

DOI: <https://doi.org/10.34069/AI/2023.64.04.34>

How to Cite:
Hruz, O., Svitlak, I., Kornienko, P., Khozlu, I., & Mykhailovska, Y. (2023). Legal problems and prospects for the development of document science in Ukraine: Problems and solutions. *Amazonia Investiga*, 12(64), 323-330.
<https://doi.org/10.34069/AI/2023.64.04.34>

Legal problems and prospects for the development of document science in Ukraine: Problems and solutions

Problemas jurídicos y perspectivas de desarrollo de la ciencia de los documentos en Ucrania: Problemas y soluciones

Received: April 5, 2023

Accepted: May 30, 2023

Written by:

Oleksandr Hruz¹<https://orcid.org/0000-0003-0370-3791>

ResearcherID Web of Science: GQP-4561-2022

Iryna Svitlak²<https://orcid.org/0000-0002-4408-6868>**Petro Kornienko**³<https://orcid.org/0000-0002-1473-6698><https://www.webofscience.com/wos/author/record/HDN-3826-2022>**Ivan Khozlu**⁴<https://orcid.org/0000-0002-2705-3968><https://www.webofscience.com/wos/author/record/ISU-9333-2023>**Yevheniia Mykhailovska**⁵<https://orcid.org/0000-0001-6814-8843><https://www.webofscience.com/wos/author/record/AEN-6775-2022>

Abstract

The relevance of the research lies in the fact that the study of legal document circulation, as a rule, concerns only certain types of documents. The purpose of the work is a comprehensive study of the phenomenon of “legal document circulation”. Achieving the specified goal involves solving the following tasks: establishing those defects that may be contained in the legal document and determining the reasons and conditions for their appearance. To solve the set goals and tasks, the dialectical method, the analysis, the generalization and the abstraction was used. The result of the study was the argumentation of the position that the prevention of negative social phenomena in the legal document circulation should be based on measures of expertise,

Resumen

La pertinencia de la investigación radica en el hecho de que el estudio de la circulación de documentos jurídicos, por regla general, sólo se refiere a determinados tipos de documentos. El objetivo del trabajo es un estudio exhaustivo del fenómeno de la “circulación de documentos jurídicos”. La consecución del objetivo especificado implica la resolución de las siguientes tareas: establecer los defectos que puede contener el documento jurídico y determinar las razones y condiciones de su aparición. Para resolver los objetivos y tareas planteados se utilizó el método dialéctico, el análisis, la generalización y la abstracción. El resultado del estudio fue la argumentación de la posición de que la prevención de fenómenos sociales negativos en la circulación

¹ PhD in Law, Senior Lecturer, Department of Organization of Pretrial Investigation, Faculty No. 1 of the Kryvyi Rih Educational and Scientific Institute of the Donetsk State University of Internal Affairs, Ukraine.

² Doctor in Juridical Sciences, Associate Professor, Head of the Department of Law and Humanities, Vinnytsia Education and Research Institute of Economics, West Ukrainian National University, Ukraine.

³ Dr. hab in Law, Professor of the Department of Philosophy, Law and Social-Humanitarian Disciplines Department of Philosophy, Law and Social-Humanitarian Disciplines the Faculty of Finance and Economics, National Academy of Statistics, Accounting and Audit, Ukraine.

⁴ Lecturer of the Department of Administrative and Legal Disciplines of the Faculty №2, Donetsk State University of Internal Affairs, Ukraine.

⁵ PhD in Law, Assistant, Deputy Head of The Department of Administrative, Economic Law and Financial and Economic Security of The Educational and Scientific Institute of Law, Sumy State University, Sumy, Ukraine.

notarization, approval and registration of legal documents. The conclusion of the study is the substantiation of the statement that the role of the legal document in the mechanism of legal regulation has increased. The value of legal document circulation is determined by the functions performed by a legal document in the process of legal regulation. The practical significance of the study lies in the development of practical recommendations aimed at improving the process of working with legal documents in the future.

