

Bridging EU Law and Design **Creating an AI Legal Support Interface with Low-Code Tools**

MASTER'S DEGREE PROJECT

Anna Bugaeva

MASTER'S DEGREE IN INTERACTIVE MEDIA DESIGN



UNIVERSIDADE da MADEIRA

A Nossa Universidade

www.uma.pt

November | 2025

Bridging EU Law and Design
Creating an AI Legal Support Interface with Low-Code Tools
MASTER'S DEGREE PROJECT

Anna Bugaeva
MASTER'S DEGREE IN INTERACTIVE MEDIA DESIGN

SUPERVISION
Mara Sofia Gomes Dionísio

Abstract (EN)

This study explores how artificial intelligence (AI) and user experience (UX) design principles can enhance access to justice by improving the usability of online case law databases of international courts, with a particular focus on the Court of Justice of the European Union (CJEU) and the European Court of Human Rights (ECtHR). Although platforms such as CURIA, EUR-Lex, and HUDOC have made legal information broadly accessible, they are often criticised for limited search functionalities and outdated user interfaces. Adopting an auto-ethnographic perspective, the research investigates how legal professionals interact with these databases and what design and AI-driven solutions could address existing barriers. The project includes the development of an experimental prototype on Replit that demonstrates an AI-based summarisation and interaction model for judicial decisions, aiming to support more intuitive navigation and comprehension. The findings contribute to the ongoing dialogue between law, design, and technology, proposing practical insights for future user-centred and AI-assisted legal information systems.

Keywords (EN):

Access to justice; Artificial intelligence; UX/UI design; Legal information systems; International courts; Case law; CJEU; ECtHR.

Resumo (PT)

Este estudo analisa como a inteligência artificial (IA) e os princípios de design de experiência do utilizador (UX) podem reforçar o acesso à justiça, melhorando a usabilidade das bases de dados de jurisprudência dos tribunais internacionais, com especial atenção no Tribunal de Justiça da União Europeia (TJUE) e no Tribunal Europeu dos Direitos do Homem (TEDH). Embora plataformas como o CURIA, o EUR-Lex e o HUDOC tenham tornado a informação jurídica amplamente acessível, continuam a ser criticadas pelas suas interfaces desatualizadas e funcionalidades de pesquisa limitadas. A partir de uma perspetiva autoetnográfica, esta investigação examina como os profissionais do direito utilizam estas plataformas e como o desenho de soluções recorrendo a IA podem superar as atuais barreiras. O projeto inclui o desenvolvimento de um protótipo experimental na plataforma *Replit* concebido para facilitar a navegação e a compreensão das decisões judiciais. Os resultados desta investigação contribuem para promover uma aproximação entre os domínios do direito, design e a tecnologia, com a apresentação de propostas concretas para futuros sistemas de informação jurídica centrados no utilizador e assistidos por IA.

Palavras-chave (PT):

Acesso à justiça; Inteligência artificial; Design UX/UI; Sistemas de informação jurídica; Tribunais internacionais; Jurisprudência; TJUE; TEDH.

Acknowledgements

I am sincerely grateful to my supervisor, Assistant Professor Mara Dionísio, for her trust, guidance, and support throughout this journey. Her encouragement, thoughtful feedback, and patience have helped me at every stage of my research. Being a lawyer, I was always a kind of “alien” at the Engineering faculty, but she supports me at every step of this path, encouraging my enthusiasm and curiosity about human-computer interaction and design principles, which are necessary for lawyers nowadays.

I want to thank my family. To my husband, Nikolai, for his love and for making the best pasta a hungry researcher could wish for; to my daughter, Margarita, and my son, Mikhail, for bringing joy to my days and reminding me of what truly matters.

*“Firstly, the law must be adequately accessible:
the citizen must be able to have an indication
that is adequate in the circumstances
of the legal rules applicable to a given case.”*

ECtHR, *The Sunday Times v. the United Kingdom* (No. 1),
Judgment of 26 April 1979, §49.

Chapter 1. Introduction

Digital technologies have significantly revolutionized access to legal information, providing unprecedented tools for legal professionals, researchers, and the public. Platforms like EUR-Lex¹, the database of EU legislation, CURIA², the database of the Court of Justice of the European Union³ (CJEU), and HUDOC⁴, the case law database of the European Court of Human Rights (ECtHR), have made repositories of legal documents, judgments, and opinions accessible online. These tools allow users to search and analyse case law, but they often face criticism for their outdated user interfaces (UI) and suboptimal user experiences (UX) [70], [71] often failing to meet user-centered standards of clarity and accessibility.

Meanwhile, access to justice is not just a formal legal right but a lived experience [54] that is mediated – and often constrained – by the design of the digital environments where justice is communicated [71],[72]. International courts such as the CJEU and the ECtHR now publish their decisions online, increasing transparency of justice in principle; however, the availability of judgments on the web does not guarantee meaningful access – it includes frustration, cognitive overload, and overall it's a time-consuming process [71]. Even professional users face barriers: search filters that are unintuitive, interfaces that require deep prior knowledge, and a lack of features that support comparative or cross-linguistic research [70]. For non-specialists, these obstacles are even greater, which makes justice more distant and less accessible.

¹ <https://eur-lex.europa.eu/>

² <https://curia.europa.eu/>

³ The Court of Justice of the European Union (CJEU) comprises two courts: the Court of Justice and the General Court. Originally established as the European Court of Justice in 1952, the system was restructured by the Treaty of Lisbon in 2007, which renamed the courts as the Court of Justice and the Court of First Instance as the General Court. A third body, the Civil Service Tribunal (2005–2016), was later dissolved. Despite these changes, the term “ECJU” is used to refer to the Court of Justice of the European Union.

⁴ <https://hudoc.echr.coe.int/>

The principle of access to justice, therefore, cannot be separated from the design of digital legal platforms, which was confirmed by the ECJ itself [73]. By integrating legal design principles into the UX and UI of case law databases, international courts can bridge this gap: ensuring that the publication of judgments does not remain a symbolic gesture, but becomes a functional pathway to justice for practitioners, researchers, and ultimately for the general public whose rights are at stake.

This thesis emerges from my personal motivation as a legal practitioner and researcher who has worked within international courts and advised individuals navigating complex legal systems such as European Union law, where I have witnessed a persistent and often underestimated barrier: the inaccessibility of legal information. For many – especially those without legal training but even legal professionals as well – case-law can appear as long, not clear, “cryptic” texts. Even for professionals, extracting relevant meaning from lengthy judgments can be a time-consuming and frustrating task.

Therefore, the thesis arises from those professional challenges and from a growing awareness that justice is not fully achieved unless it is also intelligible. Over the years, I have come to see that improving access to justice requires not only institutional reform or doctrinal clarity, but also a fundamental redesign of how legal information is structured, presented, and communicated. And the first in this direction was created by legal design.

Legal design offers a transformative, human-centred approach to reducing regulatory complexity and enhancing accessibility [79]. This interdisciplinary and proactive approach that uses human-centered design enables desirable outcomes and prevents the causes of problems from arising and developing into conflicts and disputes [32]. It offers methodologies to enhance the structure, visualization, and experience of legal information [2][8]. Legal design integrates design thinking, law, and technology to create more transparent, accessible, and user-friendly legal systems. As Margaret Hagan highlights in *Law by Design*, legal design emphasizes usability, utility, and engagement [2]. Key principles include simplicity, clarity, and empathy for the end user [3]. These Human-Computer Interaction (HCI) principles must support legal certainty, especially when legal information is accessed via digital systems (e.g., court databases, legal artificial intelligence (AI) tools, chatbots, contract online-generators, etc.) [74].

The rise of AI-enhanced legal tools promises to transform the way legal knowledge is accessed and understood [73]. The role of AI in legal design remains significantly underexplored [72], despite its potential to transform how legal information is accessed, understood, and applied [69], [73]. Legal designers emphasize now that it is crucial to responsibly employ AI-powered, human-verified tools for clarity, simplification, and analysis, e.g., for better implementation of legal design [25], [79]. We propose that by focusing on the needs of

end-users, whether they are legal professionals or the general public, AI-driven solutions could bridge the gap between legal complexity and user comprehension [73].

The objective of this research is to assess how AI-driven legal research tools and legal design principles can enhance the accessibility and clarity of case law from international courts. A particular AI platform is employed as a case study to illustrate these improvements, and our research was guided by the following questions:

Research questions:

- RQ1: How does the author's experience using traditional EU case law research tools reveal challenges and opportunities for improving legal research workflows?
- RQ2: How can insights from the author's research experience be translated into the design of an AI-assisted EU case law research prototype?
- RQ3: How do legal professionals interact with and perceive the AI-assisted EU case law research prototype in relation to their existing research practices?

The current study adopts a practice-based, qualitative research design at the intersection of law, design, and human-computer interaction. It combines UX research and the autoethnography method to explore how legal professionals interact with case law databases of international courts. The research is exploratory, and the goal is not only to study but to create and evaluate new ways of accessing legal information. Through user testing with legal researchers, the study evaluates the effectiveness, usability, and perceived trustworthiness of the AI tool, highlighting how the integration of AI and legal design can enhance access to complex legal knowledge.

At the same time, this study does not address popular visual communication techniques in legal design such as infographics and icons, for example. They are used to enhance readability and user engagement in contracts law. The text of judicial decisions, although equally in need of improved usability and accessibility, presents a different challenge. Judgments are complex argumentative documents that demand interpretive rather than purely visual clarity. Consequently, this research focuses not on visual redesign, but on understanding the user journey: how legal professionals search for, read, and analyze case law. The objective is to explore how AI can support these processes by enhancing the accessibility, accuracy, and analytical depth of legal information, rather than by introducing graphic or visual simplifications.

The methodological approach includes:

- 1) Autoethnography: The author's reflective analysis of interaction with legal research tools as a legal designer and former court legal adviser.
- 2) User research: A task-based usability study involving 6 participants, who are legal professionals, academics (or advanced law graduate students).
- 3) Qualitative and quantitative data analysis and semi-structured interviews.

The design process for the development of the AI-legal research tool in this thesis was structured according to the Design Thinking methodology developed at Stanford d.school [2]. This design thinking process was selected because of its human-centered approach, aimed at usability and accessibility in legal research. This process includes the five stages – empathize, define, ideate, prototype, and test – each of which informed the conceptualization of the tool.

The thesis draws upon interdisciplinary literature in legal informatics, design theory, and access to justice, seeking to bridge the gap between technical innovation and accessible international justice as a basic value of the rule of law.

This thesis is structured as follows. **Chapter 2** introduces the theoretical background of legal design and its relevance to access to justice in international courts, reviews existing digital legal research tools, and evaluates their usability and limitations through the lens of legal design. **Chapter 3** presents the research design and methodology, including the autoethnography method. **Chapter 4** analyzes the initial idea and prototype of the AI tool. **Chapter 5** discusses the findings from the user study with the AI platform, highlighting usability patterns, challenges, and design implications. **Chapter 6** discusses future work and limitations. **Conclusion** summarizes the main findings, reflects on methodological contributions, and offers directions for future research.

Chapter 2. Background

This chapter begins by outlining the foundations of legal design and its role in access to justice, with a focus on the international courts. It then examines digital legal research tools, such as databases of case law, and assesses their usability, limitations, and potential for improvement through legal design methods. Finally, it discusses the current use of AI and NLP in these tools, identifying how recent technological advances can support the accessibility and comprehension of complex legal information.

Together, legal design, digital research tools, and AI form the conceptual foundation for this study. Their intersection defines the analytical space for this research: the improvement of user experience in legal databases of international case law, supported by AI (Figure 1).

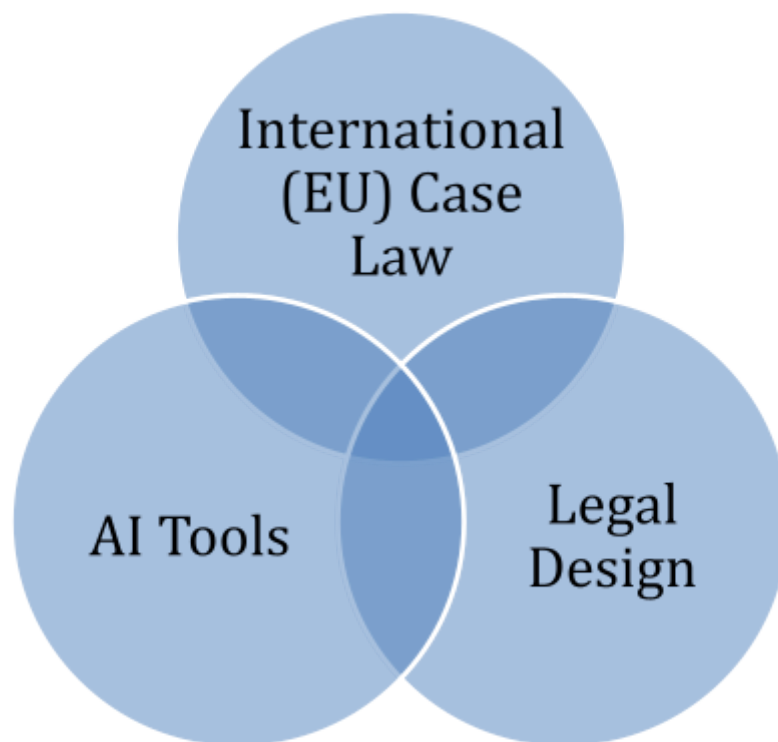


Figure 1. Interaction between International Case-Law, AI Tools, Legal Design leads to the improvement of user experience in legal databases of international case law, supported by AI.

In the intersection is *AI-supported, user-centred interfaces for case-law databases*, aimed at improving accessibility, usability, and understanding of international court jurisprudence.

2.1. Foundations of legal design and its importance for access to justice in international courts

The case law of international courts is chosen as the object of analysis in this master's thesis because these judgments have a far-reaching effect on the interpretation and application of law. The CJEU and the ECtHR play a central role in establishing fundamental legal principles in Europe. The CJEU is the highest court within the European Union (EU), ensuring uniform interpretation and application of EU law [17].

Through its judgments, the CJEU authoritatively interprets both primary and secondary law, thereby shaping how legal provisions are understood and applied. The role of the CJEU is to ensure that EU law is interpreted and applied consistently (relative to the facts and the context of each case) in all Member States, and that Member States and EU institutions abide by EU law. The case law of the CJEU is therefore also an important source of law to all national courts and administrative agencies as they apply EU law, as well as legal practitioners and the general public [69].

The CJEU judgments should therefore be treated as high-priority documents for inclusion, given their foundational role in shaping legal meaning and regulatory compliance [69].

Despite the nature of its rulings, the CJEU case law can be challenging even for legal professionals to understand. Among these challenges are managing legal change over time, addressing the multilingual nature of EU law, and ensuring precise mapping between legal sources and their interpretive context [69].

So, improving access to CJEU case law is crucial for promoting legal certainty, fostering inclusivity, and ensuring access to justice. The general public and legal professionals also need to deal with the absence of user-friendly interfaces when accessing legal information.

And this is where the field of Human-Computer Interaction comes into play. HCI is a multidisciplinary field of research that focuses on the understanding and design of the interaction between humans and computers. As Norman said, it establishes how users interact with, interpret, and apply information [19]. From the perspective of design research, case law thus represents not only legal content but also a user interface problem – its accessibility, clarity, and usability directly affect the capacity of users (both legal professionals and the general public) to engage with justice.

According to the definition by the Legal Design Alliance, *“legal design applies human-centered design to the world of law to enable desirable outcomes and prevent the causes of problems from arising and developing into conflicts and disputes”* [32]. Legal design emphasizes achieving the goals of the law and its users, as well as preventing the causes of risks and harm using contextual and real-life knowledge [30].

Among others, the most important attitudes of legal design according to Legal Design Alliance [32] are:

- 1) Human-Centred: Create information, services, and systems with the community, based on their needs and abilities, rather than starting with the needs of lawyers and courts.
- 2) Proactivity: Drive desirable outcomes, rather than deal with the consequences of failure or punishment.
- 3) Prevention: Prevent problems rather than only intervene to resolve conflicts that have arisen.
- 4) Awareness: Enable people to be aware of their rights, responsibilities, obligations, and prohibitions, rather than just apply prescriptive norms.
- 5) Effectiveness: Enable people to understand and do the right thing easily, rather than requiring considerable investments of time, money, effort, or expertise.
- 6) Inter-Disciplinarity: Establish a common language to collaborate across disciplines, rather than following just one perspective.

As the Michigan Advocacy Program mentioned in its Graphic Advocacy Project, lawyers and legal professionals undergo specialized training in order to understand the law and hone their advocacy skills [78]. While this expert mindset can be useful, it can also make it difficult to recognize, seek out, and value less institutionalized forms of expertise, like the lived experiences (Figure 2). As a result, legal design also advocates for using innovative communication strategies to meet people’s cognitive capabilities and other needs in delivering legal information [28].

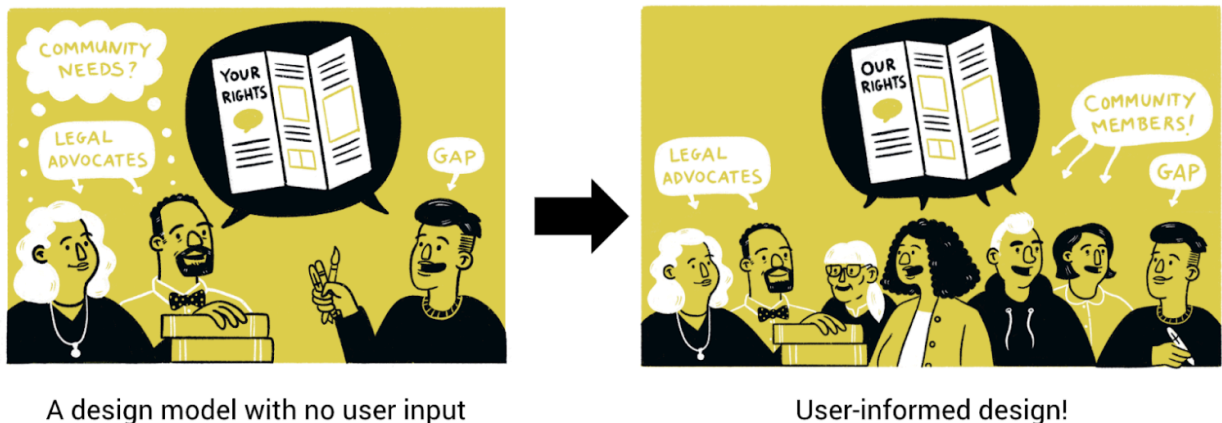


Figure 2. Build a better: Strategies for user-informed legal design. Image source: <https://www.lsntap.org/> [78].

Legal design, which applies human-centered principles to law, or, as it will be discussed further, to case law, is not an optional extra; it is foundational to democratic legal systems in the digital age [53]. Legal design, therefore, positions itself at the intersection of law, design, and

technology, with the intention of translating legal norms into usable and comprehensible knowledge [2]. This is particularly relevant in the context of international courts, where complexity, multilingualism, and cultural diversity create additional barriers to accessibility [55] [56]. For instance, judgments of the CJEU are drafted in highly formalized language, translated into all official EU languages, and published in a way that prioritizes legal precision over usability. While this is crucial for ensuring the uniformity and direct effect of EU law, it often results in texts that are difficult to navigate or lengthy, especially for individuals without specialized training, or even for lawyers who are not specialized in EU law [54]. Legal design offers tools to reconcile these competing needs: precision and authority on the one hand, clarity and accessibility on the other [2].

Legal design contributes to access to justice by addressing clear and precise legal communication. In practice, it means that law may formally guarantee rights and remedies, but if citizens cannot access, understand, and apply them, the promise of justice remains theoretical [2] [54]. International courts, such as the CJEU or the ECtHR, are particularly vulnerable to this problem. Their decisions often involve questions of fundamental rights, freedom of movement, or non-discrimination, which directly affect the lives and rights of individuals. Yet, the people most affected by these rulings are significantly less able to interpret the courts' decisions in their original form. Legal design, by reframing legal communication around the needs of its audiences through plain language summaries, structured information design, or digital tools with improved user experience, bridges the gap between the law and the judicial system, facilitating its effective use, such as access to justice.

This perspective resonates with broader theoretical debates on access to justice. Mauro Cappelletti and Bryant Garth, in the 1970s, described the “three waves” of access to justice reforms: legal aid, collective rights, and procedural/structural innovations [57]. Today, legal design can be seen as a “fourth wave,” introducing human-centered, design-driven approaches that focus on usability, inclusivity, and prevention. While traditional access-to-justice reforms emphasized financial and procedural barriers, legal design addresses informational and cognitive barriers [2]. In the international context, this is particularly urgent, as courts like the CJEU and ECtHR are expected not only to resolve disputes but also to serve as authoritative interpreters of human rights and EU law, thereby shaping public trust in the legal order.

The application of legal design to international case law highlights its preventive and proactive dimensions. Instead of treating judgments as static documents, legal design treats them as communicative tools that can anticipate users’ needs [60]. For example, a judgment is often accompanied by a summary and may also include a schematic overview of the legal issue and the procedural history. This would allow national judges, legal professionals, and individuals to situate the ruling within a broader legal framework. Similarly, interactive tools could enable users to filter judgments according to legal issues or specific provisions of EU law. Such

approaches do not alter the binding text of the judgment itself but augment it with layers of accessibility that enhance its preventive and educational function [60].

An additional complexity arises from the multilingual and multicultural environment of international courts [56]. The CJEU, for instance, works with 24 official EU languages, and its authentic judgments are published in the language of the referring court, with translations in other languages for informational purposes. This poses unique challenges for consistency, accuracy, and usability [56]. Legal design can help by standardizing metadata, providing visual summaries, or using icons and infographics that transcend language barriers [2]. While AI-assisted translation tools are rapidly improving, they cannot alone guarantee accessibility for diverse audiences [61]. Nevertheless, by integrating design principles, courts could provide consistent, recognizable communication formats that make judgments easier to navigate across languages and jurisdictions.

Critics may argue that legal design risks oversimplifying complex legal reasoning, potentially distorting the meaning of judgments or undermining the authority of the court. However, proponents emphasize that legal design does not seek to replace legal texts but to complement them [24] [31]. Just as headnotes, press releases, or case summaries currently serve as entry points to judgments, legal design offers structured and human-centered approaches to those entry points.

As courts produce ever greater volumes of case law, the challenge is not only availability but also making it easy to navigate [69]. A judgment hidden in a database is functionally inaccessible to those who cannot retrieve or interpret it. Legal design responds to this by reframing case law in a way that enables legal professionals and the general public to communicate it effectively [24]. In doing so, it strengthens the legitimacy of international courts, fosters trust in their decisions, and supports the democratic promise of law as something that belongs to all.

