such as filing assistants, classification tools, chatbots, or automated pre-examination services. This transparency should go beyond just a formal label. If AI output could affect the course of examination, opposition, or cancellation proceedings, the office should also maintain sufficient internal documentation and logs and ensure that the party can obtain a human review or an explanation of the relevant procedural step.⁸²

3.7. Interim Conclusion on Good Administration in AI-Assisted Trademark Procedures

The fact that most AI systems used in trademark registration are unlikely to qualify as high-risk under Annex III does not remove their use from EU administrative law. Article 41 of the Charter of Fundamental Rights of the European Union remains the basic standard: the procedure must be fair, impartial and reasoned, and the parties must be able to understand and challenge the basis of the decision. While AI tools may be utilised for tasks such as search, classification, comparison, or drafting, their deployment does not diminish the IP office's obligation to ensure the completeness of the evidentiary record, the intelligibility of the reasoning, and the overall legality of the final decision.

As emphasised by the European Ombudsman, several requirements imposed by the AI Act on high-risk systems give practical expression to more general principles of good administration. Accordingly, public authorities are obliged to ensure that AI-assisted procedures maintain a level of accuracy, traceability, and explainability that enables effective human oversight and preserves the authority's ultimate responsibility for decision-making. In the context of intellectual property offices, the safeguards set out in Articles 26 and 27 of the AI Act should therefore be regarded as appropriate standards to be voluntarily adopted, even where these provisions do not formally apply.

⁸² European Ombudsman, "Closing Note," SI/4/2024/MIK. The European Ombudsman stresses that human decision-makers should not just approve AI-generated proposals without review. They need to check these proposals carefully. Administrative authorities must also make sure that AI-assisted processes are clear and allow them to explain their decisions. She also supports informing affected persons about the nature of AI assistance and providing clear and meaningful explanations of the role of the AI system in the decision-making procedure. Where the AI-assisted step also entails automated processing of personal data, the transparency assessment may additionally engage Articles 13–15 of the GDPR and, in the case of automated decision-making within the meaning of Article 22 of the GDPR (Article 24 of the Regulation (EU) 2018/1725), the requirement to provide meaningful information about the logic involved, its significance and its possible consequences. In *Dun & Bradstreet Austria*, the ECJ made it clear that meaningful information must explain, in a concise, transparent and intelligible manner, the procedure and principles actually applied so that the data subject can understand which personal data and factors influenced the outcome. Nevertheless, disclosure of a complex formula or source code is not sufficient. See *Dun & Bradstreet Austria, Case C-203/22*, February 27, 2025, ECLI:EU:C:2025:117, para. 59, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62022CJ0203>; Philipp Hacker and Jan-Hendrik Passoth, "Varieties of AI Explanations Under the Law: From the GDPR to the AIA, and Beyond," in *xxAI—Beyond Explainable AI: International Workshop, Held in Conjunction with ICML 2020, Revised and Extended Papers*, ed. Andreas Holzinger et al. (Springer, 2022), 343ff., https://doi.org/10.1007/978-3-031-04083-2_17; Juliussen, "Right to an Explanation," 184ff.

4. Contractual Governance Beyond Formal Deployer Obligations

In addition to the obligations previously addressed and the delineation of responsibilities under the GDPR (Regulation (EU) 2018/1725) in the context of EU institutions, it is necessary to consider separately the contractual framework governing the relationship between the AI provider and the IP office in its capacity as deployer. This consideration becomes especially significant in situations where an externally sourced AI system is implemented within the procedures of examination, opposition, or invalidity.

The AI Act does not establish a complete contractual framework governing the relationships between public administrative authorities and AI providers. Moreover, standard software procurement clauses⁸³ are insufficient to address the specific legal and institutional implications arising from the deployment of AI systems in administrative decision-making. In light of the AI Act and taking into account the principles of good administration as well as emerging best practices in public procurement,⁸⁴ it is necessary that contractual arrangements between AI providers and deployers encompass not only the delivery of the system and technical support, but also clearly define the intended purpose of the AI system, permissible modifications, performance standards, and requirements for evidentiary traceability.⁸⁵

4.1. Change Management, Model Updates and Version Control

AI systems differ from conventional administrative software because their outputs may change even where the formal user interface remains the same. Changes may result from retraining, modifying prompts, adjusting similarity thresholds, integrating new datasets, or updates introduced by a cloud service provider.⁸⁶ For intellectual property offices, these modifications have the potential to undermine consistency across cases and may affect the evidentiary basis available to examiners.

Accordingly, the contractual framework should include a formalised change

⁸³ Coglianese and Lampmann, “Contracting for Algorithmic Accountability,” 192, 193.