Keywords: legal document, digitalization of society, electronic document management, information and communication technologies, legal defects.

Introduction

The process of reforming state and public institutions in Ukraine, which we observe in recent decades, is aimed at the formation of the rule of law and civil society. Legal regulation of public relations is carried out with the help of a certain system of tools and means. One of the most important among them is legal documents, which are the legal form of transferring legally significant information. Due to our state gaining independence, emergence of private form of ownership, separation of many organizations from the state mechanism and emergence of new independent participants of legal relations - local self-government bodies, physical persons-entrepreneurs, legal documents circulation has significantly increased. Legal documents permeate the entire process of legal regulation. First of all, this is due to the fact that the very rules of conduct of all participants of legal relations are enshrined in legal documents.

The necessity of research of legal problems and trends of development of legal documentation in Ukraine is that it is legal documents that reflect all elements of content (rights and duties, responsibility, actions of participants of legal relations; results of these actions; techniques, means and methods of their achievement); errors and violations) and procedural forms (stages of work with legal documents proper, legal processes, decision-making procedures, legal regimes) of legal practice. The process of digitalization of social life and wide introduction of information and communication technologies into legal document circulation requires theoretical comprehension and development of practical recommendations on increasing the efficiency of its functioning for the future.

de documentos jurídicos debe basarse en medidas de peritaje, notarización, aprobación y registro de documentos jurídicos. La conclusión del estudio es la corroboración de la afirmación de que el papel del documento jurídico en el mecanismo de regulación jurídica ha aumentado. El valor de la circulación de documentos jurídicos viene determinado por las funciones que desempeña el documento jurídico en el proceso de regulación jurídica. La importancia práctica del estudio radica en la elaboración de recomendaciones prácticas destinadas a mejorar el proceso de trabajo con documentos jurídicos en el futuro.

Palabras clave: documento jurídico, digitalización de la sociedad, gestión electrónica de documentos, tecnologías de la información y la comunicación, defectos jurídicos.

Lately the issue of quality of legal documents has been raised more and more often. Competent their creation forms a positive impression about the participant of legal relations, in addition, the level of legal culture of both the lawmaker and the entire population increases. In turn, a mistake contained in a legal document can cause extremely negative consequences. For example, the presence of a defect in a will can delay the inheritance of property for a long time, and an indictment drawn up with errors can violate the rights and freedoms of a person illegally convicted. Accordingly, it is important to study the legal document at the macro level, as an independent category, to identify the legal problems of the legal document, as well as to eliminate them for the future for the effective procedure of lawmaking and law enforcement. In addition, the study cannot neglect the study of the rules of legal technique, because it is their compliance that contributes to the creation of grammatically and legally correct document. Thus, the study of legal document science in Ukraine is quite relevant. It is important for the development of other general theoretical provisions (the doctrine of the ratio of legal documents, the doctrine of legal practice, the doctrine of the sources of law, the doctrine of the legal process). In addition, the study of the specifics of preparation, the requirements imposed on legal documents, the defects that may be allowed by those who develop them, can equip practitioners with the knowledge necessary to develop a quality legal document.

The purpose of the study is to examine the legal defects of the legal document flow in Ukraine,

the trends of further development and ways to improve.

Theoretical Framework or Literature Review

The works of domestic and foreign scientists are devoted to various aspects of document flow in Ukraine. Yes, Asanova (2021), who studied the problem of legal validity of electronic documents, notes that “to search for patterns in large data sets one can make more effective decisions and implement effective actions based on appropriate technologies to filter information from databases” (Asanova, 2021). The use of the above technology seems appropriate when processing a large volume of legal documents, for example, when analyzing similar cases in a judge's practice or when comparing different legal and regulatory documents according to temporal criteria, strength or other grounds for sampling by attorneys.