2.2. Digital Tools used in EU Case Law: Usability, Limitations, and Assessment from a Legal Design Perspective

Digital case-law databases are the primary entry points to the jurisprudence of European and international courts. In the EU, two institutional platforms are particularly central to this aim: EUR-Lex, the official website of EU law and other public documents of the EU, including the Official Journal of the EU, published in the 24 official EU languages; and CURIA, the official website of the CJEU that publishes judgments, orders, opinions, and other documents related to the Court's functioning. These platforms serve a wide range of users – legal professionals, academics, public administrations, journalists, and citizens.

2.2.1. EUR-Lex

EUR-Lex aggregates the EU legislation and the CJEU case law (Figure 3). It provides advanced search options, but some usability challenges limit its accessibility for non-expert users and often for expert users as well. First are multiple search entry points, because this site attempts to serve many use cases (consolidated versions of founding treaties, secondary legislation, legislative process documents, case-law), the second is the search logic itself (the search is effective mainly if the user knows the document numbers or the exact legal terms), which results in googling first because sometimes it is faster than finding document in EUR-Lex [75].

The screenshot shows the EUR-Lex website interface. At the top, there's a header with the European Union logo and 'EUR-Lex' title. Below the header, there's a navigation menu on the left with options like 'Case-law', 'Reports of cases', and 'Directory of case-law'. A central search bar is labeled 'QUICK SEARCH'. Below the search bar, there's a section titled 'EU case-law' with 'INFORMATION FOR USERS' and a list of judgments and orders. At the bottom, there's a 'Direct access to case-law' section with dropdown menus for 'Court', 'Document type', and 'Case number', and a 'Year' dropdown set to '2025'.

Figure 3. The main webpage of the EUR-Lex website.

2.2.2. CURIA

CURIA publishes the CJEU case-law and related documents in the 24 official EU languages. First, CURIA provides advanced search fields, but the search interface often assumes

knowledge of legal terminology and does not sufficiently support exploratory or concept-based queries that users conducting comparative or thematic research need [71]. Second, full-text judgments and procedural documents are typically long, uninterrupted documents (PDFs or HTML) with little in-page structuring for reading comprehension (headnotes, paragraph summaries, visual signposting). This makes rapid skimming difficult, particularly for non-specialists [76].

These screenshots demonstrate that navigation at the website is not intuitive (Figure 4), and it requires the user to be not just a legal expert, but a specialist in EU law (Figure 5).

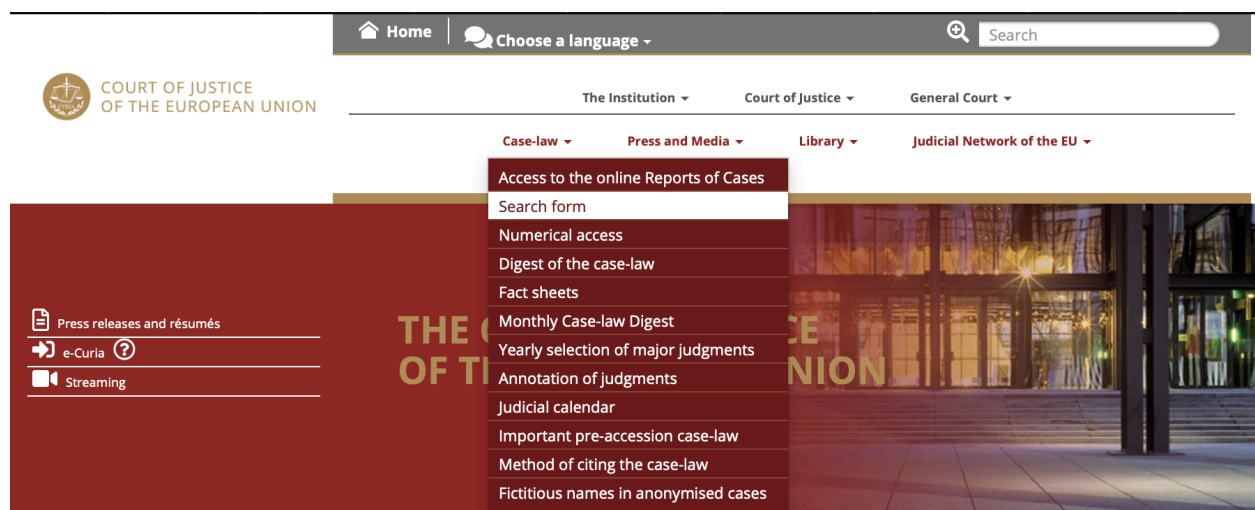


Figure 4. The main webpage of the ECJ website.



Home > Search form

last update 17/10/2025

[Clear fields](#) [Search](#)

LIST OF RESULTS	☒ All cases ☐ Cases closed ☐ Cases pending
Display preferences	☒ All ☐ Court of Justice ☐ General Court ☐ Civil Service Tribunal
☐ Automatic	
☐ List of cases	
☐ List of documents	
Listing preferences	
☐ Case numbers in descending order	
☐ Case numbers in ascending order	
☐ Dates in descending order	
☐ Dates in ascending order	
GENERAL INFORMATION	
Help	
Disclaimer	
LINKS	
Curia	
Diary	
EUR-Lex	

Case status	☒ All cases ☐ Cases closed ☐ Cases pending
Court	☒ All ☐ Court of Justice ☐ General Court ☐ Civil Service Tribunal
Case number	(ex. C-17/05; 17/05)
Name of the parties	
Documents	All
Provisions of national law referred to	
Provisions of international law referred to	
ECLI	ECLI:EU:
Text	
Period or date	Date of delivery from to (dd/mm/yyyy) ☐ last 6 days ☐ last month ☐ last year ☐ last 5 years ☐ on (dd/mm/yyyy)
Subject-matter	
Procedure and result	
References to case-law or legislation	Search in ☒ Grounds of judgment ☐ Operative part ☐ Opinion Category
Systematic classification scheme	☒ Include earlier/new scheme
Formation of the Court	
Judge-Rapporteur	
Advocate General	
Source of a question referred for a preliminary ruling	
Authentic language	☒ Language of the case ☐ Language of the Opinion

[Comments and suggestions](#) [Clear fields](#) [Search](#)

Figure 5. The webpage of the search form.

Even the digest of the CJEU case law is organized in a way that is familiar only to those who know the history of European integration (Figure 6).

+

Access to the online Reports of Cases

Search form

Numerical access

►

Digest of the case-law

Fact sheets

Monthly Case-law Digest

Yearly selection of major judgments

Annotation of judgments

+

Judicial calendar

Important pre-accession case-law

Method of citing the case-law

Fictitious names in anonymised cases

Case-law > Digest of the case-law

✉

f

✕

🖨

in

p

👤

Digest of the case-law

The Répertoire de jurisprudence (Digest of case-law) is a systematic collection of the summaries of judgments and orders of the Court of Justice, the General Court and the Civil Service Tribunal delivered or made since they commenced their activities.

The **classification scheme**, initially subdivided into eight parts, for the period 1954 to 2009, has been reworked following the changes brought about by the Treaty of Lisbon into a plan in nine parts, for the case-law as from 2010. References between the two classification schemes make it easy to move from one to the other.

Classification scheme before the Treaty of Lisbon (applied to case-law from 1954 to 2009)	Classification scheme after the Treaty of Lisbon (applied to case-law since 2010)
A - The Community legal order	1 - The legal order of the European Union
B - The European Community (EEC/EC)	2 - Institutional framework of the European Union
C - The European Coal and Steel Community (ECSC/CS)	3 - Legal proceedings
D - The European Atomic Energy Community (EAEC/AE)	4 - Internal policy of the European Union
E - Convention on Jurisdiction and the Enforcement of Judgments	5 - Association of Overseas Countries and Territories
F - The European Civil Service	6 - External policy
G - The European Union (EU)	7 - General and final provisions
H - Convention on the law applicable to contractual obligations	8 - Accession of new Member States
	9 - Civil Service

The **summaries** contain the essential points of law stated in the decision in question, based as closely as possible on the actual wording of that decision. Associated with each summary is: a series of **keywords** which reflects, systematically and telegraphically, the content of the point considered, a **classification code** corresponding to the field concerned and the **reference to the paragraphs** of the decision which were used to create the summary.

Under the same classification code, the summaries are classified in the **chronological order** of the decisions on which they are based. However, if they include a **series of keywords** identical in every respect to a pre-existing series, the text itself of the summary will be attached to that series irrespective of its date. Similarly, if the series of keywords and the text of the summary are identical in every respect to a pre-existing set, only publication details and relevant paragraph numbers will be added below the existing summary.

Figure 6. The web page of the digest of the CJEU case law.

Here, the classification scheme has been reworked following the changes brought about by the Treaty of Lisbon into a plan in nine parts, for the case-law for the period 1954 to 2009 (before the changes) and as from 2010 (after the changes by the Treaty of Lisbon). References between the two classification schemes are obvious but not clear to non-specialists in EU law.

Figure 7, for example, demonstrates the digest of the case law about the Community legal order for the period from 1954 to 2009.

15



A-01	Sources du droit communautaire (voir aussi 1.01)
A-02	Compétences respectives des Communautés et des États membres (voir aussi 1.03 1.03.01)
A-03	Droit communautaire et droit national (voir aussi 1.05)
A-04	Droit communautaire et droit international (voir aussi 1.06)
A-05	Interprétation du droit communautaire (voir aussi 1.07)

Figure 7. The digest of the case law until 2010.



1.01	Sources du droit de l'Union (voir aussi A-01)
1.02	Valeurs et objectifs de l'Union (voir aussi B-01.02)
1.03	Compétences et obligations respectives de l'Union et des États membres (voir aussi A-02)
1.04	Droits fondamentaux (voir aussi A-01.02.01)
1.05	Droit de l'Union et droit national (voir aussi A-03)
1.06	Droit de l'Union et droit international (voir aussi A-04)
1.07	Interprétation du droit de l'Union (voir aussi A-05)
1.08	Principes démocratiques
1.09	Non-discrimination et citoyenneté de l'Union (voir aussi B-01.05 B-01.08)
1.10	Dispositions d'application générale (voir aussi B-01.09 B-21)

Figure 8. The digest of the case law from 2010.

Figure 8 demonstrates the digest of the case law about the Community legal order for the period from 2010. Both digests cover the same questions, for example, the sources of EU law (see A-01 on Figure 7 and 1.01 on Figure 8). Also, the digest of the CJEU case law is translated into French only, without the possibility to search and read the summaries into the other 23 official languages of the European Union.

In general, these problems lead to the outcome that only experts can use these websites properly, while the public may be excluded, which undermines transparency and access to justice [72], [74]. At the same time, from our point of view, legal professionals (and possibly the broader public) deserve better-designed and more accessible legal tools [47].

2.2.3. HUDOC

HUDOC is the case-law database of the ECtHR. It publishes judgments, decisions, pending cases, translations, summaries, and related documentation (Figure 9). As of its 2024 report, it now exists in a total of 10 languages and contains over 200,000 documents. More than 37,000 translations in 34 languages are available, making it a key port of call for legal professionals across Europe and beyond [77].

The screenshot displays the HUDOC website interface. At the top left is the HUDOC logo with the text 'European Court of Human Rights'. To the right are navigation links: 'ECHR-KS', 'Preferences', 'Advanced Search', 'Case-Law References', and 'Other Languages'. A search bar with a magnifying glass icon and a 'SEARCH' button is located at the top right. Below the logo, a 'NARROW YOUR SEARCH' section contains a 'DOCUMENT COLLECTIONS' list with checkboxes for various categories like 'Case-Law (70033)', 'Judgments (70033)', 'Grand Chamber (5497)', 'Chamber (64536)', 'Committee (0)', 'Decisions (0)', 'Grand Chamber (0)', 'Chamber (0)', 'Committee (0)', 'Commission (0)', 'Screening Panel (0)', 'Communicated Cases (0)', 'Legal Summaries (0)', 'Advisory Opinions (0)', 'Article 47 (0)', 'Protocol No. 16 (0)', 'Opinions (0)', 'Panel refusals (0)', 'Other requests (0)', 'Reports (0)', 'Resolutions (0)', 'Execution (0)', and 'Merits (0)'. Below this is a 'Press Collection' link and 'NOL Legal Summaries'. A 'MORE HUDOC SITES' section lists links to 'HUDOC-COMMHR', 'HUDOC-EXEC', 'HUDOC-CPT', 'HUDOC-FCNM', 'HUDOC-ECRI', and 'HUDOC-GRECO'. The main 'ADVANCED SEARCH' section features a grid of input fields for 'Text', 'Case Title', 'Application Number', 'Strasbourg Case-Law', 'Rules of Court', 'Applicability', 'ECLI', 'Conclusion', 'Res Num', 'Date', 'Separate Opinion(s)', 'Domestic Law', 'International Law and Other Relevant Material', 'Keywords', and 'Request Number'. A 'SEARCH' button is at the bottom right of this section. Below the search fields, a status bar shows '70033 Results Found' and options to 'Print', 'Export', and 'RSS'. A 'Sort by:' dropdown menu is set to 'Relevance'. A 'CRITERIA' section shows 'Document Collection: Grand Chamber OR Cha...'. The results list includes three entries: 'CASE OF ISAIA AND OTHERS v. ITALY', 'AFFAIRE ISAIA ET AUTRES c. ITALIE', and 'CASE OF HORA v. THE UNITED KINGDOM', each with details on date, language, and court section.

Figure 9. The main webpage of the HUDOC website.

The interface offers many filters (date, respondent State, articles of the Convention, etc.) but often expects users to know what filters to use. The advanced search forms can be intimidating and not clearly sign-posted. As a result, users might misapply filters, which reduces usability for comparative research. The site has multiple collections, modules, and specialized HUDOC sub-sites (HUDOC-EXEC, HUDOC-CPT, etc.), which can be confusing. Also, the “key

cases” or “selection of key cases” features are helpful but not always obvious or understandable in how cases are selected.

While HUDOC provides summaries or “legal summaries” for some cases, these are not universally available. Since 2022, the ECtHR has been testing neural machine translation software, which draws on AI, and it expects to “achieve some productivity gains” [77]. “By integrating new digital solutions, the Court aims to improve overall workflow, enabling a more responsive and timely handling of cases. As these developments unfold, they hold the promise of transforming the way the Court interacts with applicants and manages its caseload, paving the way for a more modern and effective judicial process” [77].

The findings above establish the UX baseline against which legal-design interventions can be evaluated in this study: EUR-Lex, CURIA, and HUDOC are official sources of the international courts, but they have usability gaps that limit access to justice for non-expert users and complicate cross-jurisdictional research even for professionals. Chapters that follow will (a) employ user-centred evaluation methods to map these gaps in more detail, and (b) prototype legal-design and AI-assisted interventions (search, summarization, and multilingual comparison) to assess whether the recommended improvements meaningfully reduce cognitive load and increase task success in representative user scenarios.

2.3. Use of AI and Natural Language Processing in Legal Digital

Many of today’s legal tech tools – such as case-law search engines – are built on natural language processing (NLP) technologies, which aim to automatically understand and process human language. NLP and machine learning algorithms could simplify complex legal texts, provide personalized legal guidance, and enhance the searchability of legal databases [72].

NLP alone is not enough for great UX. Moreover, NLP can help extract information from legal texts, but it does not ensure that the information is well-organized, clearly displayed, or easy to interact with [48]. Also, the risk of hallucinations and lack of reliable semantic search are real problems. So, while NLP helps with data access, it doesn’t solve the design challenge – the human experience of navigating and understanding that data. It is crucial to integrate legal design principles – a user-centered approach that prioritizes clarity, accessibility, and usability – into the development of new digital tools [74], especially when adopting them in international judicial systems, to transform complex legal documents into comprehensible resources

An important thing – several years ago, legal design (meaning more pictures and short, simple texts in legal contracts, terms of services, etc.) was a mainstream. Today, automated

drafting of contracts is one of the areas where digital tools have started to assist and even replace legal practitioners [80].

The next step is to involve digital tools for assisting in the examination of legal document content [80]. AI-reading can help in legal analysis of many documents (for example, provide a summary of a court judgment). Legal professionals and the general public can use an AI agent to reach the necessary information in a very short time. We live in a time when advanced technologies are transforming the law – they may even alter its very nature [27]. AI is recognized in legal design research and practice as a tool for creating more comprehensible legal texts. AI develops communication in which wording, structure, and design are so clear that intended readers can easily find what they need, understand it, and utilize that information [49].

According to *Toivonen et al.*, a framework of legal communication can be efficient, empathetic, and empowering, based on three pillars:

- 1) User-centred communication: Designing communication strategies that are empathetic and responsive to the diverse cognitive, cultural, and situational needs of users.
- 2) Clear communication and information design principles: Using plain language and information design techniques, for example, organizing information logically and employing multimodal methods to enhance clarity and comprehension for all audiences.
- 3) Responsible use of AI tools: Utilizing advanced technologies to adapt information dynamically based on individual profiles, ensuring accessibility across varying literacy levels, languages, and sensory abilities, within the limits of AI regulation and guidelines [25].

AI tools can bring these principles into actionable, real-world applications. Beyond simple keyword searches, AI-powered platforms can now cluster cases by thematic similarity, generate instant plain-language summaries, and highlight key principles of law within judgments [52]. Such features have been tested in commercial platforms, and pilot projects in academic research have demonstrated how NLP models can extract citations, doctrinal categories, or reasoning structures from judgments with promising accuracy [69], [73].

Yet, these advances also raise concerns about transparency, accountability, and alignment with legal findings of the courts or judicial intent [52]. If AI generates simplified summaries or recommendations, users must be able to verify the accuracy of these outputs and trace them back to the original legal text. Otherwise, the risk of overreliance on AI tools could undermine legal certainty [50].

In this sense, the intersection of UX, legal design, and AI presents both promise and tension. On the one hand, AI can dramatically lower barriers to accessing case law by filtering,

summarizing, and reorganizing information in ways specified to diverse users [51]. On the other hand, legal design reminds us that technology cannot replace the need for clarity, structure, and empathy in legal communication. The goal is not only to retrieve information quickly but to empower users – whether judges, lawyers, or the general public – to understand and use it effectively in practice. This requires co-design approaches, where developers of legal research tools collaborate with end-users to identify pain points, test prototypes, and ensure accessibility for diverse audiences [52].

Looking ahead, the most successful digital legal research environments will likely be those that combine authoritative legal content with human-centered design and transparent AI assistance. Such systems would allow for multiple ways of engagement: from quick AI-generated summaries for general users, to advanced analytic tools for legal professionals who need to study reasoning patterns in depth [50]. In other words, the future of digital legal research lies not in replacing traditional texts with AI outputs, but in creating flexible, adaptive ecosystems where law is accessible at different levels, according to the needs and abilities of the user.

Artificial intelligence offers a promising way to bridge the gap between the law and the needs of its users and provide personalized accessibility to legal information [25]. AI tools can analyze huge amounts of data, choose relevant legal norms, thereby reducing the information overload and facilitating legal research. Among risks of using AI such as hallucinations and the lack of transparency in how the AI agent makes decisions, AI tools can only make decisions based on the information provided to them.

Court decisions are legal texts with specific language and complex syntax, so they obviously increase the cognitive load even of well-trained legal professionals. The effectiveness of any legal system relies heavily on how the norms are communicated [25]. Without clear and accessible delivery, even the most well-intentioned laws risk alienating those they are designed to serve [25]. AI can dynamically adapt legal texts and adapt to the particular needs of legal professionals working with texts.

As a result, we witness times when AI tools become everyday reality and are implemented in justice. For example, the concept of “smart courts” [5] and the concept of e-Justice [6] refer to the use of technology and data to improve the efficiency, transparency, and accessibility of court proceedings. Smart courts incorporate such technologies as artificial intelligence, blockchain, virtual hearings, and case management systems [5].

The international courts’ case law is in the main focus of this study and it is important to mention how they plan their own future in digital world. The CJEU started to explore the possibilities afforded by AI algorithms several years ago. In 2019, the Court’s Innovation Lab was

created, aiming to explore emergent technologies and the way in which the Court can leverage them [73]. The Court's Innovation Lab used the collective intelligence of the CJEU and talented minds with different professional backgrounds to create a meaningful multidisciplinary initiative (Figure 10).

The CJEU has started its journey towards becoming a smart court by digitalisation of its operations and implementation of technological advancements. For example, the SIGA case management system is an important step ahead, and combining this with artificial intelligence and robotic process automation will support the transformation towards being a smart court. Also, the CJEU uses videoconferencing technology to conduct hearings remotely [73].

More importantly is that the CJEU explores the use of artificial intelligence to analyse large amounts of legal data, provide insights into cases, improve the efficiency of legal research, or automate administrative activities [5]. This would help the CJEU to increase access to justice and positively impact the quality of justice. As a result, the CJEU drafts and adopts an A.I. strategy [73].

Vision statement

The Court of Justice of the European Union will leverage responsible, equitable, traceable, reliable and governable A.I. capabilities as well as the talents of its own workforce in its journey towards becoming a Smart Court.



FIGURE 1 ARTIFICIAL INTELLIGENCE GOALS

Figure 10. The goals of the CJEU are to develop an AI tool for better access to justice.

By incorporating AI into its operations, the CJEU wants to improve its efficiency, reduce its workload, and make better use of its resources. As the CJEU emphasizes, this can ultimately lead to a more effective and efficient judicial system, benefiting both the Court and the people it serves [73].

In current research, the possibility of incorporating AI in a way that supports a user-centred approach and enhances UX is examined in greater detail, with a view to improving legal research on the CJEU case law.

Chapter 3: Autoethnography: A Designer's Perspective in Legal Context

This chapter covers autoethnography in which we analyze access to case law from the perspective of a designer with a background in the legal field. Autoethnography is a form of qualitative research in contrast to traditional ethnography, which prioritizes the observation of others [44]. Autoethnography presents the researcher as both subject and analyst, whose knowledge is a lived engagement [41].

The choice to include an autoethnographic perspective in this study is motivated by two reasons. First, it recognizes that the interpretation of case law is never detached from the cognitive practice of the legal professional who engages with it. Second, autoethnography is a method to integrate the researcher's dual positionality – as a legal scholar with professional experience in international adjudication, and as a designer engaged in developing methods to improve the usability of legal information systems. This dual perspective offers insights that might remain obscured in more conventional approaches.