⁸⁴ European Commission, *Model Contractual Clauses for the Public Procurement of Non-High-Risk AI (MCC-AI-Light)*, working document, February 2025, accessed October 10, 2026, <https://public-buyers-community.ec.europa.eu/communities/procurement-ai/resources/updated-eu-ai-model-contractual-clauses>.

⁸⁵ European Commission, *Commentary: Model Contractual Clauses for the Public Procurement of AI (MCC-AI)*, dynamic working document, February 12, 2025, 10ff., accessed October 10, 2026, <https://public-buyers-community.ec.europa.eu/system/files/2025-05/Commentary.pdf>; Coglianese and Lampmann, “Contracting for Algorithmic Accountability,” 180.

⁸⁶ Changes in artificial intelligence models and their adaptiveness (such as continuous learning or retraining) present legal and technical challenges, as they can fundamentally affect the system's behaviour even after deployment. Bart Schermer, “Identification and Obligations of Importers, Distributors, and Responsibilities Along the AI Value Chain (Articles 23, 24, 25),” in *The EU Artificial Intelligence Act: A Thematic Commentary*, ed. Gianclaudio Malgieri et al. (Hart Publishing, 2026), 168, <https://www.bloomsbury.com/uk/eu-artificial-intelligence-act-9781509988594/>. Under the AI Act, such modifications can constitute a “substantial modification” if they were not predetermined in the original technical documentation and initial conformity assessment. See also European Commission, *MCC-AI-Light*, art. 1.

management procedure. The provider must be obliged to notify the office in advance of any material modification and specify the anticipated impact on system performance, explainability, and previously validated use cases.⁸⁷ The office should have the right to test the modified version before deployment and, where appropriate, to reject or postpone an update that could adversely affect ongoing proceedings.

The implementation of version control mechanisms is especially important when an applicant later challenges the role AI played in a particular examination or opposition. The office should be able to identify which system version, model, and configuration were used at the relevant time.⁸⁸ Consequently, the provider should keep sufficient version histories and release documentation so that the system's contribution to an individual case can be reconstructed without requiring the preservation of the entire technical environment indefinitely.⁸⁹

4.2. Trademark-Specific Performance Standards

The conventional contractual stipulation that an AI system be “accurate” or “fit for purpose” is too indeterminate for trademark examination.⁹⁰ Therefore, performance criteria should be linked to the particular task performed and to the linguistic, legal and evidentiary context in which the tool is used. For visual search systems, for example, relevant indicators may include false-negative rates, ranking stability, and performance across different types of figurative marks. With respect to classification tools, contractual arrangements should address multilingual performance, the treatment of non-standard terminology and the maintenance of consistency across the various Nice classes. For generative tools, the assessment of their suitability for deployment in legal practice should be based on specified criteria such as the factual reliability of their outputs, the comprehensiveness of generated document summaries, and the frequency with which statements lack legal support.

The benchmark datasets and validation procedures need to reflect the diversity

⁸⁷ The necessity of including clear rules for risk management, algorithmic impact statements, and regular audits in vendor contracts is emphasised by Coglianese and Lampmann, as these mechanisms help public agencies prevent technical errors and accuracy issues. Coglianese and Lampmann, “Contracting for Algorithmic Accountability,” 192, 193. Besides, the Model Contractual Clauses for the public procurement of Non-High-Risk AI themselves explicitly require providers to update the technical documentation and make it available to the public organisation upon every substantial modification of the system. See European Commission, *MCC-AI-Light*, art. 4(4).

⁸⁸ Ensuring transparency and the public authority's ability to retrospectively explain how the system operated at a specific point in time is crucial for preserving the right to a fair process and the defensibility of an administrative decision. Oriol Mir, “Algorithms, Automation, and Administrative Procedure at EU Level,” in *Governance of Automated Decision-Making and EU Law*, ed. Herwig C. H. Hofmann and Felix Pflücke (Oxford University Press, 2024), 59ff., <https://doi.org/10.1093/9780198919575.003.0003>.

⁸⁹ European Commission, *MCC-AI-Light*, arts. 4–5.

⁹⁰ See European Commission, *MCC-AI-Light*, art. 8(1). The commentary on the contractual provisions emphasises that even for systems that do not fall into the high-risk category, the simple requirement for an “appropriate level of accuracy” leaves too much room for interpretation. Therefore, it is essential to relate the criteria to specific tasks and context in order to realistically assess the performance of an AI system. European Commission, *Commentary to the MCC-AI*, 10.

of trademark practice. Testing only on English-language word marks or common figurative elements would be insufficient for a system intended for EU-wide use. The contract should require evaluation across languages, culturally specific signs, non-traditional marks, and categories in which distinctiveness or conceptual similarity depends on context.⁹¹