Politanskyi (2021) also investigated the problems of implementation of electronic document management in Ukraine as well as the difficulties encountered in the implementation of this process. As the scientist notes in his work, “the current state of the system of automated record keeping and document management in state authorities in Ukraine creates good technological prerequisites for further spread of electronic document management and bring it to the level of standards of the European Union countries”. Modern legal document flow also works in conditions of digital accessibility of legal information. Thus, any controversial situation involving the search and use of legal information can be resolved using the Internet.

Despite the advantages of the introduction of electronic document management in all spheres of society, including legal activities, as Poddubna & Pavlichenko (2020) notes “the main problem is system security, because it is documents of an individual or legal entity that are of particular interest to hackers and neglecting the protection will definitely contribute to the emergence of new threats to privacy”.

The provisions of almost every legal document are implemented in the legal process with the participation of the subjects of law in relation to which there is information of legal significance. At the same time, there are different forms of implementation - implementation, use, compliance and application, so it is also important to analyze the negative consequences of non-compliance with the prescriptions contained in the legal documents.

As Mason (2018) notes in his scientific work, “there remains concern among solicitors about the evidential weight of electronic documents, including document systems that are used to execute high value transactions”. At the present stage, the problem of legal regulation of the use of electronic documents in criminal proceedings is relevant. Recently, in the practice of criminal proceedings, the issue of informatization has received considerable attention, since the investigation of criminal cases in certain cases is impossible without proper information and analytical support. Thus, law enforcement agencies, both in Ukraine and in other states, regularly turn to numerous information systems to obtain the necessary information, most often they turn to collect materials characterizing the defendant.

A similar point of view is expressed in his scientific work R. Stoykova, who notes that “reverse engineering of file systems is indispensable for tool testing, accurate evidence acquisition, and correct interpretation of data structures by law enforcement in criminal investigations” (Stoykova et al., 2022). No less important is the problem of the influence of the achievements of modern technology on the quality of the legal document, including electronic.

The use of artificial intelligence tools in the implementation of legal activities and the achievements of scientific and technological progress in its document flow was also investigated by C. Sansone, who notes that «in the last years, the legal domain has been revolutionized by the use of Information and Communication Technologies, producing large amount of digital information» (Sansone & Sperlí, 2022).

Methodology

During the research to achieve its goal and solve its problems, we used philosophical methods: dialectical, analytical and dogmatic; general scientific methods, in particular: induction, analogy, deduction, synthesis, system analysis of socio-economic and political processes. Also, for a deeper and more detailed study of obtaining more objective results the tools of special legal methods were used: comparative legal, formal-legal, legal hermeneutics.

Philosophical and general scientific methods were used to study the phenomenon of the legal document, to study the conditions affecting its quality, to clarify the causes of legal defects in

legal documents, as well as to study the features of electronic documents functioning in the legal document flow.

The comparative legal method was used in the study of peculiarities of the use of electronic documents in criminal and civil proceedings, using the formal-logical method further trends in the use of electronic format of legal documents were identified taking into account the future development of scientific and technological progress, information and communication technologies and artificial intelligence tools. Using the method of legal hermeneutics helped to create a foundation to form a research field for the development of universal approaches to the provision of legal documents in the era of digital community functioning.

Results and Discussion

The main reason for the revolutionary introduction of electronic forms of legal documentation was primarily due to the fact that “legal practitioners’ needs, then, in browsing these repositories has required to investigate more efficient retrieval methods, which assume more relevance because digital information is mostly unstructured” (Sansone & Sperli, 2022).

“Natural language processing, automatic speech recognition, machine learning, and other AI technologies have been applied widely for legal tech applications” (Wang, 2020). In today's information society, with the growth of general and information threats, computer crime, the ubiquitous spread of artificial intelligence, the use of information technology in all areas of law enforcement, economic, regulatory activity is necessary, inevitable and the most promising area of activity to ensure the security of individuals, society and the state. In order to achieve this goal it is necessary to create a unified information environment ensuring effective and immediate interaction of all state services responsible for public safety and law and order, and to improve the efficiency of detection and investigation of crimes it is necessary to create integrated databanks of forensically relevant information, to reach a higher level of informatization of law enforcement bodies As Asanova (2021) rightly notes, “the need to introduce electronic d Consequently, the degree of technical equipment of all preliminary investigation bodies with telecommunication infrastructure and information resources must meet modern challenges and technical requirements”.