The chapter is structured in three subparagraphs. It begins by presenting the theoretical foundations of autoethnography, highlighting its relevance to design research and human-computer interaction. The second section turns to personal experience, where the researcher reflects on experience with case law databases - EUR-Lex, Curia, and HUDOC - as both a user and a critic of their design. The third section develops a case law analysis, demonstrating how autoethnography can reveal challenges and opportunities in the way legal professionals engage with international jurisprudence. The chapter supports the overall argument of this thesis: that user-centered approaches, informed by both legal expertise and design thinking, are essential for enhancing access to justice.

3.1 Autoethnography: Theoretical Foundations

Autoethnography or personal ethnography is a qualitative research form, an approach to research and writing that aims to describe and systematically analyze (graphō in Ancient Greek, 'writing') personal experience (autós in Ancient Greek, 'self') to understand cultural experience (éthnos in Ancient Greek, 'nation' or 'culture') [44]. In this autoethnographic method, the fieldworker's experience is investigated alongside the experiences of other observed social actors [41]. The individual, social, and cultural levels of description are interconnected to produce a complex and multilayered account of reality [42]. The idea of the autoethnography is to write detailed stories based on emotional feedback and to describe a particular socio-cultural setting in terms of personal awareness and experience.

Autoethnography was incorporated into Human-Computer Interaction methods to understand how people utilize technology in real contexts of use, or in real life. In other words, HCI ethnography attempts to produce accurate descriptions of the “world” and the individuals who inhabit it. In general, the ethnographer should maintain an impartial and impersonal view; however, recent trends suggest that a reflexive and first-person perspective is necessary to add depth to the research. *Jones et al.* say that “Autoethnography requires that we observe ourselves observing, that we interrogate what we think and believe, and that we challenge our own assumptions, asking over and over if we have penetrated as many layers of our own defenses, fears, and insecurities as our project requires” [45]. A reason for moving to the autoethnographic method can be traced to the need for finding less-demanding techniques than those employed in traditional ethnographies for studying technology in real contexts of use [41]. The first-person perspective enables HCI researchers and designers to use personal experiences to gain insights about technology in natural, everyday settings while recognising and reflecting on their positionality in their research and design. [43]

Autoethnographers produce aesthetic and evocative thick descriptions of personal and interpersonal experience by identifying patterns of cultural experience based on field notes, interviews, and/or artifacts, thus making characteristics of a culture familiar for insiders (i.e., cultural members) and outsiders (i.e., cultural strangers) [46].

3.1.1 Autoethnography applied to the EU Law Context

The core of this methodological approach of autoethnography is that the researcher draws on their own dual experience – in current research, the experience as a legal professional (with academic and practical background in international and EU law) and as a designer-researcher. Autoethnography offers, in this case, a unique lens for bridging these two identities, enabling an insight into how legal professionals interact with case law databases and how these interactions can be reimaged through design.

Usually, the autoethnography method is applied in two ways. First, it facilitates a systematic reflection on the experience – in the present case, this experience is of reading, interpreting, and searching for the case law of the Court of Justice of the European Union from the perspective of a legal researcher. This includes an examination of the cognitive and procedural strategies for navigating complex legal documents, as well as the emotional and practical challenges encountered in the process. Second, it supports a critical analysis of how this experience evolves through design interventions aimed at making legal information more accessible.

The primary empirical focus of this study is the CJEU case law and the ECtHR case law. The first is an institution whose decisions have far-reaching implications for the interpretation and application of EU law, the second is important for the member states and for the CJEU itself, being an example of legal reasoning and the basis for the European Charter of Human Rights and the protection of human rights in the EU. Both courts play a central role in shaping fundamental legal principles across the European continent. Yet, the accessibility and usability of their case law remain a persistent challenge for both legal professionals and the broader public.

As mentioned before, the courts' official case law databases, hosted on the Curia, EUR-Lex, and HUDOC websites, are characterized by structural complexity, limited search functionality, and a document-centered rather than user-centered architecture. These factors, combined with the volume of judgments issued annually and the multilingual nature of the Court's work, can significantly hinder efficient legal research.

The thematic scope of this case study is limited to migrant workers' rights in the EU. Their rights are rooted in the intersection of the free movement of persons, a fundamental principle of a free market, and core principles of EU law, such as non-discrimination. Moreover, case law on migrant workers' rights often requires complex legal reasoning and frequent cross-references to prior case law. This is a highly relevant aspect given that current AI tools are evolving to produce more accurate and less hallucinatory summaries of such materials. Finally, my professional background in EU law allows me to have an additional perspective for evaluating both the legal issues and their presentation in digital environments.

The main tools used in this autoethnography study include:

- **Legal databases** (Curia⁵, EUR-Lex⁶, HUDOC⁷);
- **Miro**⁸ for mapping legal concepts, user journeys, and pain points. The reflective process is supported by a variety of research artefacts, including interaction logs, annotated screenshots, interface sketches, and documented design decisions. These materials serve both as empirical data and as a record of the iterative journey from problem identification to conceptual solution. In doing so, the autoethnographic method not only grounds the study in lived professional practice but also positions the researcher as an active participant in the process of legal innovation.

⁵ <https://curia.europa.eu/>

⁶ <https://eur-lex.europa.eu/>

⁷ <https://hudoc.echr.coe.int/>

⁸ <https://miro.com/>

3.1.2. Positioning the Author

I hold a PhD in EU Law from the Moscow State Law University, followed by a postgraduate qualification in Interactive Media Design from the University of Madeira. I have engaged with both doctrinal legal research and design research methodologies, including supervised research in usability, user interfaces, and digital accessibility.

My experience with EU case law began during my PhD thesis. I used CURIA website to search judgments of the Court of Justice of the European Union for doctrinal legal research. Subsequently, as part of design-oriented projects, I have repeatedly worked with EU case law databases such as Curia, EUR-Lex, and national translations thereof, engaging not just with content but with interface features, search functionalities, multilingual access, and the legibility of judgments. I have observed and navigated obstacles such as inconsistent categorization, filtering options, limited cross-jurisdictional comparability, and challenges posed by specialized legal terminology in multiple languages.

Over 6 years, I worked as a legal counsellor in the Court of the Eurasian Economic Union (EAEU Court), with duties including (but not limited to) analysing legal texts, prototyping interfaces for legal information systems, and evaluating the usability and accessibility of digital legal databases, because at that time I also used HUDOC together with Curia and EUR-Lex. I have collaborated with law practitioners (judges, counsellors) and technologists (web developers, UI/UX designers) who developed the website of the EAEU Court with a database of its decisions. This interdisciplinary approach has allowed me to appreciate both the formal constraints of legal language and procedure and the usability challenges faced by users of case law.

3.2. Case Study 1: EUR-Lex and Curia

For this route, I decided to investigate case law on migrant worker definition, because in my practice as legal counsel, the different aspects of free movement of persons, as well as other freedoms of the internal market, are in high demand.

3.2.1. EUR-Lex



Figure 14. The starting page of the official website of the European Union.

I open the browser and type *eur-lex.europa.eu*. The page (Figure 14) is in the official colours of the European Union. Here I can choose the language I am the most comfortable with, besides the 24 official languages of the European Union. Usually, I choose English.

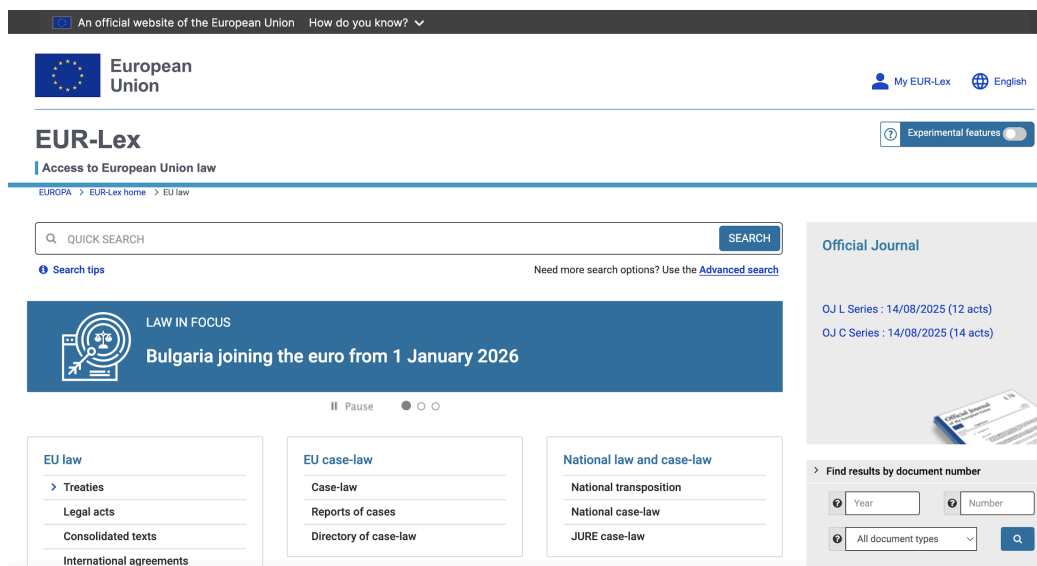


Figure 15. The first page of Eur-Lex.

The landing page (Figure 15) greets me with the familiar layout: a search bar stretching across the top, menus for legislation, case-law, and preparatory acts. My attention moves to the “Case-law” section. I press this submenu and see again the search bar, the description of this section, and the classifier on the left side (Figure 16).

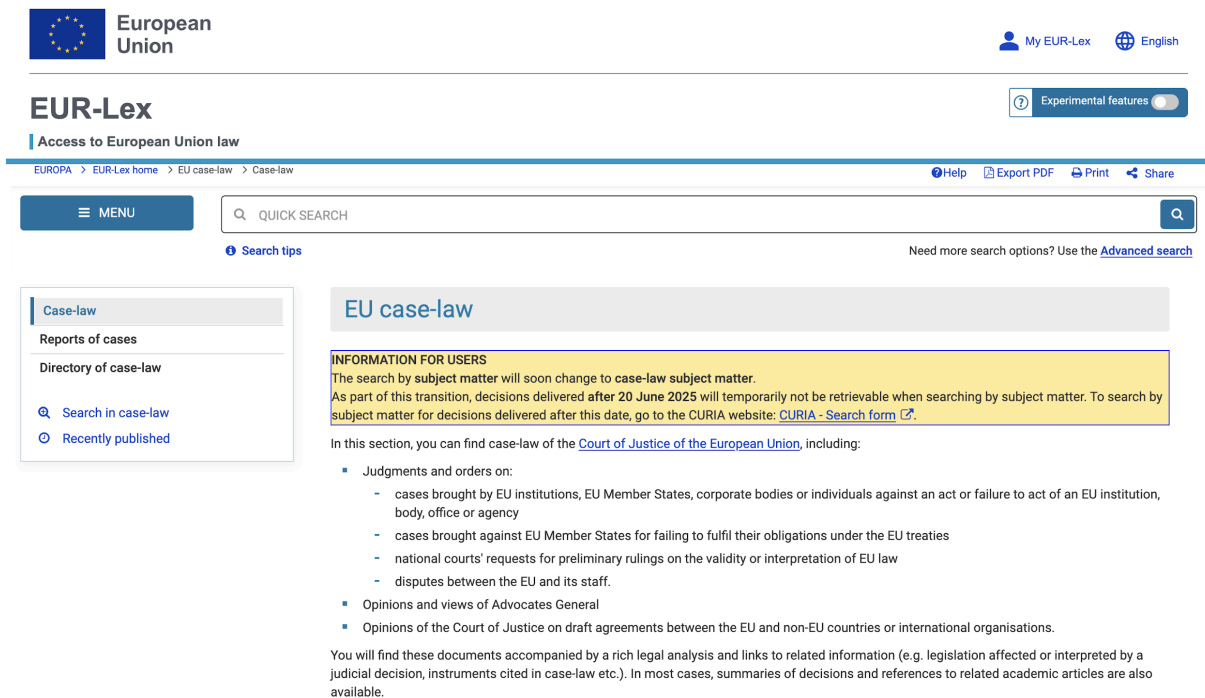


Figure 16. Trying to find a way to the case-law.

The website also has a clear exploration of how to use the search at the bottom of the page (Figure 17), but I don’t use it, because the left side of the webpage is clear enough for me.

How to search in this section

The left-hand side of this page gives access to several search tools.

- **Reports of Cases** gives access to a search directly in the official reports by the jurisdictions of the Court of Justice of the European Union.
- The **Directory of case-law** contains all the documents of this section organised in 9 main domains and several subdomains.
- **Search in case-law** redirects to an advanced search form that offers many options. Searches will be performed only within the remit of the “Case-law” section.

On the top of the search form, you have the option to: (i) limit your search to documents published in Court Reports; (ii) include or not case-law summaries in search results.

- The **Recently published** search gives access to all the documents published in this section in the last 14 days.

You can also search using 4 basic criteria:

Direct access to case-law

Court

Document type

Case number

Year

Q

Figure 17. Description of the search, but I don't need it; I feel comfortable with descriptions on the left side of the website because of my professional background.

I decided to explore through the built-in classification system. I click on the “Directory of Case-law” tab (Figure 16) – a tool that feels both structured and slightly overwhelming. It divides the CJEU’s case law into legal domains, mirroring the complexity of the EU law itself.

The classification reflects the changes brought by the Lisbon Treaty, giving access to case-law from 1954 to 2009 at the bottom of the page and to the case-law from 2010 to the present.

Quite often, I feel a little bit stressed at this moment, because it is not always clear if my research question is better described before or after the Lisbon Treaty, if it is a broad or fundamental question of economic integration. Sometimes, it might be defined at the very beginning of European integration, as, for example, key principles; sometimes, the CJEU is able to develop such concepts only in modern times, after the reform by the Lisbon Treaty.

Luckily, I can use a special checkbox, and I press it (Figure 18). With or without a checkbox chosen, the menu is the same, and further movement at this stage has the same route. I feel it is positive, because there is no need for re-adaptation for changing the visual appearance.

To display all case-law (both classification schemes), select the check box ‘Show cases from both classification schemes’.

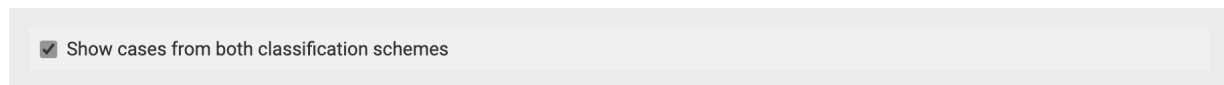
A screenshot of a web interface showing a single checkbox. The checkbox is checked, indicated by a small square icon to its left. The text next to the checkbox is "Show cases from both classification schemes". The entire element is contained within a light gray rectangular box.

Figure 18. Decision on the period for my search.

Case-law

Reports of cases

Directory of case-law

Search in case-law
Recently published

Directory of European Union case-law

Classification scheme after the Lisbon Treaty (since 2010)

In this section, you can find the judgments and orders of the Court of Justice, General Court and Civil Service Tribunal classified by subject in accordance with the classification scheme of the Directory of case-law.

This classification reflects the changes brought by the Treaty of Lisbon, modifying the classification scheme used to analyse case-law from 1954 to 2009.

The new scheme has been applicable since 2010.

How to search in this section

On this page, EUR-Lex displays the classification scheme that was applicable to cases published after the Lisbon Treaty. It consists of 9 main domains and several subdomains and gives access to the cases published from 2010.

To access the cases published up to 2009, click 'Consult the classification scheme in place before the Lisbon Treaty (up to 2009)'. It consists of 8 main domains and several subdomains.

To display all case-law (both classification schemes), select the check box 'Show cases from both classification schemes'.

☐ Show cases from both classification schemes

> 1 The legal order of the European Union Q 3425

> 2 Public procurement by the EU institutions Q 2288

> 3 EEC/EC - Legal proceedings * Legal proceedings Q 6955

> 4 Internal policy of the European Union Q 10510

> 5 EEC/EC - Association of Overseas Countries and Territories * Association of Overseas Countries and Territories Q 0

> 6 External policy Q 961

> 7 EEC/EC - General and final provisions * General and final provisions Q 92

> 8 Accession of new Member States Q 40

> 9 Staff cases Q 1518

Figure 19. With or without the checkbox pressed, this initial menu has the same visual appearance.

Then, navigating the classificator, I scroll through the hierarchical tree: the legal order of the European Union, public procurement by the EU institutions, EEC/EC – Legal proceedings, internal policy of the European Union, external policy, general and final provisions, and many more (Figure 19).

Each category branches into subcategories, and I follow the path toward “Internal policy of the European Union”, because the internal market is a part of internal policy (Figure 20). The submenu is very extensive, because the internal market covers almost all spheres of social and economic life of member states of the European Union. The system responds with precision, showing me how cases are organised under thematic umbrellas. I select the relevant category, and the screen refreshes into a list – and it is still too broad.

Nevertheless, “4.04 Free movement of persons and services” is quite easy to find, because it is almost at the top of the list, the fourth line, and the number is 4.04 (Figure 20).

- ▼ **4 Internal policy of the European Union** [Q 10510](#)
 - 4.01 Internal market - General [Q 0](#)
 - > 4.02 EEC/EC - Free movement of goods * Free movement of goods [Q 288](#)
 - > 4.03 Agriculture and fisheries [Q 415](#)
 - > 4.04 EEC/EC - Free movement of persons and services * Free movement of persons and services [Q 741](#)
 - 4.05 EEC/EC - Free movement of capital and freedom of payments * Free movement of capital and freedom of payments [Q 145](#)
 - > 4.06 Area of freedom, security and justice [Q 790](#)
 - > 4.07 EEC/EC - Transport * Transport [Q 256](#)
 - > 4.08 EEC/EC - Competition * Competition [Q 837](#)
 - > 4.09 EEC/EC - State aid * State aid [Q 703](#)
 - > 4.10 EEC/EC - Tax provisions * Tax provisions [Q 728](#)
 - > 4.11 Approximation of laws [Q 4542](#)
 - > 4.12 EEC/EC - Economic and monetary policy * Economic and monetary policy [Q 277](#)
 - 4.13 EEC/EC - Employment * Employment [Q 0](#)
 - > 4.14 EEC/EC - Social policy * Social policy [Q 391](#)
 - 4.15 Education, vocational training, youth and sport [Q 4](#)
 - 4.16 Culture [Q 4](#)
 - 4.17 EEC/EC - Public health * Public health [Q 34](#)
 - > 4.18 EEC/EC - Consumer protection * Consumer protection [Q 357](#)
 - 4.19 Trans-European networks [Q 4](#)
 - 4.20 Industry [Q 6](#)
 - 4.21 Economic, social and territorial cohesion [Q 41](#)
 - 4.22 Research and technological development and space [Q 4](#)
 - 4.23 Environment, sustainable development and climate [Q 409](#)
 - 4.24 Energy [Q 86](#)
 - 4.25 Tourism [Q 0](#)
 - 4.26 Civil protection [Q 0](#)
 - 4.27 Administrative cooperation [Q 12](#)

Figure 20. Finding the subcategory “Free movement of persons and services”.

Then I press this subcategory, and I can see the more detailed division (Figure 21).

- ▼ **4.04 EEC/EC - Free movement of persons and services * Free movement of persons and services** [Q 741](#)
 - 4.04.00 General [Q 9](#)
 - > 4.04.01 Workers [Q 110](#)
 - > 4.04.02 Freedom of establishment [Q 319](#)
 - > 4.04.03 Freedom to provide services [Q 322](#)
 - 4.04.04 Company law [Q 30](#)
 - > 4.04.05 Social security [Q 141](#)

Figure 21. Defining the subcategory “Free movement of persons”.

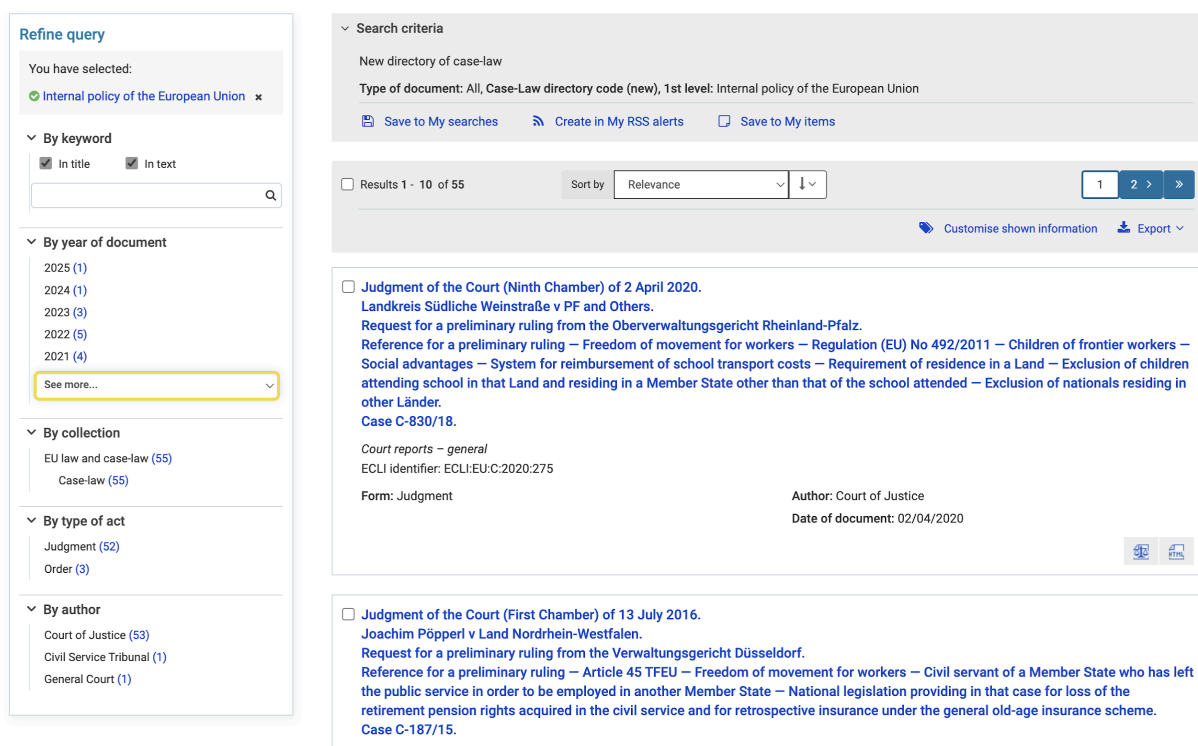
This submenu is not long, so I can easily find the subdivision “4.04.01 Workers” (Figure 22). When I press this, I see the next subdivision, and at this stage, I can understand that it is

final: the next lines are not clickable, and from my experience as legal researcher I know that the Court was mostly focused on such issues as equal treatment of migrant workers across the European Union and the question of the employment in the public services.