Performance obligations should also distinguish between the minimum acceptance criteria at delivery and the ongoing standards during operation. Model drift, changes in filing practices, and the introduction of new terminology may reduce a system's reliability over time. Consequently, suppliers should be contractually obliged to undertake regular validation, promptly report any significant decline, and fully cooperate in the remedial action.⁹² In alignment with this approach, the EU model clauses recommend that public authorities define substantial levels of accuracy and other performance criteria in dedicated contractual annexes rather than relying solely on abstract statutory language.⁹³

4.3 Evidentiary Traceability and Cooperation in Review Proceedings

AI outputs used in trademark administration may become part of the factual or evidentiary basis of a procedural step. The contract should therefore enable the office to reconstruct how a relevant output was produced to the extent necessary for internal review, proceedings before the Boards of Appeal or judicial scrutiny by the General Court. This does not necessarily require disclosure of source code or unrestricted access to proprietary models. It does, however, require sufficient information to identify the input supplied to the system, the relevant model and version, the nature of the output, any confidence score or ranking criterion and the known limitations of the system. Where the AI output has influenced the examiner's reasoning, the provider should be obliged to assist the office in explaining the system's role in terms intelligible to the parties and the reviewing authority.⁹⁴

The supplier's duty of cooperation should continue after the specific service has been delivered and, where necessary, after the contract has expired. Given that appeals and judicial proceedings may arise after the initial examination, it is essential that the agreement specifies the duration for which relevant technical records must be retained and allocates responsibility for the costs associated with providing assistance

⁹¹ The simplified version of the clauses (MCC-AI-Light) expressly requires the supplier to ensure that the datasets used for system development and testing are relevant, sufficiently representative, and have appropriate statistical properties in relation to individuals or groups. In Art. 3.3 it further requires that the datasets take into account specific geographic, contextual, or functional environments. European Commission, *MCC-AI-Light*, art. 3(2)–(3).

⁹² Coglianese and Lampmann, "Contracting for Algorithmic Accountability," 193. The simplified version of the clauses (MCC-AI-Light) subsequently stipulates directly in Art. 9.3 that as soon as the supplier determines that the system no longer meets the contractual terms, it must immediately take the necessary corrective actions and notify the authority. European Commission, *MCC-AI-Light*, arts. 2, 9(3).

⁹³ European Commission, *Commentary to the MCC-AI*, 10.

⁹⁴ European Commission, *Commentary to the MCC-AI*, 1–2; European Commission, *MCC-AI-Light*, art. 11(1)–(2).

in subsequent proceedings.⁹⁵

However, claims based on trade secrets should not, as a matter of course, override the aforementioned obligations. A proportionate contractual mechanism may provide that confidential information is disclosed exclusively to authorised public officials, independent experts, or judicial authorities, and only under controlled conditions.⁹⁶

4.4. Continuity, Portability and Vendor Lock-In

Continuity of administrative functions is another issue specific to public-sector deployment. An IP office cannot simply discontinue examination or lose access to prior records because a supplier changes its business model, withdraws a product or terminates a cloud service. The contract must therefore contain detailed exit and transition arrangements.⁹⁷

The office should be able to export important configurations, logs, system records, and, when allowed by contract, fine-tuning datasets in a format that operates with other systems. It should also receive enough documentation to migrate the function to another provider or, where feasible, keep the system running for a set transition period.⁹⁸ The EU Model Contractual Clauses (MCC-AI-High-Light) expressly recognise that having rights to datasets can help prevent vendor lock-in and enable public authorities to continue using necessary resources after the contractual

⁹⁵ Maintaining technical records is crucial for subsequent administrative or judicial reviews, which may occur long after the initial procedure. The MCC-AI-Light framework addresses this by requiring the supplier to keep automatically generated event logs for the duration of the agreement. Once the contract expires, the supplier is obligated to provide these logs to the public organisation without delay, ensuring that the evidentiary basis remains available for future scrutiny. European Commission, *MCC-AI-Light*, art. 5(4).

⁹⁶ Private vendors frequently invoke trade secret protection to shield their algorithms from public and legal scrutiny, which creates tension with the due process rights of individuals. Coglianese and Lampmann, “Contracting for Algorithmic Accountability,” 186. To resolve this, contracts should proactively mandate mechanisms such as “in camera” review, where proprietary information is disclosed only to courts or independent experts under controlled conditions. See Directive (EU) 2016/943 on the Protection of Undisclosed Know-How and Business Information (Trade Secrets) against Their Unlawful Acquisition, Use and Disclosure, June 8, 2016, *Official Journal of the European Union* L 157 (June 15, 2016): 1–18, art. 9, <https://eur-lex.europa.eu/eli/dir/2016/943/oj/eng>.

⁹⁷ Jan Svoboda, “Public Procurement and Vendor Lock-in within the Area of Data Migration: Ex Post Measures from Selected Legal Regimes of Direct Applicability and Their Effectiveness in Achieving Data Migration,” *Milan Law Review* 3, no. 1 (2022): 120, <https://doi.org/10.54103/milanlawreview/18741>.