A similar point of view is supported by Politanskyi (2021) who notes that “in addition, it became clear that electronic document management systems should be implemented everywhere, at all workplaces associated with the creation, editing and storage of information, otherwise the effectiveness of their use will be minimal”. As Poddubna & Pavlichenko (2020) notes, “information security in electronic document management systems is a complex problem, the solution of which requires a combination of measures at the legislative, administrative, procedural and software and hardware levels”. In addition, “... this new context creates uncertainties about the legality of tools and methods used for evidence acquisition and the compliance of law enforcement with obligations to protect intellectual property and confidential information” (Stoykova et al., 2022). Electronic document as a source of evidence in criminal proceedings can be defined as a form of electronic and digital display of information recorded on a tangible medium, containing information about the facts relevant to the proof of the case, which has established requisites, obtained in compliance with the requirements of criminal procedural legislation and is intended for storage and subsequent use.

As Zhuchenko (2019) notes, “the development of automatic methods of evaluation of evidence, along with the control of compliance with the requirements of procedural legislation in the pre-trial investigation, became another link on the way to the formation of a holistic concept of electronic criminal proceedings”. In most cases, electronic documents are allowed in criminal proceedings as other documents, because they are created outside the criminal process, during normal activities of individuals and legal entities. The most common way to certify electronic documents is electronic digital signature, the procedure of application of which is regulated by the Law of Ukraine “About electronic trust services”. Electronic document flow is important not only for criminal, but also for civil procedure. As Tatulych (2020) notes, “...the introduction at the national level of a new means of proof - electronic evidence is designed to promote effective and timely implementation of civil proceedings”. At the present stage, the civil procedure law of Ukraine is one of the most dynamic branches of law, respectively, the sphere of influence of information and communication technologies has also spread to it. New means of proof appeared in the civil procedure: electronic documents, which the legislation of Ukraine refers to the written evidence. Accordingly, there is a problem in the

way and form of their presentation to the court as evidence in the case, despite the fact that «lawyers regularly predict court outcomes to make strategic decisions, including when, if at all, to sue or settle, what to argue, and how to reduce their clients' liability risk» (McConnell et al., 2021).

In addition, the civil procedural legislation of Ukraine determines the requirements to the above documents: to use a method to establish their reliability during their creation, and one of the ways to establish the reliability of an electronic document is an electronic signature. In this connection, one can highlight such problems as imperfection of the procedure for identification of a citizen willing to obtain an electronic key; insufficient provision of reliable storage of electronic keys. Such problems can arise as a result of electronic signature fraud.

Also, in the case of a damaged electronic document there can be a situation when the accuracy of the electronic computing device is compromised. As a result, the information contained in said document may be altered. The problem is that the change of information in the electronic document can be a consequence of further distortion of the established information about the facts subject to judicial proof. Information, not protected against distortion, contained in these documents should make these documents invalid even if they have all the formal requisites. Consequently, such documents would be excluded from sources of evidence in civil proceedings as inadmissible. Furthermore, «legal documents often contain references to either other documents, or other parts (of the same document)». This also significantly complicates the use of electronic documents in the evidentiary process.

As Mason (2018) notes, important in the digital world is «... the meaning, in electronic terms, of document, book or paper, instrument, writing, record and map - both in terms of legislation and case law». Undoubtedly, positive for the system of jurisdictional protection of Ukraine was the introduction of automated document flow of the court, because for our state the courts remain the most effective tools for ensuring the legitimate interests of the subjects of law. Citizens most often apply for protection of their violated or disputed rights exactly to the courts, which perform the function of the public arbitrator in all spheres of their life and economic entities involved in civil-law relations. High social importance of judicial protection is explained by the fact that it ensures the inviolability of the state

social system, protection of law and order, as well as guarantees the preservation of a single economic space and freedom of entrepreneurial activity of citizens.