- ▼ **4.04.01 Workers**  110
 - **4.04.01.00 General**  55
 - **4.04.01.01 Workers - Equal treatment * Equal treatment**  65
 - **4.04.01.02 Workers - Employment in the public service * Employment in the public service**  7

Figure 22. The last subcategory.

I am researching the general question of migrant workers in the EU, their definition, and their freedom of movement, and I press the number 55 (Figure 23). This is the number of cases available for reading. After moving to the next page with a list of judgments, I open the filter panel on the left side. The interface offers multiple refinement options: date of judgment, document type, and court formation.



The screenshot displays the ECHR database interface. On the left, a 'Refine query' panel is open, showing the selected filter 'Internal policy of the European Union'. Below this, there are sections for 'By keyword', 'By year of document' (with a dropdown menu set to 'See more...'), 'By collection' (showing 'EU law and case-law (55)' and 'Case-law (55)'), 'By type of act' (showing 'Judgment (52)' and 'Order (3)'), and 'By author' (showing 'Court of Justice (53)', 'Civil Service Tribunal (1)', and 'General Court (1)').

The main search results area shows 'Results 1 - 10 of 55'. The first result is a judgment from 2020, titled 'Landkreis Südliche Weinstraße v PF and Others'. The second result is a judgment from 2016, titled 'Joachim Pöpperl v Land Nordrhein-Westfalen'. Each result includes a brief description of the case and the date of the judgment.

Figure 23. The head of the list of 55 judgments.

I apply filters step-by-step: first narrowing the jurisdiction to the Court of Justice, then selecting “Judgments” rather than “Orders” or “Opinions” (Figure 24). I add a time range to capture more recent decisions, knowing that legal developments in the last five years are most relevant to my research. Each filter click reshapes the dataset until only a manageable list remains.

The screenshot displays the EUR-Lex search results page. On the left, the 'Refine query' sidebar shows three selected filters: 'Court of Justice', 'Internal policy of the European Union', and 'Judgment'. Below these, the 'By keyword' section has checkboxes for 'In title' and 'In text'. The 'By year of document' section lists years from 2025 to 2021 with counts in parentheses. The 'By collection' section shows 'EU law and case-law (51)' and 'Case-law (51)'. The main search results area shows 'Search criteria' including 'New directory of case-law' and 'Type of document: All, Form: Judgment, Case-Law directory code (new), 1st level: Internal policy of the European Union, Author: Court of Justice'. It also includes links to 'Save to My searches', 'Create in My RSS alerts', and 'Save to My items'. The results are sorted by 'Relevance' and show 'Results 1 - 10 of 51'. The first result is 'Judgment of the Court (Ninth Chamber) of 2 April 2020. Landkreis Südliche Weinstraße v PF and Others. Request for a preliminary ruling from the Obergerverwaltungsgericht Rheinland-Pfalz. Reference for a preliminary ruling – Freedom of movement for workers – Regulation (EU) No 492/2011 – Children of frontier workers – Social advantages – System for reimbursement of school transport costs – Requirement of residence in a Land – Exclusion of children attending school in that Land and residing in a Member State other than that of the school attended – Exclusion of nationals residing in other Länder. Case C-830/18. Court reports – general. ECLI identifier: ECLI:EU:C:2020:275. Form: Judgment. Author: Court of Justice. Date of document: 02/04/2020.' The interface also includes a 'Customise shown information' link and an 'Export' button.

Figure 24. Some filters applied.

With the refined results in front of me, I feel a small sense of control over the otherwise vast corpus of EU case-law, although I have 51 judgements instead of 55. The EUR-Lex classifier and filters serve as a cartographic tool, translating the Court’s jurisprudence into an accessible, thematic map. Yet I remain aware of the interpretive act hidden in these choices: by selecting the year filter further, I can already shape the boundaries of my inquiry.

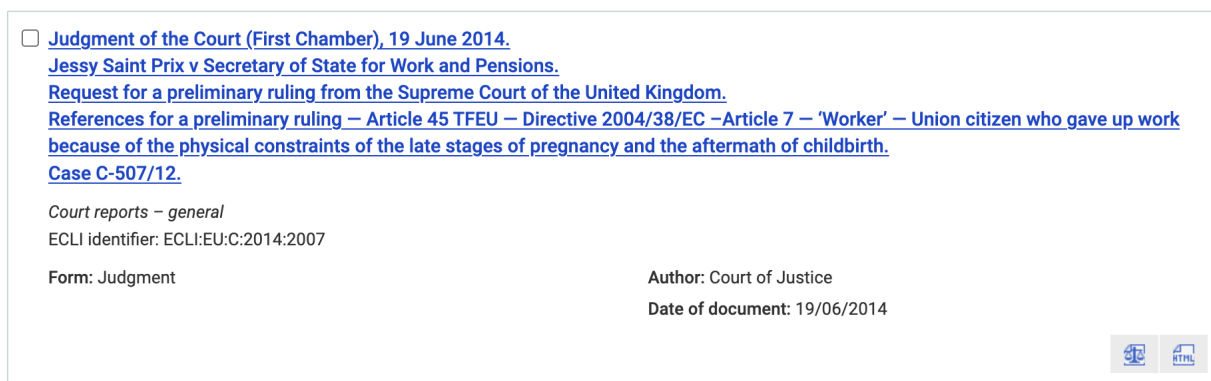


Figure 25. One of the judgments chosen for further research on the concept “worker” in EU law.

The only thing I can do now is to open the judgments, one by one, which are described by keywords (Figure 25). As I am interested in the basic definition of a worker in the EU, I decided to open the judgment because I see the definition “worker” among the keywords (Figure 26).

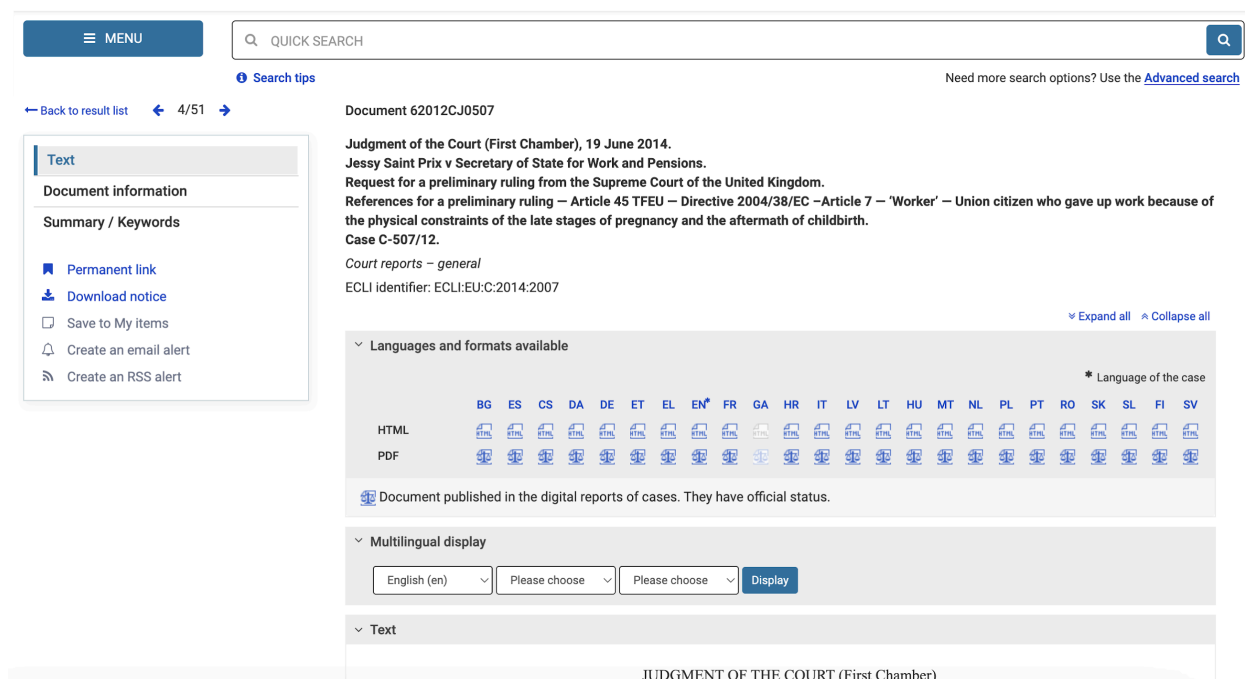


Figure 26. The interface of the judgment on the EUR-Lex website.

Following through the text of the judgment, I scroll to find paragraphs 33–37 (Figure 27). As I read, I’m struck by how the Court nuances the notion of “worker”: rather than a fixed label, it's shaped by activity, intent, and aspiration – even interruptions.

- 33 In that regard, it must be noted that, according to the settled case-law of the Court, the concept of ‘worker’, within the meaning of Article 45 TFEU, in so far as it defines the scope of a fundamental freedom provided for by the FEU Treaty, must be interpreted broadly (see, to that effect, *N*, C-46/12, [EU:C:2013:97](#), paragraph 39 and the case-law cited).
- 34 Accordingly, the Court has held that any national of a Member State, irrespective of his place of residence and of his nationality, who has exercised the right to freedom of movement for workers and who has been employed in a Member State other than that of his residence falls within the scope of Article 45 TFEU (see, inter alia, *Ritter-Coulais*, C-152/03, [EU:C:2006:123](#), paragraph 31, and *Hartmann*, C-212/05, [EU:C:2007:437](#), paragraph 17).
- 35 The Court has thus also held that, in the context of Article 45 TFEU, a person who, for a certain period of time, performs services for and under the direction of another person in return for which he receives remuneration must be considered to be a worker. Once the employment relationship has ended, the person concerned, as a rule, loses the status of worker, although that status may produce certain effects after the relationship has ended, and a person who is genuinely seeking work must also be classified as a worker (*Caves Krier Frères*, C-379/11, [EU:C:2012:798](#), paragraph 26 and the case-law cited).
- 36 Consequently, and for the purposes of the present case, it must be pointed out that freedom of movement for workers entails the right for nationals of Member States to move freely within the territory of other Member States and to stay there for the purposes of seeking employment (see, inter alia, *Antonissen*, C-292/89, [EU:C:1991:80](#), paragraph 13).
- 37 It follows that classification as a worker under Article 45 TFEU, and the rights deriving from such status, do not necessarily depend on the actual or continuing existence of an employment relationship (see, to that effect, *Lair*, 39/86, [EU:C:1988:322](#), paragraphs 31 and 36).

Figure 27. The key legal findings of the Court in the judgment.

When I get to paragraph 37, the words stand out: “...classification as a worker ... does not necessarily depend on the actual or continuing existence of an employment relationship.” (Figure 27). I pause. That sentence reframes everything. It validates the situation I’m tracking – someone suspending work due to physical constraints (in this case, pregnancy) – not as a gap, but as part of the legal status of a worker in the EU.

This insight shapes my next moves. I open a new tab and return to the classification on EUR-Lex. I navigate to themes like “rights of workers”, “free movement of persons”, “worker equality”, or even broader contexts like “interruption of employment”. Otherwise, I broaden to “worker status case law” and intend to scan for judgments dealing with non-continuity of work.

Each click and judgment selected reflects a decision in my legal mapping – about what’s relevant, what counts, and what connections I choose to trace. The Court’s finding in paragraph 37 justifies a pathway to explore similar situations where worker status persists despite interruptions.

In this way, the autoethnography doesn’t just recount steps – it exposes how a legal insight provokes a shift in the researcher’s focus, reshaping both system navigation and scholarly interpretation.

The key point is that my research process is entirely manual. When I research a legal issue, I already know, I rely on memory: I search for the relevant texts, extract the core idea, and then summarise the Court’s reasoning in my own words, formulating the interpretation. When the legal question is unfamiliar, I take a different approach – copying and pasting the relevant

passages directly, with proper citations to the Court’s judgments. Later, I revisit these citations and work towards formulating my own interpretation, building on and aligning with the Court’s logic.

3.2.2. Curia

Now I move to another tool for my legal research – it’s the official website of the CJEU. I open a new tab and type *curia.europa.eu*. The first page (Figure 28) invites me to choose one of 24 official languages. I feel more comfortable choosing English, so I press the button “EN” for that.



Figure 28. The initial page of Curia.

The interface immediately contrasts with EUR-Lex because it is cleaner, more institutional, yet less intuitive from a design perspective. The structure feels more document-centered than user-centered.

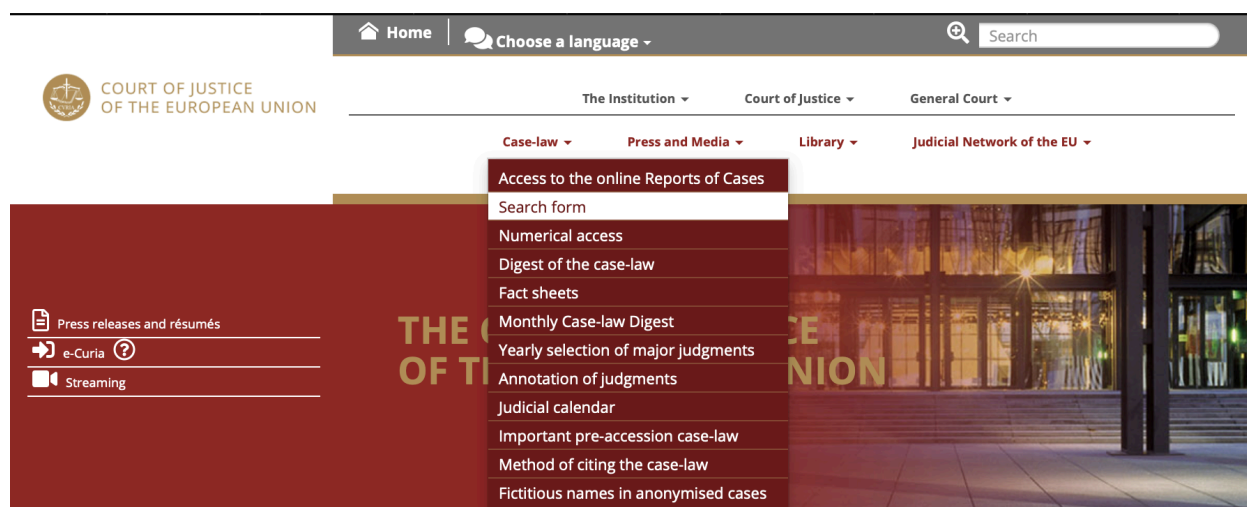


Figure 29. The main page of Curia.

The landing page (figure 29) presents several main categories: *The Institution*, *Court of Justice*, *General Court*, *Case-law*, *Press and Media*, *Library*, and *Judicial Network of the EU*. My focus, again, is *Case-law*. I click this section, which unfolds into several distinct search options: *Access to the online Reports of Cases*, *Search form for case-law*, *Numerical access*, *Digest of the case-law*, *Fact sheets*, *Monthly Case-law Digest*, *Yearly selection of major judgments*, *Judicial calendar*, *Important pre-accession case-law*, *Method of citing the case-law*, *Fictitious names in anonymized cases*.

Unlike EUR-Lex, where navigation begins with thematic exploration, Curia expects precision: it presupposes that the user already knows what they are looking for. There is no hierarchical classifier here; instead, the system offers a range of predefined fields. I chose the “*Search form for case-law*”, which seems to be the most flexible entry point for an exploratory researcher.

The page of this search form that opens is minimalist but dense with input boxes: *Case title*, *Court*, *Case number*, *Name of parties*, *Documents*, *Provisions of national law referred to*, *Provisions of international law referred to*, *ECLI*, *Text*, *Period or Date*, *Subject-matter*, *Procedure and result*, *References to Case-law or legislation*, *Systematic classification scheme*, *Formation of the Court*, *Judge-Rapporteur*, *Advocate General*, *Source of a question referred to a preliminary ruling* and *Authentic language*.



Home > Search form

last update 17/10/2025

LIST OF RESULTS

Display preferences

☒ Automatic

☐ List of cases

☐ List of documents

Listing preferences

☐ Case numbers in descending order

☐ Case numbers in ascending order

☐ Dates in descending order

☐ Dates in ascending order

GENERAL INFORMATION

[Help](#)

[Disclaimer](#)

LINKS

[Curia](#)

[Diary](#)

[EUR-Lex](#)

Case status ☒ All cases ☐ Cases closed ☐ Cases pending

Court ☒ All ☐ Court of Justice ☐ General Court ☐ Civil Service Tribunal

Case number (ex: C-17/05; 17/05)

Name of the parties

Documents ☒ All

Provisions of national law referred to

Provisions of international law referred to

ECLI/EU:

Text

Period or date ☒ Date of delivery ☐ from to (dd/mm/yyyy)

☐ last 6 days ☐ last month ☐ last year ☐ last 5 years

☐ on (dd/mm/yyyy)

Subject-matter

Procedure and result

References to case-law or legislation ☒ Search in ☐ Grounds of judgment ☐ Operative part ☐ Opinion

Systematic classification scheme ☒ Include earlier/new scheme

Formation of the Court

Judge-Rapporteur

Advocate General

Source of a question referred for a preliminary ruling

Authentic language ☒ Language of the case ☐ Language of the Opinion

[Comments and suggestions](#)

[Clear fields](#) [Search](#)

Figure 30. The search form of the CJEU case law.

For a trained legal professional, the layout appears familiar because it mirrors a traditional database interface rather than a modern search engine. Yet for a design researcher, it exposes a usability gap: the cognitive load is shifted to the user, who must already understand the internal logic of EU case referencing or know the referred national legislation.

To find case law comparable to my previous search on EUR-Lex, I type “worker” into the *Text* box. I leave the other fields blank to make my search broader (Figure 30). The result page appears (Figure 31), which is a list of cases arranged chronologically, each line displaying the case number, the parties, and the date of judgment. All in all, there are 246 pages with judgments (Figure 31). The results feel raw, procedural, and textual. The only navigational aids are hyperlinks leading to the types of the CJEU’s documents: *Request for a preliminary Ruling*, *Order*, *Application*, *Judgment*, and *Opinion*. Also, I can see the names of the parties and the subject-matter subdivision.



Note of criteria selected:

Text = worker

Modify the
search

List of results by case		List of documents				
4915 document(s)						
Case	Document	Date	Name of the parties	Subject-matter	Curia	EUR-LexAutres Liens
C-544/25	Request for a preliminary ruling	12/08/2025	ACC Business Development	Social policy		
C-520/25	Request for a preliminary ruling	31/07/2025	Ministerio de Inclusión, Seguridad Social y Migraciones	area of freedom, security and justice - Borders, asylum and immigration - Immigration policy		
C-386/25	Application (OJ)	08/09/2025	Ministero della Difesa II	Social policy		
C-380/25	Application (OJ)	25/08/2025	Bellavista Società Agricola	Social policy		
C-380/25	Request for a preliminary ruling	10/06/2025	Bellavista Società Agricola	Social policy		
C-372/25	Request for a preliminary ruling	05/06/2025	Raffaelsenbank im Walgau			
C-369/25	Application (OJ)	04/08/2025	Trenitalia and INPS	Social policy		
C-359/25	Request for a preliminary ruling	27/05/2025	Delevris	Social policy		
C-343/25	Request for a preliminary ruling	16/05/2025	CPAM de la Gironde	Freedom of movement for persons - Freedom of establishment		
C-279/25	Request for a preliminary ruling	11/04/2025	Land Baden-Württemberg	Non-discrimination and citizenship of the Union - Citizenship of the Union - Right of entry and residence		
C-253/25	Application (OJ)	22/09/2025	Ayuntamiento de Murcia II			
C-235/25	Request for a preliminary ruling	27/03/2025	Villeme	Social policy		
C-172/25	Request for a preliminary ruling	27/02/2025	Personal Sea Management	Social policy		
C-172/25	Application (OJ)	13/06/2025	Personal Sea Management	Social policy		
C-136/25	Request for a preliminary ruling	13/02/2025	Pemak	Social policy		
C-136/25	Application (OJ)	02/05/2025	Pemak	Social policy		
C-131/25	Request for a preliminary ruling	10/02/2025	Dris	Non-discrimination and citizenship of the Union - non-discrimination		
C-116/25	Request for a preliminary ruling	04/02/2025	NOI - Blagoevgrad	Freedom of movement for persons - Freedom of movement for workers - Social security		
C-37/25	Order (OJ)	25/08/2025	GTC Dijon	Social policy		
C-22/25	Application (OJ)	04/04/2025	Intercos Europe	Social policy		
◀◀ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 / 246 Pages ▶▶▶						

The statements of case or written observations referred to above will not be accessible if an objection is raised pursuant to Article 96(3) of the Rules of Procedure of the Court of Justice or Article 202(3) of the Rules of Procedure of the General Court.