⁹⁸ In this regard, the EU Data Act imposes interoperability and switching obligations on data processing services to counter lock-in effects in cloud computing. See Regulation (EU) 2023/2854 (Data Act), December 13, 2023, *Official Journal of the European Union* L, 2023/2854 (December 22, 2023), arts. 23–31, 34–35, <https://eur-lex.europa.eu/eli/reg/2023/2854/oj/eng>; Leonie Ott and Yifeng Dong, “Clouds Connecting Europe: Interoperability in the EU Data Act,” *JIPITEC—Journal of Intellectual Property, Information Technology and E-Commerce Law* 16, no. 2 (2025): 163, <https://www.jipitec.eu/jipitec/article/view/435>. In Articles 34 and 35, the EU Data Act mandates an interoperable format that gives customers (participants in data spaces) the option to migrate to a different provider without losing functionality, thereby facilitating a seamless multi-vendor cloud environment and enhancing digital resilience.

relationship ends.⁹⁹ Therefore, exit terms should also require cooperation with a replacement supplier, the secure deletion of residual copies, the preservation of records necessary for pending proceedings, and continued technical assistance during an agreed transition period.¹⁰⁰

5. Conclusion

The deployment of AI-assisted tools in the trademark examination process raises complex regulatory considerations that go beyond mere classification under the AI Act. The majority of AI applications currently utilised by IP offices in the context of trademark registration are unlikely to fall within the scope of high-risk systems as defined in Annex III of the AI Act, given that their primary functions are search, classification, comparison, and internal administrative support, rather than direct involvement in high-risk public-sector decision-making. This distinction is significant, as the specific obligations imposed on high-risk AI systems are not directly applicable in this context.

Nevertheless, the use of AI in trademark registration processes is by no means legally insignificant. IP offices, acting as public administrative authorities, have a major impact on applicants and other rights holders with their decisions. AI tools, even when classified as low-risk, may influence the examination process by identifying relevant prior marks, proposing classifications, or assisting in the evaluation of evidence and legal reasoning. Consequently, such systems have the potential to affect fundamental principles of procedural fairness, the right to be heard, equal treatment, legal certainty, and the protection of property rights.

It is therefore essential not to interpret the AI Act exclusively through the high-risk-low-risk dichotomy. In the context of public administration, particularly in matters affecting individual rights, the provisions of the AI Act must be considered alongside overarching principles of good administration and established best practices for deploying AI in the public sector. Intellectual property offices should, on a voluntary basis, implement key safeguards articulated in the AI Act, notwithstanding the absence of a formal legal obligation. These safeguards include human oversight, transparency, documentation, ongoing monitoring, auditability, risk assessment, and effective mechanisms for contesting outcomes influenced by AI systems.

Such a voluntary approach is consistent with the soft-law framework established by the AI Act. In this regard, Article 95 expressly encourages applying high-risk criteria to systems which do not formally fall within the high-risk category. In the context of trademark registration, the objective is not to impose additional disproportionate regulatory burdens, but rather to ensure the protection of the rights and interests of all stakeholders and the alignment with the procedural obligations of intellectual property offices.

Given that a significant proportion of AI tools deployed by intellectual property

⁹⁹ European Commission, *MCC-AI-Light*, arts. 12, 14.

¹⁰⁰ Ott and Dong, “Clouds Connecting Europe,” 163; Svoboda, “Public Procurement and Vendor Lock-in,” 146.

offices are sourced from external providers, the contractual arrangements between the offices and the AI providers are a crucial point for the procedural mechanism. Standard software procurement contracts are insufficient in this context. Instead, such agreements should explicitly address the intended purpose of the AI system, the quality and provenance of training data, procedures for bias detection and mitigation, update and maintenance obligations, audit rights, performance benchmarks, explainability requirements, and mechanisms for cooperation during reviews. Moreover, for the purposes of internal review or appeal, the contracts must ensure that the IP office retains the capacity to trace and document the generation of AI outputs.

Additionally, contractual provisions should extend to matters not expressly regulated by the AI Act, including data portability, interoperability, and the prevention of vendor lock-in, where AI tools are delivered via cloud-based solutions. It is essential that IP offices maintain traceability and uphold legal certainty, and therefore they must ensure continued access to all relevant logs and documentation, even in the event of a change in service provider.

In conclusion, AI constitutes a structuring technology within the trademark registration process. Although it does not replace the role of human examiners, it significantly influences the presentation of information, the organisation of evidence, and the way applicants interact with the system. Accordingly, the assessment of the legality of AI-assisted trademark examination should not be confined to the question of whether a system is classified as high-risk. A more appropriate approach is to pursue balanced governance, in which systems are classified as low risk under the AI Act, while standards of good administration and transparency are carefully maintained.

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