«Legal case precedents have a considerable impact on the development of litigation strategies» (Trappey et al., 2020). The above shows that improving and supporting the judicial system at the proper level, the introduction of modern information technology, allowing the active use of electronic system of judicial proceedings, is an important task of the state. Moreover, as N.O. Melnychenko rightly notes, «the role of technology here is not to support and improve our old ways of doing things, but to review and often replace our practices in the electronic filing and adjudication of claims» (Melnychenko, 2021).

The concept of «electronic court proceedings» in a broad sense includes a set of information and telecommunication systems or services that allow to place judicial acts, to conduct electronic document flow by receiving electronic applications from citizens and organizations, to provide access to the familiarization with the materials of electronic cases. Thus, electronic information exchange enhances the opportunities for interaction between the judiciary and participants of the judicial process. In the narrow sense e-judicial proceedings is reduced to the possibility for justice agencies and other subjects of procedural relations to participate directly in the submission of documents in electronic form, in the conduct of judicial proceedings through videoconferencing system.

«The growing complexity of legal cases has led to an increasing interest in legal information retrieval systems that can effectively satisfy user-specific information needs» (Aumiller et al., 2021). In order to work successfully and find legal documents quickly, it is important to use their classification. Especially convenient are local classifications, which allow to quickly find the necessary document in the organization by certain criteria. Despite this fact, at the present stage in Ukraine there is no unified system of legal documentation, the development of which would help to facilitate the work of specialists in law.

It should be agreed that «... the choice of the most effective (optimal) option (from the possible alternatives) for the Ukrainian lawyer to search for legal information on the content of foreign law rules (while representing the client's interests in court) in a particular court case in the

civil proceedings of Ukraine, is dependent, in the first place, on: 1) a specific civil case; 2) the lawyer's capabilities (potential) and professionalism; 3) the authority of the court (directly from the judge) (Antoniuk et al., 2019). In addition, it is important to consider that at the present stage there is a digitalization of public life, which, among other things, generates a qualitative modification of the legal profession, associated with changes in the content and forms of organization of professional legal activity.

«Automatic summarization of legal case documents is an important and practical challenge» (Bhattacharya et al., 2021). Analysis of different legal documents - normative legal acts; court decisions, rulings, determinations; contracts and other documents shows that they often have various kinds of defects that can negatively affect the content of the legal document. The main factor that causes the creation of a legal document with errors is legal illiteracy.

It is important to improve not only the digital professional competence of specialists in law, but also the general level of legal culture and consciousness of the population of Ukraine. For example, «despite their ever-increasing presence in everyday life, contracts remain notoriously inaccessible to laypeople» (Martinez et al., 2021). However, we should agree with the point of view of Rezvorovych (2022), who notes that “at the present stage of development in Ukraine there is a dynamic transformation of Ukrainian society - national cultural and political identification, awareness of its value and value of the state as an institution that ensures the functioning not only of government bodies, but also all citizens, the formation of a conscious civil society, modified a number of democratic processes, etc.”.

As Ponamarenko (2022) notes, “The war in Ukraine in 2022 resulted in serious losses for the country, businesses, and citizens”. Under such conditions, further introduction of information and communication technologies in Ukraine in the future will be problematic due to the lack of funds to provide the mentioned sphere, but necessary. For effective law-making and law-enforcement activities it is important to eliminate legal defects in legal documents, by which we mean a defect committed by a participant of legal relations, which directly develops this document or has the opportunity to influence its development, which entails or may entail undesirable legal or other consequences. Legal defects in legal documents also have a negative

impact on the interpretation of the law, so, «when literal interpretation of statutes leads to counterintuitive consequences, judges, especially in high courts, may identify counterintuitive consequences and revise interpretation of statutes» (Fungwacharakorn et al., 2021).