Note of criteria selected:

Text = worker

Modify the
search

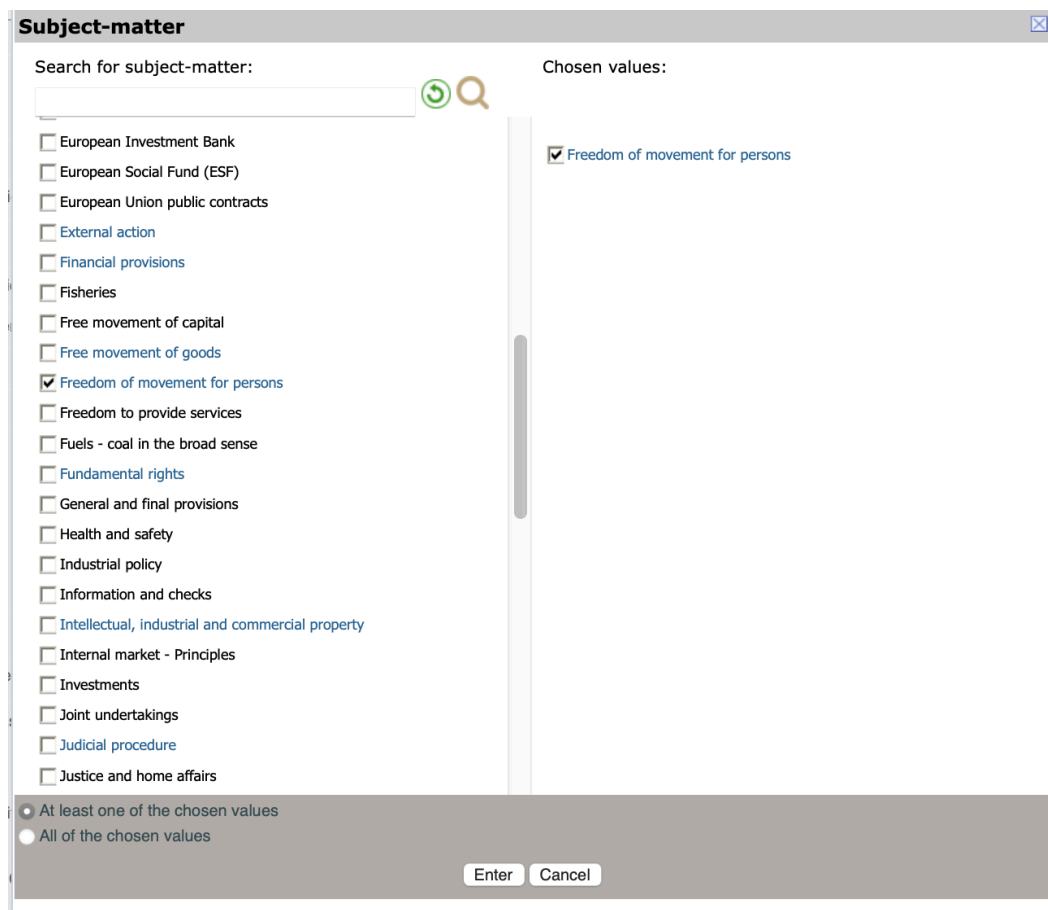
List of results by case		List of documents				
4915 document(s)						
Case	Document	Date	Name of the parties	Subject-matter	Curia	EUR-Lex Autres Liens
C-907/24	Application (OJ)	07/03/2025	Orefice Generators	Approximation of laws		
C-906/24	Application (OJ)	14/02/2025	Sirto	Non-discrimination and citizenship of the Union - Citizenship of the Union		
C-830/24	Request for a preliminary ruling	04/12/2024	Trivium Packaging Italy	Social policy		
C-830/24	Application (OJ)	14/03/2025	Trivium Packaging Italy	Social policy		
C-808/24	Request for a preliminary ruling	26/11/2024	Zálečta	Social policy		
C-768/24	Request for a preliminary ruling	06/11/2024	Hortis	area of freedom, security and justice - Judicial cooperation in civil matters		
C-742/24	Request for a preliminary ruling	24/10/2024	Havvitt	area of freedom, security and justice - Borders, asylum and immigration - Border checks		
C-718/24	Request for a preliminary ruling	22/10/2024	Aleb	area of freedom, security and justice - Borders, asylum and immigration - Border checks		
C-668/24	Request for a preliminary ruling	11/10/2024	Fondazione Teatro alla Scala di Milano	Social policy		
C-654/24	Request for a preliminary ruling	08/10/2024	Bariello	Social policy		
C-642/24	Application (OJ)	25/10/2024	Commission v Germany	Freedom of movement for persons - Freedom of movement for workers		
C-597/24	Request for a preliminary ruling	16/09/2024	Zirvatta	Social policy		
C-522/24	Request for a preliminary ruling	29/07/2024	Ministero della Difesa (Obligation vaccinale des militaires)	Fundamental rights - Charter of Fundamental Rights		
C-485/24	Request for a preliminary ruling	10/07/2024	Locatrans	Rome Convention of 19 June 1980		
C-485/24	Opinion ECLI:EU:C:2025:528	03/07/2025	Locatrans	Rome Convention of 19 June 1980		
C-477/24	Opinion ECLI:EU:C:2025:734	25/09/2025	Deldwyn	Non-discrimination and citizenship of the Union - Citizenship of the Union		
C-420/24	Request for a preliminary ruling	11/06/2024	Sindicatul Drumarilor „Elie Radu”	Social policy		
C-420/24	Application (OJ)	13/09/2024	Sindicatul Drumarilor „Elie Radu”	Social policy		
C-419/24	Judgment ECLI:EU:C:2025:464	19/06/2025	Hôtel Plaza	Social policy		
C-418/24	Request for a preliminary ruling	12/06/2024	Obadal	Social policy		
◀◀ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 / 246 Pages ▶▶▶						

The statements of case or written observations referred to above will not be accessible if an objection is raised pursuant to Article 96(3) of the Rules of Procedure of the Court of Justice or Article 202(3) of the Rules of Procedure of the General Court.

Figure 31. “Wide” results of the search for the term “worker”.

This experience differs completely from EUR-Lex. Whereas EUR-Lex guides the user through layers of conceptual structure, Curia functions as a repository of procedural outputs. To refine the results, I cannot rely on the visual classifier or filters on the left panel; I must either reformulate my search query or use the *Advanced search* options by combining multiple fields.

I return to the *Search form* and now combine the text “worker” with *Subject-matter’s* “freedom of movement for persons” area of EU law (Figure 32). Also, I decide to choose specific documents, such as the CJEU’s judgments and opinions (Figure 33). Otherwise, my search results would again be too wide.



Subject-matter

Search for subject-matter:  

Chosen values:

- ☐ European Investment Bank
- ☐ European Social Fund (ESF)
- ☐ European Union public contracts
- ☐ External action
- ☐ Financial provisions
- ☐ Fisheries
- ☐ Free movement of capital
- ☐ Free movement of goods
- ☒ Freedom of movement for persons
- ☐ Freedom to provide services
- ☐ Fuels - coal in the broad sense
- ☐ Fundamental rights
- ☐ General and final provisions
- ☐ Health and safety
- ☐ Industrial policy
- ☐ Information and checks
- ☐ Intellectual, industrial and commercial property
- ☐ Internal market - Principles
- ☐ Investments
- ☐ Joint undertakings
- ☐ Judicial procedure
- ☐ Justice and home affairs

☒ At least one of the chosen values
☐ All of the chosen values

Figure 32. An attempt to narrow the search by adding the area of EU law.

Documents

☐ Select all

☐ Documents published in the ECR

- ☒ Judgments
- ☐ Orders
- ☒ Opinions of the Court
- ☐ Decisions (Review procedure)
- ☒ Opinion
- ☐ Views
- ☐ Summaries and reviews
- ☐ Information (on unpublished decisions)

☐ Documents not published in the ECR

- ☒ Judgments
- ☐ Orders
-
- ☐ Decisions (Review procedure)

☐ Notices published in OJ

- ☐ Cases brought
- ☐ Cases closed

☐ Other documents

- ☐ Requests for a preliminary ruling
- ☐ National decisions
- ☐ Statements of case or written observations

☒ from to (dd/mm/yyyy)

☐ last 8 days ☐ last month ☐ last year ☐ last 5 years

☐ on (dd/mm/yyyy)

Figure 33. An attempt to narrow the search by adding the type of document.

The database returns fewer results, each with a direct link to the judgment in PDF or HTML format and with the possibility to open EUR-Lex (Figure 34). I received 82 pages instead of 246 pages as it was before (Figure 31).

List of results

Start printing

Note of criteria selected:

Subject-matter = "Freedom of movement for persons"

Documents = Documents published in the ECR : Judgments - Opinions of the Court - Opinion

Documents not published in the ECR : Judgments

Text = worker

Modify the search

List of results by case

List of documents

1637 document(s)

Case	Document	Date	Name of the parties	Subject-matter	Curia	EUR-Lex	Autres Liens
C-477/24	Opinion ECLI:EU:C:2025:734	25/09/2025	Deldwyn	Non-discrimination and citizenship of the Union - Citizenship of the Union			
C-296/24	Opinion ECLI:EU:C:2025:444	12/06/2025	Joux	Non-discrimination and citizenship of the Union - Citizenship of the Union			
C-257/24	Judgment ECLI:EU:C:2025:567	10/07/2025	Städteregion Aachen	Non-discrimination and citizenship of the Union - Citizenship of the Union - Right of entry and residence			
C-253/24	Judgment ECLI:EU:C:2025:660	04/09/2025	Pelavi	Fundamental rights - Charter of Fundamental Rights			
C-210/24	Opinion ECLI:EU:C:2025:529	03/07/2025	AESTE	Fundamental rights - Charter of Fundamental Rights			
C-203/24	Judgment ECLI:EU:C:2025:662	04/09/2025	Hakamp	Freedom of movement for persons - Freedom of movement for workers			
C-7/24	Judgment ECLI:EU:C:2025:439	12/06/2025	Deutsche Rentenversicherung Nord und BG Verkehr	Freedom of movement for persons - Freedom of movement for workers - Social security			
C-769/23	Opinion ECLI:EU:C:2025:568	10/07/2025	Mara	Freedom of movement for persons - Freedom of establishment			
C-743/23	Opinion ECLI:EU:C:2025:414	05/06/2025	GKV-Spitzenverband	Freedom of movement for persons - Freedom of movement for workers - Social security			
C-715/23	Opinion ECLI:EU:C:2025:187	13/03/2025	Farmacija	Freedom of movement for persons - Freedom of establishment			
C-664/23	Judgment ECLI:EU:C:2024:1046	19/12/2024	Caisse d'allocations familiales des Hauts-de-Seine	area of freedom, security and justice - Borders, asylum and immigration - Immigration policy			
C-575/23	Judgment ECLI:EU:C:2025:141	06/03/2025	ONB and Others	Intellectual, industrial and commercial property - Copyright and related rights			
C-531/23	Judgment ECLI:EU:C:2024:1050	19/12/2024	Loredas	Freedom of movement for persons - Freedom of movement for workers			
C-421/23	Judgment ECLI:EU:C:2025:36	23/01/2025	ONSS (Faux certificats A 1)	Freedom of movement for persons - Freedom of movement for workers - Social security			
C-375/23	Judgment ECLI:EU:C:2024:572	04/07/2024	Meislev	General and final provisions			
C-367/23	Judgment ECLI:EU:C:2024:529	20/06/2024	Artemis security	Freedom of movement for persons - Freedom of movement for workers			
C-329/23	Judgment ECLI:EU:C:2024:802	26/09/2024	Sozialversicherungsanstalt	Freedom of movement for persons - Freedom of movement for workers			
C-116/23	Judgment ECLI:EU:C:2024:292	11/04/2024	Sozialministeriumservice	Freedom of movement for persons - Freedom of movement for workers - Social security			
C-41/23	Judgment ECLI:EU:C:2024:554	27/06/2024	Peigli	Freedom of movement for persons - Freedom of movement for workers			
C-36/23	Judgment ECLI:EU:C:2024:355	25/04/2024	Familienkasse Sachsen	Freedom of movement for persons - Freedom of movement for workers - Social security			

123456789101112131415161718192021/82 Pages

Figure 34. The result of the search with additional parameters.

Figure 35. Trying to choose one of the judgments and choosing the language.

The only thing I can do now is to open the judgments, one by one, which are described by the type of the documents, the date, the names of the parties, and the subject matter. So, I

open one of them, trying to choose the language of the official translation (Figure 35). This is not easy – the pop-up menu is small, and sometimes I press the button leading to the text of the judgment too fast instead of choosing the language first. Also, sometimes the necessary language is not available. Nevertheless, here I press English and open one of the last judgments of 2025 within the freedom of movement for workers.

The screenshot displays the InfoCuria Case-law interface. At the top, the 'InfoCuria Case-law' logo is on the left, and a language selector set to 'English (en)' is on the right. Below the header, a navigation bar contains links: 'Home > Search form > List of results > Documents'. The main content area shows the document details for 'ECLI:EU:C:2025:662'. It includes a 'Language of document' dropdown set to 'English', a 'Start printing' button, and the title 'JUDGMENT OF THE COURT (Sixth Chamber)' dated '4 September 2025 (*)'. The text of the judgment begins with a reference to a preliminary ruling on social security for migrant workers, followed by the case identifier 'In Case C-203/24 [Hakamp], ()'. It then states the request for a preliminary ruling under Article 267 TFEU from the Hoge Raad der Nederlanden. The parties are listed as 'KN' and 'Raad van bestuur van de Sociale verzekeringsbank'. The court is identified as 'THE COURT (Sixth Chamber)', composed of President A. Kumin, President of the First Chamber F. Biltgen, and Judge I. Ziemele. The Advocate General is A. Rantos, and the Registrar is A. Calot Escobar. The judgment is given after considering observations from various parties, including the Netherlands Government, the Czech Government, the French Government, the Government of the Principality of Liechtenstein, and the European Commission. The final line indicates the court is giving the following judgment.

Figure 36. Judgment of the Court.

The interface redirects to the official document, visually consistent across all decisions: the EU emblem, the case number, the parties, and the operative parts of the judgment.

Reading within Curia feels different from reading within EUR-Lex. The document is static, formal, and disconnected from contextual aids such as cross-references or related legislation (Figure 37). The absence of a sidebar, filters, or intertextual links keeps me anchored in the single judgment, reducing the sense of navigational control. Yet this simplicity also has an advantage – it provides a direct and authoritative engagement with the Court’s own language, untouched by external metadata or editorial categorisation.

The first and second questions

- 30 By its first and second questions, which it is appropriate to examine together, the referring court asks, in essence, whether Article 14(8) of Regulation No 987/2009 must be interpreted as meaning that, in order to assess whether a person who normally pursues an activity as an employed person in two or more Member States carries out a substantial part of that activity in the Member State of residence, it is open to the competent institution to take into account circumstances other than the time worked and/or the remuneration obtained in that State.
- 31 It is apparent from the wording of Article 14(8) of Regulation No 987/2009 that a 'substantial part of employed or self-employed activity' pursued in a Member State means that a quantitatively substantial part of all the activities of the employed or self-employed person is pursued there, without this necessarily being the major part of those activities. To determine whether a substantial part of the activities is pursued in a Member State, account is to be taken, in the case of an employed activity, of working time and/or remuneration. The fact that less than 25% in respect of those criteria are met is to be an indicator that a substantial part of the activity is not being pursued in the relevant Member State (judgment of 19 May 2022, *INAIL and INPS*, C-33/21, EU:C:2022:402, paragraph 63).
- 32 The doubts raised by the referring court arise from the fact that the Dutch-language version of Article 14(8) of Regulation No 987/2009 includes the term '*mede*' ('also') in conjunction with the reference to the indicative criteria which must be taken into account in order to determine whether a substantial part of the employed activity of the person concerned is pursued in a Member State. The referring court infers from this that it would be permissible to accept criteria other than those of working time and/or remuneration listed in that provision.
- 33 It should be noted that other language versions of Article 14(8) of Regulation No 987/2009, those of the German-, English-, French- and Latvian-language versions in particular, do not contain the word 'also'.
- 34 It is settled case-law that the wording used in one language version of a provision of EU law cannot serve as the sole basis for the interpretation of that provision, or be made to override the other language versions in that regard. Such an approach would be incompatible with the requirement for uniform application of EU law. Where there is divergence between the various language versions, the provision in question must be interpreted by reference to the purpose and general scheme of the rules of which it forms part (judgments of 25 March 2010, *Helmut Müller*, C-451/08, EU:C:2010:168, paragraph 38 and the case-law cited, and of 21 March 2024, *Cobuit*, C-76/23, EU:C:2024:253, paragraph 25 and the case-law cited).
- 35 As regards the context of the rules of which the provision in question forms part, it is clear from the very title of Regulation No 987/2009 that it is required to lay down the detailed rules for implementing Regulation No 883/2004. Article 14 of Regulation No 987/2009 is entitled 'Details relating to Articles 12 and 13 of [Regulation No 883/2004]' and paragraph 8 thereof was adopted 'for the purposes of the application of Article 13(1) and (2) of [Regulation No 883/2004]'.
- 36 It is therefore necessary, in interpreting Article 14 of Regulation No 987/2009, to take into account Articles 12 and 13 of Regulation No 883/2004.
- 37 In that regard, it must be borne in mind that the provisions of Title II of Regulation No 883/2004, entitled 'Determination of the legislation applicable', of which Articles 12 and 13 of that regulation form part, constitute a complete and uniform system of conflict-of-law rules which are intended not only to prevent the simultaneous application of a number of national legislative systems and the complication which might ensue, but also to ensure that the persons covered by that regulation are not left without social security cover because there is no legislation which is applicable to them (see, to that effect, judgment of 16 November 2023, *Zakład Ubezpieczeń Społecznych Oddział w Toruniu*, C-422/22, EU:C:2023:869, paragraph 50 and the case-law cited).

Figure 37. References to other judgments are not active hyperlinks.

- 46 From that perspective, the aim of the derogating rules laid down in the provisions mentioned in paragraph 43 of the present judgment is to ensure that, in accordance with the rule of a single applicable legislation referred to in paragraph 39 of this judgment, employed persons working in two or more Member States are subject to the legislation of only one Member State, by establishing for that purpose connecting factors which take into account the objective situation of those workers in order to facilitate their freedom of movement (see, to that effect, judgment of 16 July 2020, *AFMB and Others*, C-610/18, EU:C:2020:565, paragraph 65).
- 47 It is in the light of those considerations that Article 14(8) of Regulation No 987/2009 must be interpreted when it refers to working time and/or remuneration in order to determine whether a quantitatively significant part of the **worker's** overall activities is pursued in a Member State.
- 48 In that context, it should be noted, first, that the last subparagraph of Article 14(8) of Regulation No 987/2009, according to which it is necessary to verify, in the context of an overall assessment of the situation of the **worker** concerned, whether the 25% threshold is reached, expressly refers to the criteria 'mentioned above', that is to say, in the case of activity as an employed person, those relating to working time and/or remuneration, to the exclusion of any other criterion.
- 49 The fact that the criteria set out are verified in the context of an overall assessment of the situation of the **worker** concerned does not mean that other criteria may be added, but that all the employed activities of that **worker** must be taken into consideration.
- 50 Second, the wording of that provision leaves little room for doubt that, if 25% of the criteria relating to working time and/or remuneration are not met, it cannot be found that a substantial part of the employed activity is pursued in the Member State concerned.
- 51 To accept that a **worker** who has pursued less than 25% of all his or her employed activities in the territory of the Member State of residence may be subject to the legislation of that State pursuant to Article 13(1)(a) of Regulation No 883/2004 would not only be to disregard the derogating nature of the connecting factors laid down in Articles 12 to 14 of that regulation, including those relating to the Member State of residence, but also to create uncertainty in the application of the conflict-of-law rules laid down in Title II of that regulation, to the detriment of the simplicity which those rules are intended to establish as regards the application of connecting factors based on the objective situation in which the **worker** concerned finds himself or herself.
- 52 The interpretation that a share of less than 25% of the criteria relating to working time and/or remuneration cannot be offset by taking into account other criteria is further confirmed by the explanatory notes provided by the Practical guide, a document which, by its very nature, has no binding legal force. That said, that guide is a useful instrument for the interpretation of Regulations No 883/2004 and No 987/2009. Thus, in the part of the document concerning the concept of 'substantial part' of the activity, it is stated that the criteria of working time and/or remuneration must be taken into account in order to ascertain whether the 25% threshold referred to in the last subparagraph of Article 14(8) of Regulation No 987/2009 is reached in the Member State of residence, which would then constitute an indication that a substantial part of all the activities of the **worker** concerned is carried out in that Member State. Although the Practical guide states that other criteria may also come into play, without, however, defining those criteria, it is clear from all the specific examples given that the pursuit of an activity as an employed person in the Member State of residence representing less than 25% in terms of working time and/or remuneration does not support a conclusion that the legislation of that State is applicable.
- 53 Consequently, the Court finds that Article 14(8) of Regulation No 987/2009 must be interpreted as meaning that, in order for a person to be regarded as pursuing a substantial part of his or her activity as an employed person in the Member State of residence, the threshold of 25% of working time and/or remuneration in that Member State must be reached; the taking into account of other criteria is not liable to offset the failure to meet the criteria referred to above.

Figure 38. The word “worker” is highlighted by the website.

As I scroll, I search for the paragraphs defining the concept of “worker.” They are highlighted by the website (Figure 38). Nevertheless, I do it manually as well, using the browser’s “find” function – typing “worker” to highlight occurrences within the text, because it helps to switch between the words.

This experience reinforces how *Curia* is designed for targeted legal reading rather than thematic exploration. Each decision is presented as an autonomous unit, encouraging a deep, linear reading rather than cross-referencing.

From a designer's perspective, the contrast between the two databases is clear:

- **EUR-Lex** acts as a *map* — structuring complexity through classification, filters, and metadata.
- **Curia** functions as a *repository* — preserving legal authenticity through minimal mediation.

When I compare my emotional responses, I realise that EUR-Lex gives me a feeling of navigational agency – the sense of “finding” something through exploration – while Curia induces a more archival mood, a sense of consulting an authoritative record. My workflow mirrors this difference. On EUR-Lex, I search broadly, identify clusters of judgments, and move laterally between themes. On Curia, I focus narrowly, tracing the authoritative text of a specific case.

To align both, I often cross-check: when I identify a relevant case on EUR-Lex, I open it again in Curia to access the official version of the judgment, the authentic PDF, and occasionally the Advocate General's opinion – documents that may not always be immediately accessible from EUR-Lex. This dual use reflects the broader ecology of EU legal information systems, where the same material circulates in multiple interfaces, each with its epistemic logic and affordances.

In practical terms, the Curia search complements the EUR-Lex classifier. While EUR-Lex helps to identify relevant clusters of cases, Curia provides the official textual corpus necessary for close reading and citation. However, from the perspective of usability and human-computer interaction, the lack of semantic filters and visual hierarchy in Curia limits discoverability and increases cognitive effort.

As I conclude this phase of the search, I note that the act of moving between the two databases becomes part of my research method. It reveals how *access to justice* is not only a question of legal content but also of *design infrastructure* – the interfaces that demonstrate how law is found, understood, and interpreted.

Case Study 2: Navigating HUDOC, Filtering the European Court of Human Rights Case-Law

The process begins with a familiar ritual: opening a new browser tab and typing *hudoc.echr.coe.int*.