Among the reasons for defects in legal documents are: lack of legal education, ignorance of the rules of drafting a legal document, irresponsibility, inattention, lack of time, inexperience. The main ways to eliminate defects in legal documents are: prevention, prevention and termination. Prevention is a set of measures to identify and eliminate (neutralize, block) the causes and conditions of false legal activity, offenses and legal arbitrariness. Prevention is a set of measures to identify and eliminate defects that already exist in the legal document before its implementation. Termination can be considered as an activity aimed at eliminating the negative impact of a legal document on social relations.

As a result of the study we can conclude that:

1. the source of information on the facts established during an operational and investigative measure or investigative action shall be the persons who conducted it and participated in it; video recording of the investigative action of an operational and investigative measure is the best means of electronic documentation. Personal evidence should be formed exclusively in court proceedings, in the course of judicial interrogation of the person aware of the facts, video or audio recording of testimony, as derivative evidence, may be reproduced in court only in cases specifically provided for by law;
2. in the process of proving in civil proceedings electronic documents are quite often used as evidence. Due to the lack of clear criteria of authenticity of electronic document in the domestic legislation, there may be cases of non-recognition of its legal force. For effective use of electronic documents in evidentiary proceedings it is necessary to provide legal guarantees for authenticity of information received from electronic documents; define responsibility for falsification of such information; set criteria for admissibility of electronic documents as evidence in civil proceedings;
3. further digitalization of document circulation and introduction of modern information technologies into the sphere of judicial protection of rights and legal

interests of citizens will provide qualitative improvement in the judicial system of Ukraine. The use of information technology in the work of the courts will not only reduce the procedural time of consideration of cases and disputes, but also significantly reduce the number of violations in this area. The use of information and communication technologies, the achievements of scientific and technological progress in the field of legal document flow will allow to achieve more convenient and rapid access of citizens to the mechanism of judicial protection of rights and improve the quality of the apparatus of the courts of general and arbitration jurisdiction.

Conclusions

As a result of the study we can conclude that:

1. In the framework of linguistic research and in legal practice, special attention should be paid to the brevity, accuracy, clarity, simplicity and accessibility of legal documents. The accuracy of the legal provisions means that their content should be specific, unambiguous and sufficient, and the clarity, simplicity and accessibility of the language should ensure the general comprehensibility of legal orders;
2. Most domestic laws and other legal acts and legal documents are drafted in such a way that their perception and interpretation can be significantly complicated for citizens who do not have special legal knowledge;
3. many legal documents at the present stage are marked by complicated syntactic constructions and are lexically overloaded, which does not contribute to the improvement of legal culture, but may cause citizens to have a potentially irrational fear of the "letter" of the law.