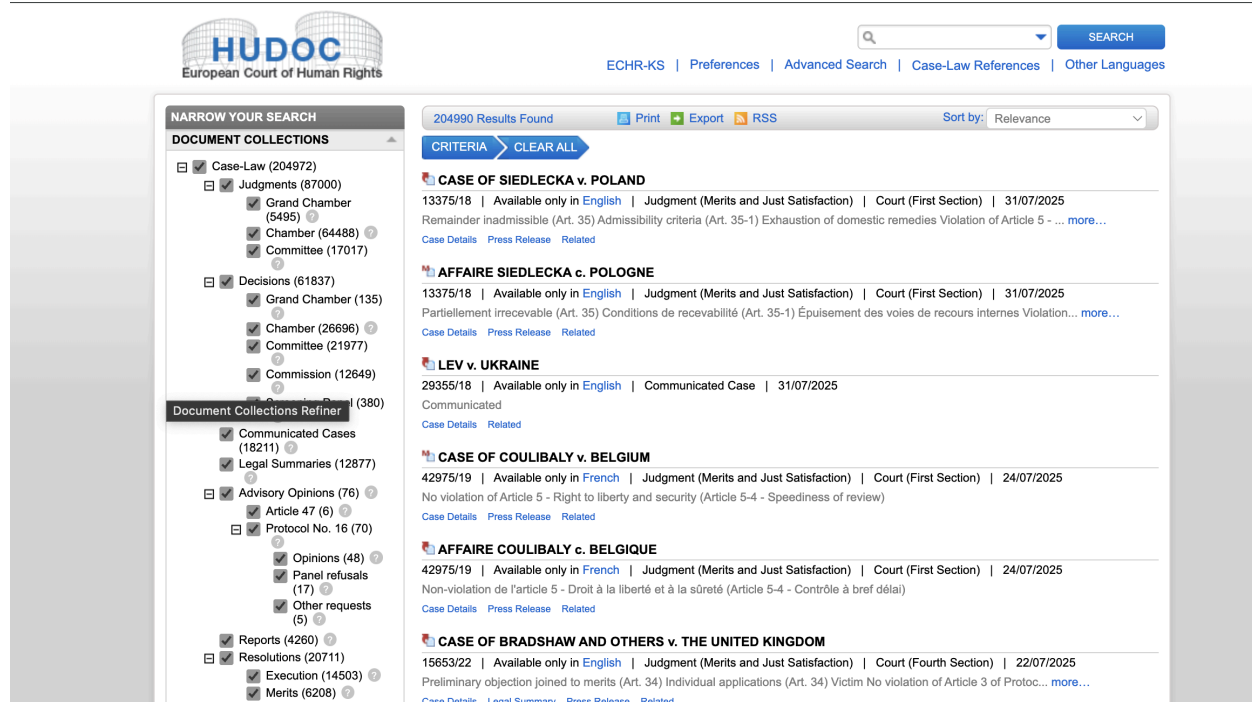
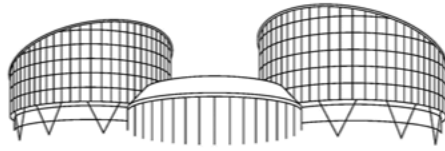


Figure 40. The main page of the European Court of Human Rights' case law website.

The page (Figure 40) loads quickly, presenting a simple design. The search bar dominates the right corner of the page, supported by icons and a menu that promises multiple paths to the same information. Unlike EUR-Lex, HUDOC's interface is stripped of the heavy institutional framing; its minimalism hides a depth of functionality that only reveals itself after repeated use.

I do not use the "Case-Law References" link because I feel it is useless. The link opens a PDF file (Figure 41) containing all the judgments of the ECHR. Obviously, I can't use the search organized in alphabetical order if I am searching the legal position of the ECHR on a particular legal question, e.g., I don't know in advance the name of the parties and the date of judgment.



EUROPEAN COURT OF HUMAN RIGHTS
COUR EUROPÉENNE DES DROITS DE L'HOMME

Case-law references of judgments, advisory opinions and key case decisions

Updated until: 1 August 2025

This document is a master list of all judgments delivered by a Grand Chamber or Chamber, all advisory opinions and any related decisions as well as all decisions in key cases¹.

The references below set out the exact citation of the cases concerned according to the Court's citation rules, which can be consulted [here](#). Please remember to complete, amend or delete as required the reference to paragraph numbers "§ ..." in each individual citation.

Table of Contents

- A -	2
- B -	35
- C -	66
- D -	91
- E -	113
- F -	124
- G -	136
- H -	160
- I -	173
- J -	184
- K -	190
- L -	225
- M -	240
- N -	279
- O -	291
- P -	301
- Q -	325
- R -	326
- S -	341
- T -	387
- U -	407
- V -	411
- W -	426
- X -	431
- Y -	432
- Z -	439

- A -

3A.CZ s.r.o. v. the Czech Republic, no. 21835/06, § ..., 10 February 2011
A and B v. Croatia, no. 7144/15, § ..., 20 June 2019
A and B v. France, no. 12482/21, § ..., 8 June 2023
A and B v. Georgia, no. 73975/16, § ..., 10 February 2022
A and B v. Malta, no. 4986/24, § ..., 24 June 2025
A and B v. Norway [GC], nos. 24130/11 and 29758/11, § ..., 15 November 2016
A and B v. Romania, nos. 48442/16 and 48831/16, § ..., 2 June 2020
A and Others v. Denmark, 8 February 1996, § ..., *Reports of Judgments and Decisions* 1996-I
A and Others v. Iceland, nos. 25133/20 and 31856/20, § ..., 15 November 2022
A and Others v. Italy, no. 17791/22, § ..., 7 September 2023
A v. Russia, no. 37735/09, § ..., 12 November 2019
A, B and C v. Ireland [GC], no. 25579/05, § ..., ECHR 2010
A, B and C v. Latvia, no. 30808/11, § ..., 31 March 2016
A. and B. v. Montenegro, no. 37571/05, § ..., 5 March 2013
A. and E. Riis v. Norway (no. 2), no. 16468/05, § ..., 17 January 2008
A. and E. Riis v. Norway, no. 9042/04, § ..., 31 May 2007
A. and Others v. Bulgaria, no. 51776/08, § ..., 29 November 2011
A. and Others v. the United Kingdom [GC], no. 3455/05, § ..., ECHR 2009
A. and Others v. Turkey, no. 30015/96, § ..., 27 July 2004
A. Menarini Diagnostics S.R.L. v. Italy, no. 43509/08, § ..., 27 September 2011

Figure 41. The PDF document contains the list of all judgements.

Also, I do not use the “Advanced Search” link (Figure 42) because I am searching for an answer from the Court to the broad legal question. This search has such tools as *Text*, *Case Title*, *Application Number*, *Strasbourg Case-Law*, *Rules of Court*, *Domestic Law*, *International Law* and *Other Relevant Material*. This is for contextual search or search based on particular characteristics that should already be known in advance.

Figure 42. The Advanced Search link.

Rather than entering a keyword immediately, I move my eyes to the filters on the left side of the webpage (Figure 43). I have learned through trial and error that this classifier is closer to my goal, where the system stops being a blank box and starts speaking in categories. I see a panel of structured filters. First, *Document Collection* and *More HUDOC sites*, and after that some filters below: *Language*, *Importance*, *State*, *Article*, *Non-Violation*, *Violation*, and the separate filter *Keywords*, followed by more filters: *Document Type*, *Date*, *Judge*, *Originating Body*, *Court*, *Organisation*.

NARROW YOUR SEARCH

DOCUMENT COLLECTIONS

☒ Case-Law (204972)
☐ Judgments (87000)
☒ Grand Chamber (5495)
☒ Chamber (64488)
☒ Committee (17017)
☐ Decisions (61837)
☒ Grand Chamber (135)
☒ Chamber (26696)
☒ Committee (21977)
☒ Commission (12649)
☒ Screening Panel (380)
☒ Communicated Cases (18211)
☒ Legal Summaries (12877)
☐ Advisory Opinions (76)
☒ Article 47 (6)
☐ Protocol No. 16 (70)
☒ Opinions (48)
☒ Panel refusals (17)
☒ Other requests (5)
☒ Reports (4260)
☐ Resolutions (20711)
☒ Execution (14503)
☒ Merits (6208)

[Press Collection](#)
[NOL Legal Summaries](#)

MORE HUDOC SITES

[HUDOC-COMMHR](#)
[HUDOC-EXEC](#)
[HUDOC-CPT](#)
[HUDOC-FCNM](#)
[HUDOC-ECRI](#)
[HUDOC-GRECO](#)
[HUDOC-ECRML](#)
[HUDOC-GRETA](#)
[HUDOC-ESC](#)
[HUDOC-GREVIO](#)

FILTERS

LANGUAGE

English (92449)

French (74780)

Turkish (6489)

Russian (3968)

More...

IMPORTANCE

3 (152767)

2 (29388)

Key cases (14216)

1 (8619)

More...

NON-VIOLATION

6 (5354)

6-1 (4554)

3 (3441)

8 (3282)

More...

VIOLATION

6 (42646)

6-1 (37885)

3 (12481)

5 (11723)

More...

KEYWORDS

(Art. 6) Right to a fair trial (104505)

(Art. 41) Just satisfaction-(general) (39896)

(Art. 35) Admissibility criteria (36252)

(Art. 3) Prohibition of torture (31671)

More...

MORE FILTERS

DOCUMENT TYPE

Judgment (Merits and Just Satisfaction) (77696)

Decision (54643)

Communicated Case (18212)

Res-54 (14512)

More...

DATE

Last Month (7)

Last 6 Months (2184)

Last 12 Months (5373)

Last 5 Years (33425)

Last 10 Years (71578)

JUDGE

Nicolas Bratza (9532)

Christos Rozakis (7225)

Peer Lorenzen (5849)

András Sajó (5373)

More...

ORIGINATING BODY

Court (Second Section) (22271)

Committee of Ministers (20713)

Court (First Section) (18608)

Court (Fourth Section) (17584)

More...

COURT

Supreme Court (18901)

Cour de cassation (13454)

Constitutional Court (11552)

Court of Cassation (6890)

More...

ORGANISATION

European Court of Human Rights (73675)

Comité des Ministres (14135)

Committee of Ministers (12840)

Parliamentary Assembly of the Council of Europe (1310)

More...

Figure 43. The filters to narrow the search are on the left side of the webpage.

The classifier here is not hierarchical in the same way as EUR-Lex, but rather a matrix of intersecting options. I begin with *Document Collection*, deliberately choosing “Case-Law” over “Advisory Opinions” or “Resolutions.” This first narrowing already eliminates irrelevant materials. Then I set the *Court* filter to “European Court of Human Rights”, excluding decisions from the former Commission or the Committee of Ministers and Parliamentary Assembly of the Council of Europe, so I can focus on the Court’s judicial reasoning rather than administrative conclusions.

Next, I choose to narrow to the “Article” section – a distinctive feature of HUDOC (Figure 44).

The screenshot shows the HUDOC website interface. On the left, there are two sections: 'MORE HUDOC SITES' and 'FILTERS'. The 'FILTERS' section has two columns: 'LANGUAGE' and 'IMPORTANCE'. The 'LANGUAGE' column lists English (52434), Russian (2162), Romanian (803), Ukrainian (800), and More... The 'IMPORTANCE' column lists 3 (45202), 2 (8847), Key cases (6937), 1 (3128), and More... Below these, there is a 'STATE' section with Russia (8861), Türkiye (6113), Poland (4901), Ukraine (4252), and More... The 'ARTICLE' section is highlighted with a tooltip that reads: 'Use the Article filter to search by the Convention or Protocol Article(s) concerned in a case. This filter is displayed in descending order of the number of documents by Article. Click on More... to open a full list of the Convention and Protocol Articles.' The main content area displays case listings. The first case is 'CASE OF GUÐMUNDUR ANDRÍ ÁSTRÁÐSSON v. ICELAND' with details: Key Case, 26374/18, Available in English, French, 10 more..., Judgment (Merits and Just Satisfaction), Court (Grand Chamber), 01/12/2020. The second case is 'CASE OF MRAOVIĆ v. CROATIA' with details: 30373/13, Available in English, French, Judgment (Struck out of the List), Court (Grand Chamber), 09/04/2021. The third case is 'v. SWEDEN - [Croatian Translation] summary by the Office of the' with details: sh, French, 6 more..., Judgment (Merits and Just Satisfaction), Court (Grand Chamber). The fourth case is 'CASE OF CENTRUM FÖR RÄTTVISA v. SWEDEN – [Russian translation] by Development of Legal Systems'.

Figure 44. The Convention Article filter and its description.

This is where thematic organisation becomes legal substance. Each entry is just a number, but behind each number lies an approach to protect human rights: Article 2 (Right to life), Article 3 (Prohibition of torture), Article 8 (Right to respect for private and family life), and so on (Figure 45).

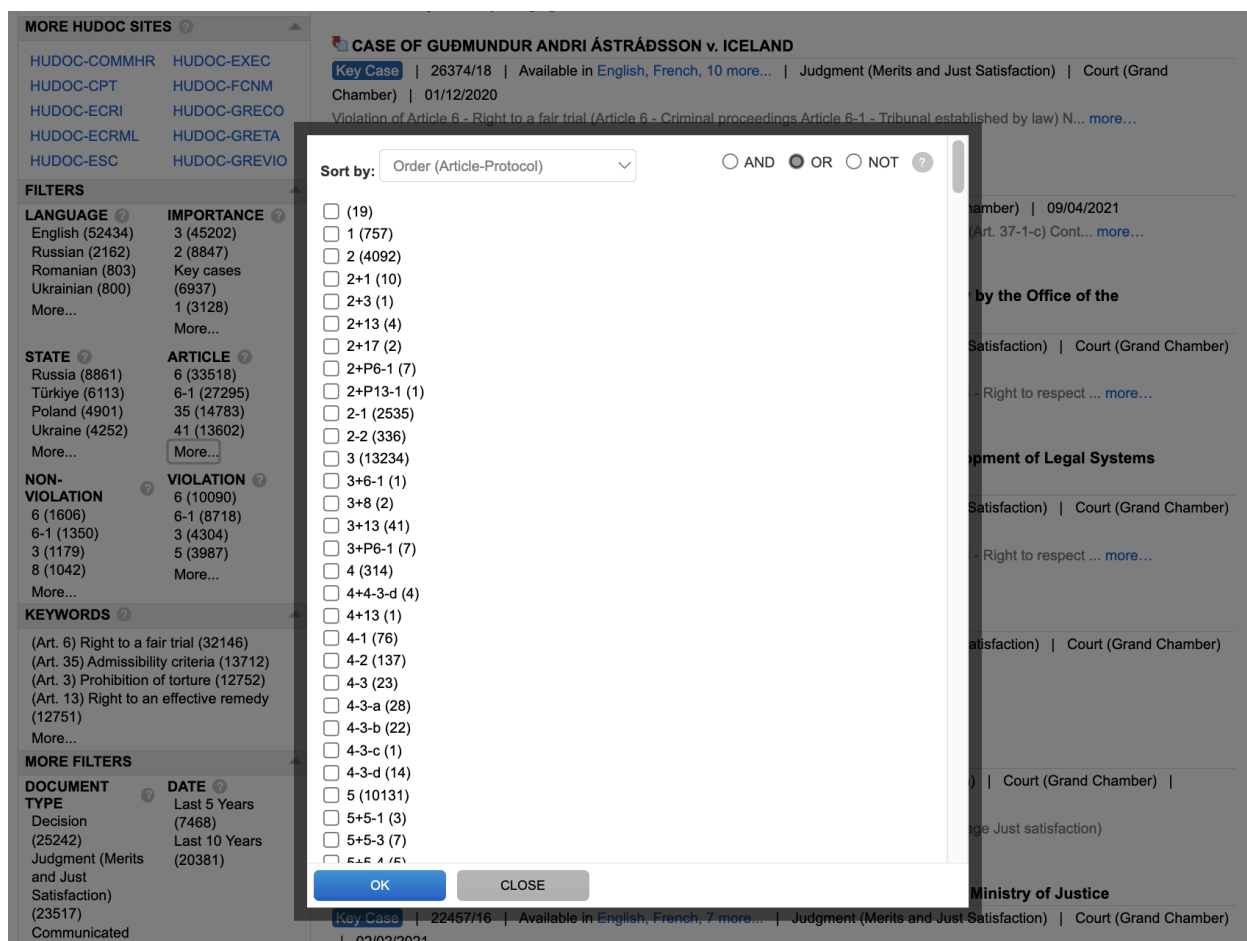


Figure 45. The expanded list of the Articles of the European Convention on Human Rights

I select Article 8, anticipating that my research will intersect with migration (Figure 46). This article establishes the right to respect for private and family life, home, and correspondence, which is often applied in migration and personal status matters by allowing for the protection of family relationships, the right to a home, and even the potential regularisation of a person's immigration status. While not directly about personal status or migration, it provides a legal basis for individuals to challenge state interference with these rights. The checkboxes respond instantly, the counter above the search bar updating to reflect the filtered universe of cases.

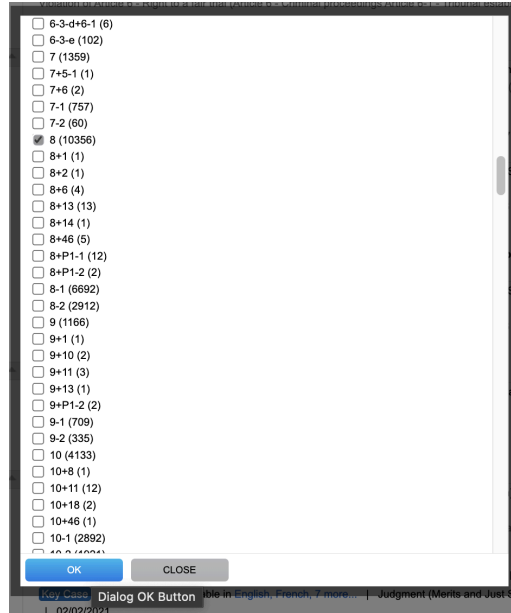


Figure 46. The number of cases-law on the protection of the rights guaranteed by Article 8.

The “Importance” filter catches my attention next. HUDOC categorises cases from “Key Cases” to “Level 1” (key judgments that the Court considers to have high jurisprudential value) down to “Level 3” (less significant decisions). For this stage, I chose “Key Cases”, aiming to capture the most important ones. I know from past searches that Level 1 judgments are also often cited in academic literature, while Level 2 cases provide useful nuance without being overshadowed by their fame. Nevertheless, *Key Cases* is an obvious filter for my search.

With these filters in place, the search automatically narrows the number of cases. The result list appears - clean rows of case titles, application numbers, languages, and decision dates. I also see below the list of articles from the European Convention of Human Rights mentioned by the parties, along with six links: *Case Details*, *Legal Summaries*, *Language*, *Versions*, *Press Release*, *Webcast*, and *Related*.

The *Legal Summaries* link could be useful, because the text of the judgment is usually very long. The new tab opens when I press the link. Nevertheless, it is useless in most cases, as not all the judgments have summaries (Figure 47).

0 Results Found [Print](#) [Export](#) [RSS](#) Sort by: Relevance

CRITERIA [CLEAR ALL](#) Importance Level:Key cases x Application number:35252/08 x Article:8 x

Document Collection:Legal Summaries x Date:From 25/05/2021 to 25/05/2021 x

Organisation:European Court of Hu... x

Your search did not return any documents.

Suggestions:

Try different search terms.

Try more general search terms.

Figure 47. The attempt to search faster by using the link “Legal Summaries” was unsuccessful.

I am also confused by the description of the articles below the number of the cases, because I don’t see any mention of Article 8 among them, while the search was narrowed to this article.

CASE OF CENTRUM FÖR RÄTTVISA v. SWEDEN - [Croatian Translation] summary by the Office of the representative of the Republic of Croatia

[Key Case](#) | 35252/08 | Available in [English](#), [French](#), [6 more...](#) | Judgment (Merits and Just Satisfaction) | Court (Grand Chamber) | 25/05/2021

Preliminary objection dismissed (Art. 34) Individual applications (Art. 34) Victim Violation of Article 8 - Right to respect for private and family life (Article 8-1 - Respect for private life)

[Case Details](#) [Legal Summaries](#) [Language Versions](#) [Press Release](#) [Webcast](#) [Related](#)

CASE OF CENTRUM FÖR RÄTTVISA v. SWEDEN – [Russian translation] by Development of Legal Systems

Publ. Co

[Key Case](#) | 35252/08 | Available in [English](#), [French](#), [6 more...](#) | Judgment (Merits and Just Satisfaction) | Court (Grand Chamber) | 25/05/2021

Preliminary objection dismissed (Art. 34) Individual applications (Art. 34) Victim Violation of Article 8 - Right to respect for private and family life (Article 8-1 - Respect for private life)

[Case Details](#) [Legal Summaries](#) [Language Versions](#) [Press Release](#) [Webcast](#) [Related](#)


CASE OF X AND OTHERS v. BULGARIA - [Bulgarian Translation] by the Bulgarian Ministry of Justice

[Key Case](#) | 22457/16 | Available in [English, French, 7 more...](#) | Judgment (Merits and Just Satisfaction) | Court (Grand Chamber) | 02/02/2021

Preliminary objection dismissed (Art. 35) Admissibility criteria (Art. 35-3-a) Abuse of the right of application No violation of Article 3 - Prohibition of torture (Article 3 - Degrading treatment Inhuman treatment Positive obligations) (Substantive aspect); Violation of Article 3 - Prohibition of torture (Article 3 - Effective investigation) (Procedural aspect); Non-pecuniary damage - award (Article 41 - Non-pecuniary damage; Just satisfaction)

[Case Details](#)
[Legal Summaries](#)
[Language Versions](#)
[Press Release](#)
[Webcast](#)
[Related](#)


CASE OF X AND OTHERS v. BULGARIA - [Croatian Translation] summary by the Office of the representative of the Republic of Croatia
[Key Case](#) | 22457/16 | Available in [English, French, 7 more...](#) | Judgment (Merits and Just Satisfaction) | Court (Grand Chamber) | 02/02/2021

[Case Details](#)
[Legal Summaries](#)
[Language Versions](#)
[Press Release](#)
[Webcast](#)
[Related](#)

Figure 48. The first two cases mention Article 8 of the European Convention of Human Rights, and the next two cases don't mention it.

I feel confused. More than that, the list of judgments is long, and I cannot separate the cases mentioning migrants from cases of violation of the rights of citizens of the country (Figure 48).

I scan the first page and choose cases one by one. I click on the case *Sargsyan v. Azerbaijan*. The judgment opens (Figure 49), its structure mirroring the Court's formal style: facts, relevant domestic and international law, the Court's assessment, and the operative provisions.

40167/06 | Judgment (Merits) | Court (Grand Chamber) | 16/06/2015 | [Legal Summary](#)
 Document URL: <https://hudoc.echr.coe.int/?i=001-155662>

[View](#)
[Case Details](#)
[Language Versions](#)
[Related](#)



EUROPEAN COURT OF HUMAN RIGHTS
COUR EUROPÉENNE DES DROITS DE L'HOMME

◀

GRAND CHAMBER

▶

CASE OF SARGSYAN v. AZERBAIJAN

(Application no. [40167/06](#))

Figure 49. Opening the case, trying to find case-law about migrant rights.

I go to the **“The Facts”** division and **“The Circumstances of the Case”** subdivision. By scrolling down, I can find the **Alleged Violation of Article 8 of the Convention** section. I note **“the parties’ submissions”** and **“the Court’s assessment”**, e.g., the paragraphs where the Court balances the applicant’s personal circumstances against the state’s obligation to protect his right (Figure 50). This allows me to understand that the applicant complained about the denial of his right to return to his home village and to have access to his home, and the Court considered it a continuing violation of Article 8 of the Convention. So it touches on migration and family life.

2. Whether there has been a continuing violation of Article 8 of the Convention

259. The Court refers to the considerations set out above which led to the finding of a continuing violation of Article 1 of Protocol No. 1. It has found that due to the situation pertaining in Gulistan refusing the applicant, or any civilian, access to the village served the interest of protecting civilians against the dangers existing in the area. However, the impossibility for the applicant to have access to his property in Gulistan and the Government not taking any alternative measures to restore his property rights or to provide him with compensation for his loss of their enjoyment, had placed and continued to place an excessive burden on him.

260. The same considerations apply in respect of the applicant’s complaint under Article 8 of the Convention. The impossibility for the applicant to have access to his home and to his relatives’ graves in Gulistan and the Government not taking any measures to address his rights or to provide him at least with compensation for the loss of their enjoyment, placed and continues to place a disproportionate burden on him.

261. Accordingly, the Court concludes that there has been a continuing breach of the applicant’s rights under Article 8 of the Convention.

Figure 50. The result of searching the legal findings of the ECHR.

After noting key passages, I move back to the results list. This return is an intentional act: in autoethnographic terms, it marks the hesitation between micro-level engagement (close reading of one case) and macro-level navigation (shaping the dataset). HUDOC’s filters become the map I redraw at each iteration. So, I try to narrow the search and add precision, limiting by *Decision Type* to “Judgment” only and choosing **8** in *Violation*. Now, I have 1022. Again, I scan the first page and choose cases one by one. I find that if the case concerns the migrant’s life, and I check *Alleged Violation of Article 8 of the Convention* section in each case, I seek the legal principles mentioned by the Court. These will later serve as comparative anchors when I return to EUR-Lex to examine how the ECJ handles similar cases.

At this point, I reflect on the differences between HUDOC and EUR-Lex as research environments. HUDOC’s classificator is more fluid, less rigidly hierarchical. EUR-Lex organises law into fixed legal domains; HUDOC organises it into rights-based clusters. This subtly shifts my cognitive process: in EUR-Lex, I start from a legal field and narrow to specific questions; in HUDOC, I start from the right and trace outward into fact patterns.

By the end of this session, my HUDOC search history is a breadcrumb trail of decisions. The mechanical act of ticking boxes in the classificator is intertwined with the interpretive act of deciding which dimensions of the case to prioritise. In this way, HUDOC is not just a database – it is a collaborator in shaping the boundaries of my legal inquiry.

3.3. Reflections on Access to Case-Law

From a legal design perspective, the comparison between EUR-Lex, Curia and HUDOC suggested that the usability of legal databases depends not only on technical search features but also on the conceptual model embedded in their structure. A thematic, rights-based classifier invites a different type of engagement than a domain-based one, and this shapes the kinds of connections the researcher makes between cases. Working with both EUR-Lex, Curia and HUDOC has given an understanding of what “access to case-law” truly means in the context of legal research from the user’s perspective (Table 1). While both platforms are designed to facilitate access to case-law and judicial reasoning, the classifiers and filter systems force the user’s path in a way that needs to be improved (Figure 12).

Stage	Actions	Touchpoints	Thoughts & Emotions	Pain Points	Solutions
1. Problem Recognition	Recognizes that it’s necessary to find or support a judicial position for a specific legal argument.	Formulates the legal question.	“I need to make sure there are judgments to support my position.” 😊	Doesn't always remember the exact names of cases or article numbers.	Hints for formulating a search query.
2. Information Search	Find relevant cases on Curia or EUR-Lex, or HUDOC.	Opens Curia website, uses the “Case-law search” form, tries searching by keywords, Treaty articles, case names or case numbers.	“Why do I see the necessary filter?” / “The search system doesn’t understand context.” 😞	Complex filter structure, limited contextual search.	Implementation of semantic search (by meaning), improved search UX, making filters more clear.
3. Evaluation of	Assess the relevance of the cases	Opens several judgments,	“I’m not sure if this case fits the	There are no short summaries;	Providing brief case summaries,

Alternatives	found.	scans their operative part (legal findings of the Court), summaries.	factual context." 😞	the texts of judgments are long.	visual maps of legal issues, highlighting key fragments.
4. Decision	Select relevant cases and use them.	Saves or copies links, makes notes, cites in a document.	"Okay, this one works, but I want to find similar ones quickly." 😞	There is no "related cases" function, or referral links to the previous judgments.	Add functions "related cases", "save search", and quote export.
5. Follow-up	Complete the search and evaluate it.	Saves PDF, closes tabs, and shares links with colleagues.	"I spent too much time searching for three relevant cases." / "The interface is outdated, but there is no other choice." 😞	Irritation, cognitive overload, low satisfaction.	Personalized interface (recent searches, smart recommendations, learning mode).

Table 1. User Journey on access to case law of international courts.

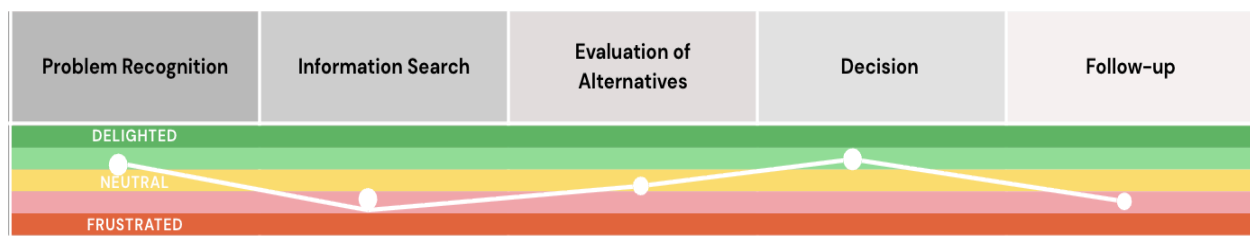


Figure 12. Emotional Arc of the User Journey at Figure 11.

The challenges of User Journey in Table 1 could be summarized as following research goals below:

RG1: The websites' classifiers frame the user's path. In EUR-Lex, access is organized through a domain-oriented classifier according to the EU areas of law. This creates a cognitive frame in which areas of law organise legal questions before the substantive content in the CJEU's legal findings is even reached, especially in Curia. HUDOC, in contrast, begins with the list of human rights and then allows the researcher to explore the ECtHR's legal findings through filters. These structural differences influence not only how information is retrieved but also how legal reasoning is interpreted. As a result, **multi-dimensional classifiers** that are flexible and allow switching from the rule of law to general ideas for search would be great for dynamic legal research.

RG2: A wide search gives completeness but overwhelms; narrow filters risk missing relevant cases. The manual search process also highlighted a tension between comprehensiveness and efficiency. This is the challenge of filtering through large volumes of results. In some cases, the classifiers and filters helped reduce this cognitive load. In others, especially where my understanding of the legal question was still forming, the search process remained iterative and time-consuming. This experience reinforced the need for tools that do not simply store legal information but actively assist in shaping, refining, and summarising it. Access to case-law, in this sense, is not only about retrieving documents but also about accessing their essence - extracting the reasoning, context, and doctrinal value without losing the richness of the original text. It would be important to implement **semantic search** and **natural language queries**, enabling users to type questions in plain language, suggest synonyms, related legal terms, or landmark cases to make the search process flexible and easy.

RG3: High cognitive load in navigating results and reliance on prior knowledge ("knowing what to search for"). The experience of manually navigating such platforms as EUR-Lex, Curia and HUDOC revealed both the affordances and the limitations of traditional legal databases. The affordances lie in the comprehensiveness and authoritativeness of the data: each platform is an official source, it holds an official, verified record of judicial decisions, with metadata. However, limitations are in the time and cognitive effort required to move from a broad legal category to the specific passages relevant to a given research question. Even with advanced filters, the process demands time and prior knowledge – knowing what to search for, how to narrow the dataset effectively, and when to switch between platforms. This reliance on existing mental models means that new researchers, or those approaching an unfamiliar legal question, may struggle to identify the most relevant case law. These 2 problems could be solved by **smart previews** that demonstrate key reasoning before opening the full text of the judgment.

RG4: Reading the full text of judgments is slow and demanding. Adding **automated summarisation tools** would show argument structures and legal findings in short form. Summaries should be linked back to the full text for transparency.

As we see above, the case law of international courts creates inherent accessibility challenges for users. So, the challenges of user journey mentioned above in Table 1 presents a unique research opportunity to explore how legal design can address the accessibility challenges inherent in the CJEU's and other international courts' case law.

Despite the growing application of legal design principles, such as clarity, simplicity, and accessibility, in legal applications, their integration into the legal profession and court context, especially in combination with AI tools, remains limited. Hagan, describing the design of a better court regarding court forms, says that it is a super-specialized, “design-geek” topic [24]. This highlights the need to shift from an institutional perspective to a user-centered one, applying key visual and interaction design principles to reduce errors and ensure that legal professionals can access accurate and comprehensive information efficiently.

Chapter 4. Developing the AI Legal Research Assistant

Based on conversations with former colleagues, legal professionals working with European case law, and auto-ethnographic reflections on my own experience as a legal researcher, and analysis of websites (EUR-Lex, Curia, HUDOC), I tried to formulate the difficulties of searching, comparing, and applying judicial reasoning. I tried to be non-judgmental, focusing on mapping frustrations and unmet needs rather than assuming predefined solutions.

As a result, I formulated user persona (Table 2) to represent the ideal archetype of the legal researcher. The decision-making contexts and recurring pain points – such as information overload, fragmented search systems, and high cognitive load when reading multilingual judgments – were synthesized into a set of design requirements. This stage served to reframe the problem as an interaction challenge (legal research supported by HCI and UX): how can a system provide complex legal information in a better UX way?

The way legal persons think looks like everything is a black box, while the outcome is very structured. The ideal persona for this prototype is a mid-career legal counselor working with job tasks on an international or transnational level. This persona is characterized by a high level of legal expertise, usually with an advanced academic background and practical experience in litigation, advisory roles, or compliance functions. The lawyer regularly engages with case law of the European Court of Justice and the European Court of Human Rights, which is not an abstract academic text, but a resource for drafting legal opinions and advising clients on the potential outcomes of proceedings. The ideal lawyer, therefore, requires tools that not only provide an efficient amount of case law but also support “meaningful” legal activities – that is, the interpretation, contextualization, and integration of judicial reasoning into professional texts.

Table 2 describes the ideal persona’s background, Figure 51 represents the ideal persona’s description for the prototyped AI tool for lawyers.

Name	Dr. Sofia Richter
Age	36
Profession	Legal counsel at the international organization
Experience	10+ years, specializing in EU and international law
Education	Doctor of Law, University of Germany; completed an internship at the Court of Justice of the European Union

Quote	"I know what I'm looking for - but the website makes it harder than it should be."
Needs	Analyze the case law of the Court of Justice of the European Union to prepare a legal opinion, memorandum, or comparative analysis
Challenges	Works with a large volume of cases, often under deadlines; prefers accurate and relevant search results
Opportunities	Interactive AI assistant as an intermediary between the user and a complex database. Semantic understanding instead of textual search. Contextual summarization. Personalized workflow with history, preferences, and citations.

Table 2. The persona's background.

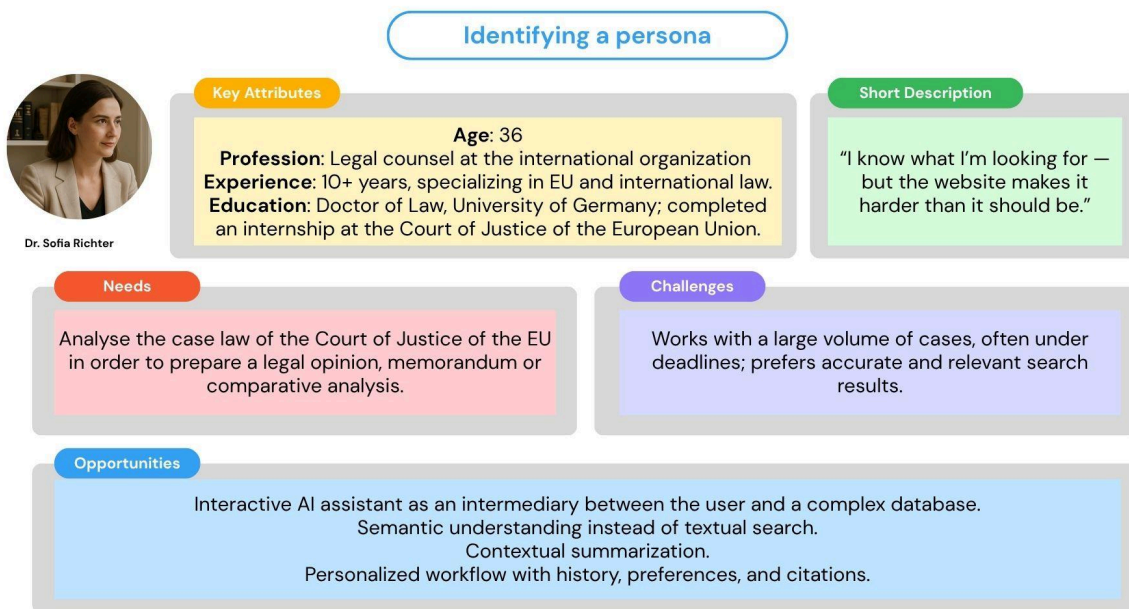


Figure 51. The persona for the prototyped AI tool for lawyers.

4.1. The Initial idea

The objective was to create a tool that has the structured search capabilities of established databases while introducing an intelligent AI-helping that could reduce the time

required to reach substantive engagement with case-law. The core design principle was to offer the researcher multiple filtering options familiar from platforms such as EUR-Lex and HUDOC, combined with an AI-generated summary function capable of presenting the key facts, legal issues, and legal reasoning of a judgment in a short form.

The initial sketching of ideas was created in Canva just to summarize the main criteria for better results of searching in case law databases of international courts. First, I sketched the idea of the website with a simple and intuitive interface (Figure 52) showing that the tool focuses the user's attention by searching a field for a dialogue with AI and the result of this search - the list of cases. Some filters based on area of law and protected rights as well as keywords were added as instruments to narrow the results of search. Later (Figures 52.1-52.3), the keywords were removed because search uses actual key phrases. Also, filters were developed helping to choose the court, the date (or period of time) and language. The principal idea that the result of the search looks like the list of cases remained unchanged.

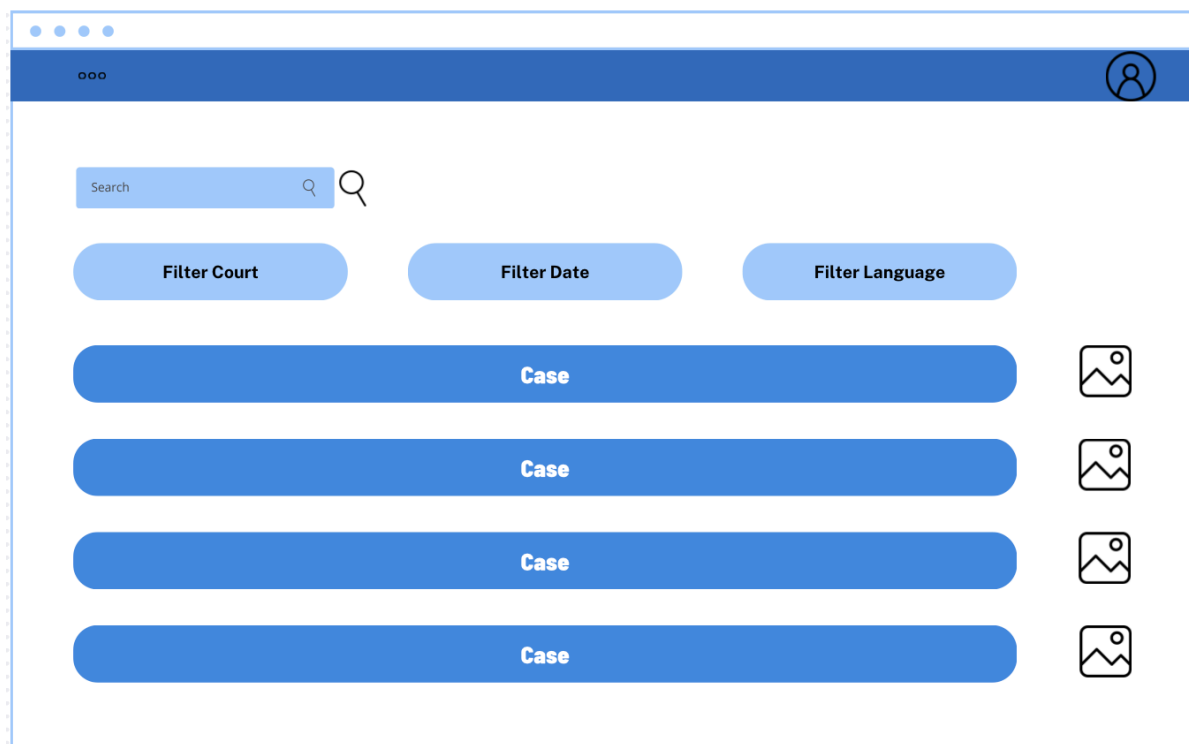


Figure 52. Sketching the initial low-fidelity prototype.

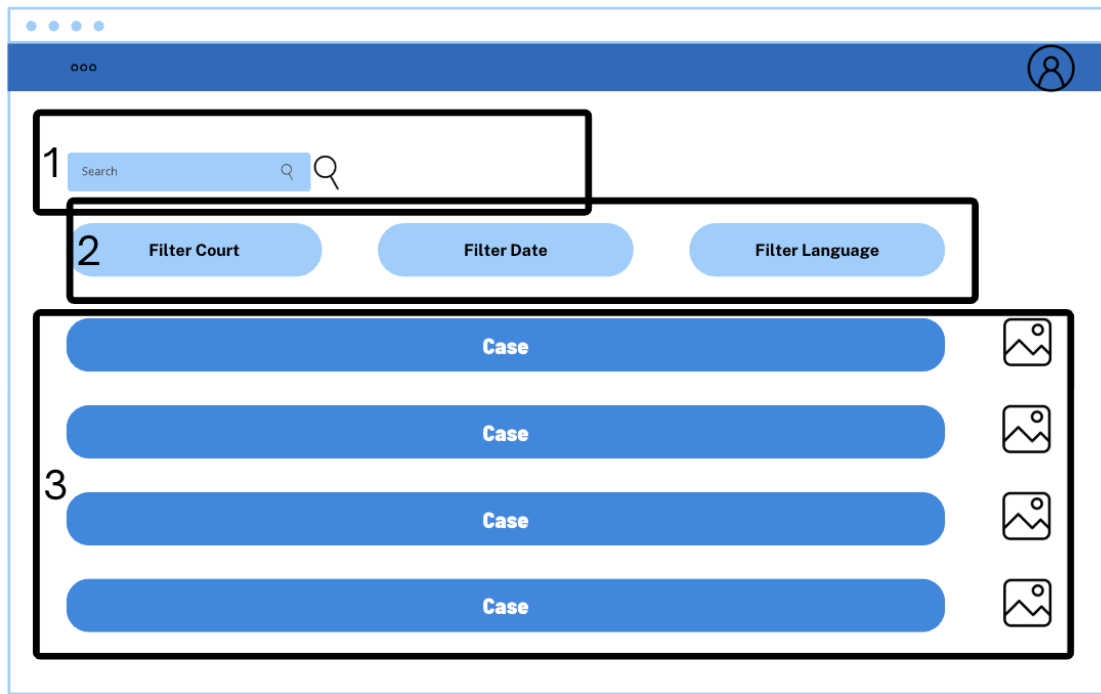


Figure 52.1. The wireframe of the AI tool. (1) An input text box where the user would search for the keywords of the case law. (2) Buttons that are additional filters to narrow the search. (3) The table shows the results of the search.

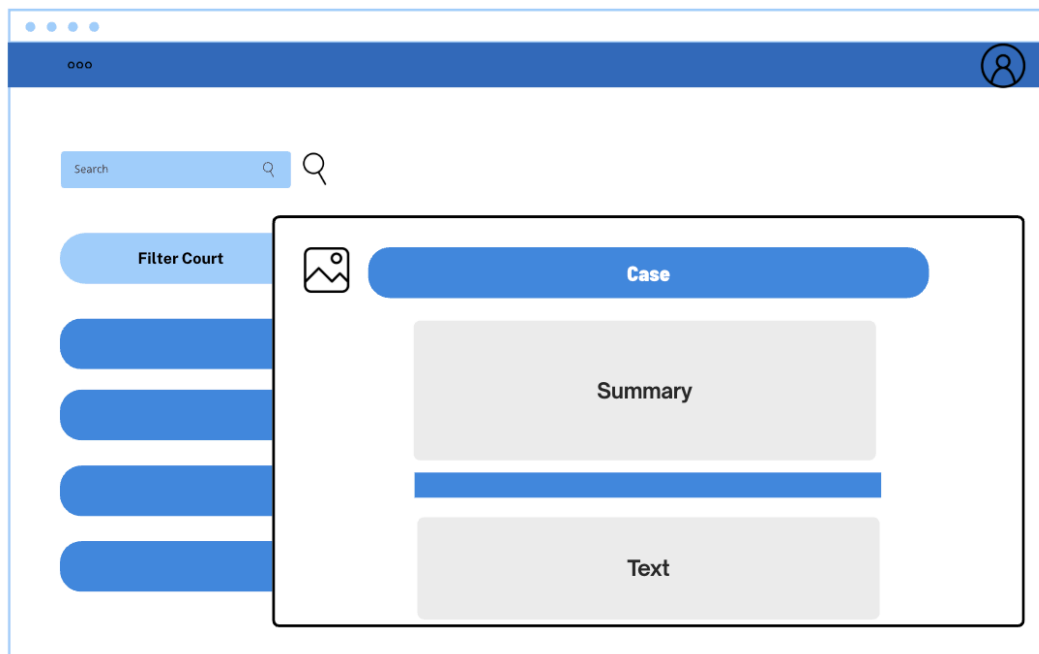


Figure 52.2. Pop-up window of the AI tool.