Bibliographic references

- Antoniuk, S., Zaiats, O., Skrynkovskyy, R., & Makukhina, I. (2019). Problems of obtaining by the lawyer the legal information on the content of foreign law norms while representing the client's interests in civil proceedings in Ukraine. *Path of Science*, 5(10), 5001–5010. <https://doi.org/10.22178/pos.51-5>
- Asanova, L. (2021). The place of electronic document management in the general system of office work. *Entrepreneurship, Economy and Law*, 3, pp. 156-160. <https://doi.org/10.32849/2078-3736/2021.1.4> (in Ukrainian)
- Aumiller, D., Almasian, S., Lackner, S., & Gertz, M. (2021). Structural text segmentation of legal documents. *Proceedings of the Eighteenth International Conference on Artificial Intelligence and Law*. <https://doi.org/10.32849/2663-5313/2021.3.24> (in Ukrainian)
- Bhattacharya, P., Poddar, S., Rudra, K., Ghosh, K., & Ghosh, S. (2021). Incorporating domain knowledge for extractive summarization of legal case documents. *Proceedings of the Eighteenth International Conference on Artificial Intelligence and Law*. <https://doi.org/10.1145/3462757.3466085>
- Fungwacharakorn, W., Tsushima, K., & Satoh, K. (2021). On semantics-based minimal revision for legal reasoning. *Proceedings of the Eighteenth International Conference on Artificial Intelligence and Law*. <https://doi.org/10.1145/3462757.3466092>
- McConnell, D. J., Zhu, J., Pandya, S., & Aguiar, D. (2021). Case-level prediction of motion outcomes in Civil Litigation. *Proceedings of the Eighteenth International Conference on Artificial Intelligence and Law*. <https://doi.org/10.1145/3462757.3466075>
- Martinez, E., Mollica, F., & Gibson, E. (2021). Poor writing, not specialized concepts, drives processing difficulty in legal language. <https://doi.org/10.31234/osf.io/hfbdt>
- Mason, S. (2018). Documents signed or executed with electronic signatures in English law. *Computer Law & Security Review*, 34(4), 933–945. <https://doi.org/10.1016/j.clsr.2018.05.023>
- Melnychenko, N. (2021). Claim and its modern modifications: definitions of the future. *Futurity Economics&Law*, 1(1), 4-11. <https://doi.org/10.57125/FEL.2021.03.25.1>
- Poddubna, L., & Pavlichenko, V. (2020). Information security in Electronic Document Management Systems. *Scientific Bulletin of PUET: Economic Sciences*, 4(95), pp. 59-66. <https://doi.org/10.37734/2409-6873-2019-4-7> (in Ukrainian)
- Politanskyi, V. (2021). Theoretical and legal principles of the electronic document management system in Ukraine. *Law and society*, 1, pp. 22-27. <https://doi.org/10.32842/2078-3736/2021.1.4> (in Ukrainian)
- Ponamarenko, T. (2022). The impact of the war in Ukraine in 2022 on the retail market and suppliers of fast moving consumer goods: a

- forecast of the future. *Futurity Economics & Law*, 2(4), 42-52. <https://doi.org/10.57125/FEL.2022.12.25.06>
- Rezvorovych, K. R. (2022). Legal nihilism in Ukraine: Essence, causes and ways to overcome. *egal sciences and their role in the development of the legal culture of a modern man*, 163-179. <https://doi.org/10.30525/978-9934-26-209-8-8>
- Sansone, C., & Sperlí, G. (2022). Legal Information Retrieval Systems: State-of-the-art and open issues. *Information Systems*, 106, 101967. <https://doi.org/10.1016/j.is.2021.101967>
- Stoykova, R., Nordvik, R., Ahmed, M., Franke, K., Axelsson, S., & Toolan, F. (2022). Legal and technical questions of file system reverse engineering. *Computer Law & Security Review*, 46, 105725. <https://doi.org/10.1016/j.clsr.2022.105725>
- Tatulych, I. (2020). Electronic evidence as a means of evidence in civil proceedings. *Law Review of Kyiv University of Law*, 1, 215–219. <https://doi.org/10.36695/2219-5521.1.2020.43> (in Ukrainian)
- Trappey, C. V., Trappey, A. J. C., & Liu, B.-H. (2020). Identify trademark legal case precedents - using machine learning to enable semantic analysis of judgments. *World Patent Information*, 62, 101980. <https://doi.org/10.1016/j.wpi.2020.101980>
- Wang, R. (2020). Legal Technology in Contemporary USA and China. *Computer Law & Security Review*, 39, 105459. <https://doi.org/10.1016/j.clsr.2020.105459>
- Zhuchenko, O. D. (2019). Directions for the using of information and analytical methods of recording, evaluating and processing evidence at the stage of pre-trial investigation. *Odesa National University Herald. Jurisprudence*, 24(35), 106–116. [https://doi.org/10.18524/2304-1587.2019.2\(35\).186020](https://doi.org/10.18524/2304-1587.2019.2(35).186020) (in Ukrainian)