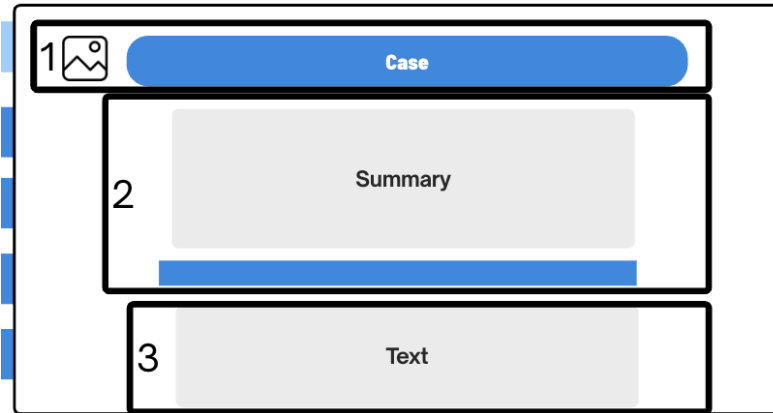


Figure 52.3. Pop-up window of the AI tool: (1) The name of the case. (2) Short AI summary. (3) The official text of the judgement.

In response to my reflections from chapter 3.3, basically, RG1 (difficulties with multi-dimensional classifiers) and RG2 (reflection on search with possibility to ask questions), I have implemented a simple search function designed to handle plain-language queries, addressing situations where users may not know the parties' names or other specific identifiers of a case. This feature aims to enhance accessibility and inclusivity in legal search. Furthermore, to respond to challenges identified in RG3 (high cognitive load in navigating results) and RG4 (summarization of text to save time), I have designed a pop-up window that displays search results with clear and concise explanations of each case. This feature enables users to understand the key legal reasoning quickly, while preserving access to the complete text for deeper exploration.

4.2. Technology review

I tested no-code and low-code platforms for building a website for searching legal cases. No-code and low-code platforms were a logical choice given the research focus on usability and accessibility rather than technical implementation and my own background as a lawyer. These tools allowed rapid prototyping and iterative testing of search interfaces for legal case databases without requiring advanced programming skills. This approach made it possible to concentrate on user experience, information design, and interaction flow – core aspects of evaluating how legal professionals engage with digital case-law tools. Platforms were selected for their relevance to (i) rapid UI/UX prototyping, (ii) data integration and workflow automation, (iii) ability to incorporate AI or custom logic, and (iv) accessibility to non-developer researchers. For each platform, I summarise strengths, weaknesses, and indicative use-cases. Platforms tested in hands-on experiments are explicitly noted (Table 3).

Platform	Type / Focus	Strengths (relevant for legal design)	Weaknesses / risks
Replit	Code + AI-assisted build environment that can generate apps/websites from natural language and run & deploy code. Good for prototype-to-productive pipelines.	Fast turn-from-idea to running prototype; integrated deployment; supports code when needed (so not locked-in); AI assistance speeds iteration. Good for researcher-developers who want more control.	Autonomy of AI agents raises safety concerns (recent incidents show potential for destructive automated actions); requires careful sandboxing and testing before production.
Udify	AI / no-code AI tooling & automation offering tailored AI solutions and content automation; positions itself as an accessible AI toolkit for business workflows.	Promising for integrating AI features (content generation, intelligent automation) without heavy infra investment; vendor claims rapid customization.	Vendor maturity and documentation may vary; integration depth and limits depend on plan and APIs; independent reviews are more limited than for older platforms.
Glide	No-code PWA / mobile-like apps from spreadsheets or databases quickly; good for simple workflows and demos.	Extremely fast to go from data to usable app; good for user tests and small administrative tools.	Limited customization; apps are PWAs (not full native apps); limited complex business logic.
Zapier	Automation / integrations – workflow automation between	Great for stitching systems together (e.g., intake form → Airtable	Complex orchestration can become brittle; not ideal for

	services (trigger → action).	→ Slack); low learning barrier.	highly stateful or mission-critical logic.
--	------------------------------	---------------------------------	--

Table 3. Technology review.

In general, these no-code tools greatly shorten iteration cycles for UI/UX testing and stakeholder demos but trade some control and portability – platforms that allow code (Replit, for example) reduce lock-in risk. Legal workflows depend on secure data handling, auditability and reliable integrations (case databases). Platforms like Replit (for custom integration code) are helpful complements.

During the initial scanning phase, I have chosen platforms that (a) enable rapid prototyping for user-testing, (b) offer some AI assistance that speeds content and interaction design, and (c) provide a path to run and iterate custom logic when needed.

- **Udify**⁹ appeared attractive as an approachable AI toolkit for business automation and content tasks; its focus on “tailored AI strategies” suggested it could be used to create AI-assisted user interfaces (for example, automated summaries of case law or guided intake flows). I therefore conducted initial experiments to validate how easy it is to connect prompts/agents to simple UI stubs and legal datasets.
- **Replit**¹⁰ combines an editor, immediate deployment, and an AI agent that can generate app scaffolding from natural language. This makes it possible to go from idea → runnable prototype in a single environment; from a legal-design perspective, it reduces friction between design, iteration, and technical implementation. Because Replit also supports writing and running code, it offers an “escape hatch” when no-code constraints are reached. This flexibility was important for prototypes that need small custom integrations (e.g., anonymised case import scripts).

I therefore shortlisted and tested both Udify and Replit in practice (see methods and results section for detailed notes on the experiments). The tests examined (i) time to first interactive prototype, (ii) ability to connect to sample data, (iii) ease of modifying generated behaviour, and (iv) safety/roll-back features (especially for Replit’s AI agent). On balance, both platforms showed high potential for the objectives of this thesis: Udify for rapid AI-driven content features, Replit for fast end-to-end prototyping with the option to extend by code.

⁹ <https://udify.ai/>

¹⁰ <https://replit.com/>

However, the Replit tests also revealed concrete safety concerns that require human oversight and careful testing before any real or production data is used.

4.3. Prototyping

Platforms such as Udify provided a useful entry point but were limited in scope, essentially functioning as a better prompt around ChatGPT without enabling a more structured development process. This simplicity made Udify suitable for quick experimentation but insufficient for the needs of my project, which required modularity, persistence of code, and integration with external data sources. Platforms offering AI agents or code generation (Replit, various AI toolkits such as Udify/Dify) can speed prototype creation. However, they show that autonomous AI code agents can perform unsafe actions (deleting data, fabricating outputs), so rigorous sandboxing, human supervision, and test/rollback plans are necessary before any deployment.

For example, Figure 53 showcases my initial prompt to test my idea.

Prompt:

<instruction>

- Review the case law of the European Court of Justice related to migration law and rights of migrant workers from third countries and EU countries.
- Provide a detailed analysis of the legal principles and precedents established in these cases.
- Ensure that the output does not contain any xml tags.

<input>

- {{lawyer_name}}: The name of the experienced lawyer specialized in EU law and case law of the European Court of Justice.
- {{specialization}}: The area of expertise in migration law and rights of migrant workers from third countries and EU countries.

<output>

- Analyze the case law of the European Court of Justice on migration law and rights of migrant workers from third countries and EU countries.
- Provide a comprehensive overview of the legal framework and key decisions in this area.
- ...

Figure 53. The process of prompting in Udify.

The model should focus on *case law reasoning* rather than purely descriptive summaries. The request to “provide a detailed analysis of the legal principles and precedents” was meant to elicit structured legal reasoning comparable to a professional legal memorandum. The placeholders {{lawyer_name}} and {{specialization}} were designed to test whether role conditioning (simulating the voice of a domain expert) could improve the precision and interpretive depth of responses. This reflects an emerging practice in prompt engineering, where assigning a professional persona (“experienced EU lawyer”) helps large language models adopt a more appropriate style and structure in the generated output. The section *Output* defines the expected form and scope of the response – a comprehensive overview combining both the legal framework and key ECJ decisions. Such guidance balances completeness with clarity, encouraging the system to provide a coherent synthesis rather than fragmented case summaries. This aligns with the project’s focus on *designing clarity* in legal information.

The main problem here: I could not prompt all kinds of legal research - and in this case user’s path would be very limited - while I was sure that I want to develop a tool which uses some AI features to make user’s path shorter and minimize the “distance” between initial research idea and outcome of the most relevant cases of international courts or one of them.

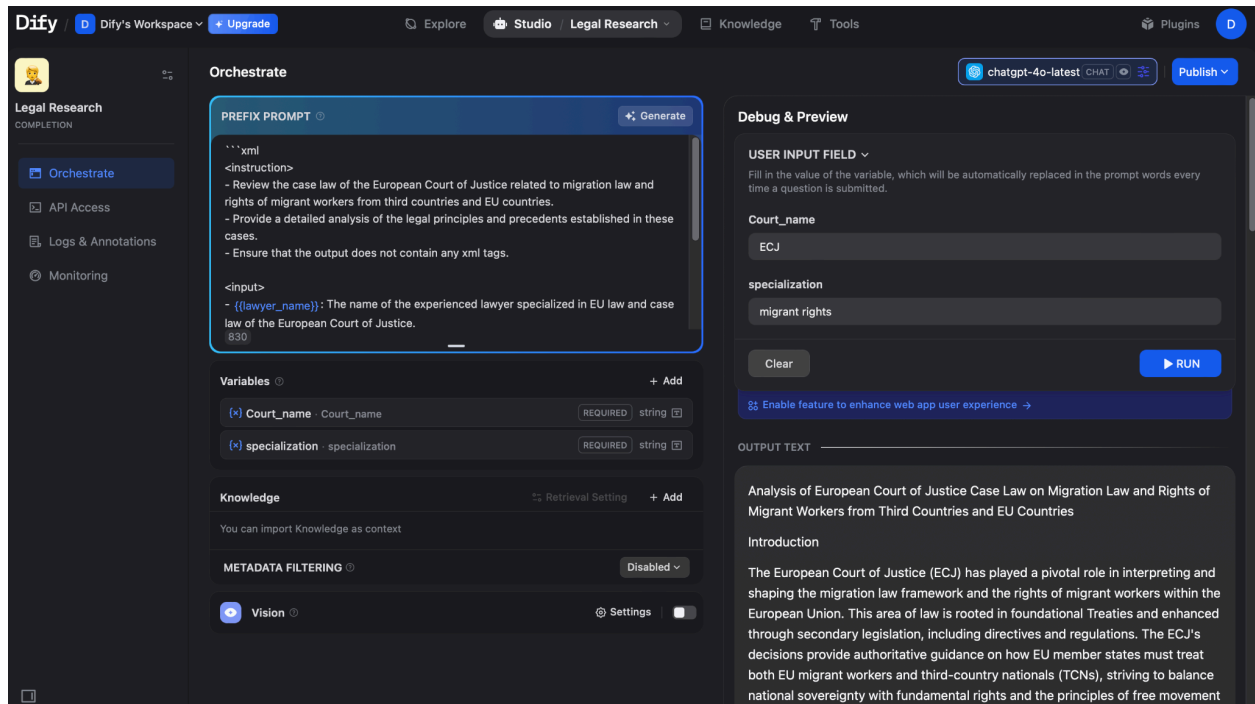


Figure 54. The first prototype in Udify.

Analysis of European Court of Justice Case Law on Migration Law and Rights of Migrant Workers from Third Countries and EU Countries

Introduction

The European Court of Justice (ECJ) has played a pivotal role in interpreting and shaping the migration law framework and the rights of migrant workers within the European Union. This area of law is rooted in foundational Treaties and enhanced through secondary legislation, including directives and regulations. The ECJ's decisions provide authoritative guidance on how EU member states must treat both EU migrant workers and third-country nationals (TCNs), striving to balance national sovereignty with fundamental rights and the principles of free movement and non-discrimination.

I. Legal Framework

1. Primary EU Law

Treaty on the Functioning of the European Union (TFEU)

Articles 45–48 TFEU establish the free movement of workers, prohibiting discrimination based on nationality among EU nationals.

Charter of Fundamental Rights of the EU

Several provisions reinforce rights relevant to migrant workers, including Article 15 (freedom to choose an occupation and right to engage in work), Article 21 (non-discrimination), and Article 45 (freedom of movement and residence).

For EU citizens:

- Directive 2004/38/EC (Free Movement Directive) governs the rights of EU citizens and their family members to move and reside freely within the EU.

For third-country nationals (TCNs):

- Directive 2003/109/EC (Long-term Residents Directive)
- Directive 2003/86/EC (Family Reunification Directive)
- Directive 2011/98/EU (Single Permit Directive)
- Directive 2009/50/EC (Blue Card Directive)
- Directive 2014/36/EU (Seasonal Workers Directive)
- Directive 2014/66/EU (Intra-Corporate Transferees Directive)

II. Landmark ECJ Cases on EU Migrant Workers

1. Case 53/81 D.M. Levin v Staatssecretaris van Justitie (1982)

The ECJ defined “worker” broadly, holding that even part-time workers earning less than the minimum required for subsistence can enjoy rights of free movement if the work is genuine and effective.

2. Case 66/85 Lawrie-Blum v Land Baden-Württemberg (1986)

The Court defined a “worker” as someone who performs services under the direction of another for remuneration. This judgment is foundational in determining who qualifies for workers' rights under EU law.

3. Case C-85/96 Maria Martínez Sala v Freistaat Bayern (1998)

The ECJ expanded the protection from discrimination, holding that an EU national lawfully residing in another Member State cannot be discriminated against based on nationality, even when not economically active.

4. Case C-184/99 Grzelczyk v Centre public d'aide sociale d'Ottignies-Louvain-la-Neuve (2001)

The Court affirmed that EU citizens lawfully residing in another EU state can rely on the non-discrimination provisions in receiving social assistance, even students, highlighting the “fundamental status of Union citizenship.”

5. Case C-413/99 Baumbast v Secretary of State for the Home Department (2002)

The ECJ held that EU citizens have a right of residence under Article 21 TFEU irrespective of economic activity, provided they have comprehensive health insurance and sufficient resources.

III. ECJ Case Law on Third-Country National Migrant Workers

1. Case C-540/03 European Parliament v Council (2006) – Family Reunification Directive

The Court clarified that while the Family Reunification Directive allows some discretion to Member States, it must be interpreted and applied in a way consistent with fundamental rights, especially the right to family life under Article 8 ECHR and the Charter.

2. Case C-508/10 European Commission v Netherlands (2012)

The Netherlands imposed restrictive integration requirements before issuing long-term residence permits. The ECJ held such requirements must not jeopardize the directive's objective of integrating TCNs who are already long-term residents.

3. Case C-571/10 Kamberaj v IPES (2012)

The Court ruled that TCNs who are long-term residents must not be discriminated against concerning access to social assistance in areas covered by the Long-term Residents Directive.

4. Case C-302/19 Minister for Justice and Equality v XU and QP (2021)

This case discussed family reunification and procedural safeguards for TCNs and emphasized proportionality and the importance of effective remedies.

5. Case C-18/20 Bundesrepublik Deutschland v Prokuratura Rejonowa w S. (2021)

Addressed detention of TCNs for the purpose of return and the conditions of detention under the Return Directive. The judgment reiterated the limited grounds and due process standards for such detention.

IV. Key Legal Principles Established by the ECJ

1. Broad and Autonomous Interpretation of "Worker"

The ECJ has consistently resists narrow national definitions, ensuring a wide category of individuals benefit from EU law.

2. Primacy of EU Citizenship and Equal Treatment

The Court has elevated Union citizenship as a fundamental status, requiring equal treatment and access to benefits, subject to conditions related to lawful residence and self-sufficiency.

3. Procedural Rights and Rule of Law

The Court has emphasized the need for fair procedures, effective remedies, and proportionality when dealing with the expulsion or denial of rights to both EU citizens and TCNs.

4. Limiting Member State Discretion under Directives

While acknowledging national discretion in implementing migration directives, the ECJ insists on harmony with fundamental principles such as the right to family life, non-discrimination, and legal certainty.

Conclusion

The European Court of Justice has significantly contributed to a coherent and rights-based approach to the treatment of migrant workers within the EU. Its case law affirms a strong commitment to the principles of free movement, equality, and respect for fundamental rights for both EU citizens and third-country nationals. For legal practitioners and policymakers, awareness of this evolving jurisprudence is essential for ensuring compliance with EU law and the protection of migrant rights across Member States.

Figure 55. The outcome of the prototype in Udify. The text is a good legal analysis for study purposes; it cites key decisions, but this result would not be enough for the real job task of a legal counsellor.

The prototype developed in Udify, presented in Figure 54 and Figure 55, produced a well-structured and coherent legal analysis suitable for study purposes because it accurately summarized the main principles of EU migration law and cited several key CJEU decisions. The output demonstrated the model's ability to synthesize complex legal information into an accessible narrative, making it useful for academic exploration and comparative analysis. However, the text remained descriptive rather than interpretative, lacking the depth of reasoning and contextual evaluation expected in professional legal advice, which are essential for applied legal counselling. Therefore, while the Udify result proved valuable as an educational or analytical aid, it was insufficient for real-world advisory or procedural work requiring precise legal interpretation and responsibility.

Then, Replit was chosen because it is a more flexible and clearer instrument to create a prototype for an idea.

At first, I decided to begin the prototyping process in Replit, because it provided an integrated environment for coding, testing, and deploying small applications. While my initial goal was simply to reproduce the prompt and observe the AI's output, I soon discovered that Replit offered a wider range of practical instruments than I expected. Its real-time code execution, AI-assisted editing, and built-in data handling tools allowed for faster iterations and immediate visual feedback. These features made the process of refining prompts and adjusting logic far more interactive and transparent than in purely no-code tools. As a result, Replit evolved from a testing environment into a primary workspace, enabling more advanced experimentation with the structure and presentation of legal information.

Replit occurs that this no-code platform combines the accessibility of a browser-based IDE with collaborative features and integrated deployment options. It allowed me to:

- maintain a structured codebase rather than isolated prompts,
- easily integrate and modify external resources such as case law datasets, and
- test user experience designs in an environment closer to production settings.

Thus, Replit was chosen as the primary platform for development, since it provided both the low-entry threshold necessary for rapid prototyping and the technical depth required for experimentation with legal design solutions.

These prototypes were intentionally simple, privileging iterative learning over technical completeness. Features such as structured search of case law, integration of metadata, and retrieval of comparative jurisprudence were tested in storyboard-like scenarios to simulate potential user interactions.

4.4. Final Prototype

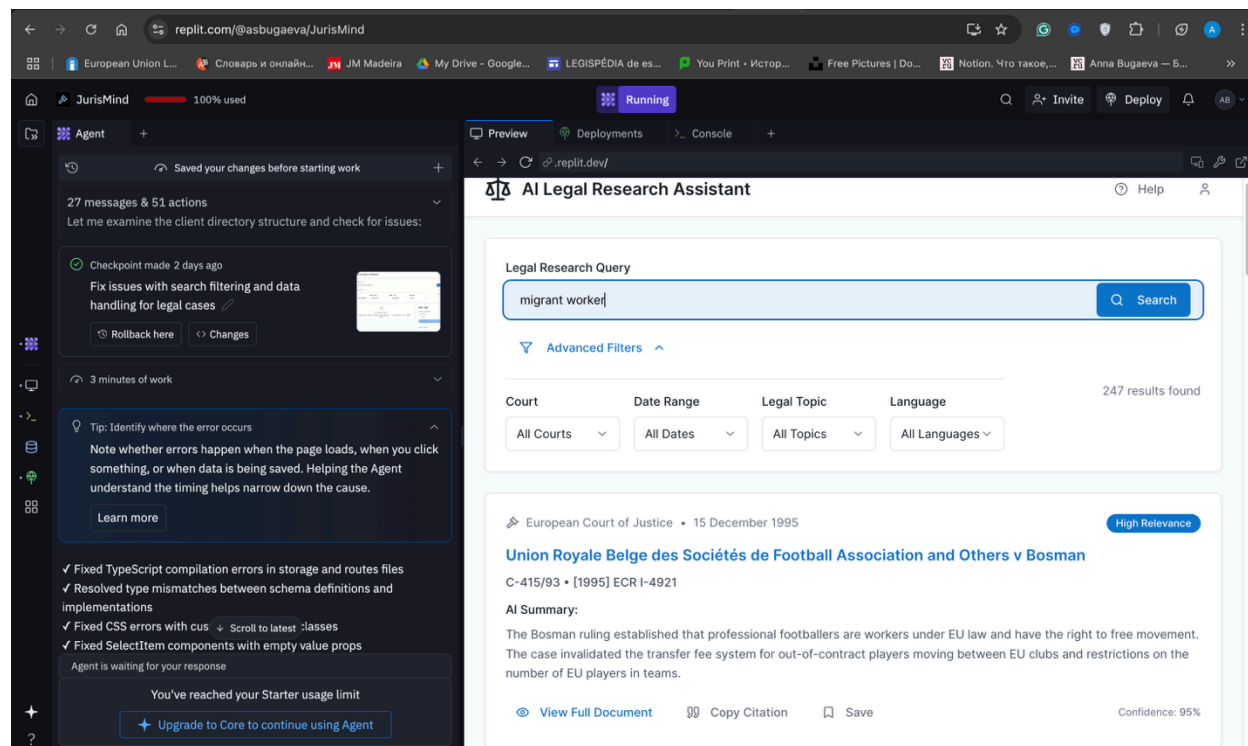


Figure 56. The process of coding of the AI Legal Research Assistant.

The development of the AI agent in Replit began with adapting the previously designed prompt on ECJ case law into an interactive format that could generate, refine, and display legal analyses dynamically. The initial prompt instructed the agent to *review and analyze the case law of the CJEU and the ECtHR related to migration law and the rights of migrant workers from third countries and EU Member States*, ensuring clarity and citation of key decisions. I implemented the agent within Replit's AI Workspace, which integrates a code editor, a console, and an output panel – allowing immediate interaction between natural language instructions and executable code. The editor was used to define the system role, input structure, and output logic; the console captured real-time model responses and errors; and the preview/output section displayed formatted text, serving as a prototype interface for users.

Throughout development, I iteratively tested how the agent handled task-specific prompts, adjusting its tone and depth to match the communication needs of different personas defined earlier in the study. For instance, the “Legal Adviser” persona required detailed doctrinal reasoning and precise references, while the “Policy Analyst” persona benefited from concise summaries and cross-case synthesis. The “Research Student” persona, on the other hand, used the agent as a study companion to retrieve and explain key CJEU judgments in plain language. Each persona’s interaction followed a slightly different sequence: advisers would begin with a specific query about a legal issue, policy analysts might start from a topic overview, and students typically used guided prompts to explore legal principles step by step.

In Replit, these different use paths were simulated through input forms and parameter adjustments: by changing the instruction layer (system message) and temperature setting, the same model could alternate between analytical precision and interpretive breadth. The workflow thus consisted of defining the persona and task → running the prompt → reviewing and editing the generated text → and, if needed, refining the query for a second iteration. This process highlighted the flexibility of Replit’s environment, which supported both technical experimentation (through editable code) and user-centered design evaluation (through immediate feedback). Over time, the agent became not only a test for prompt design but also a conceptual prototype for how legal professionals and learners might interact with AI tools to access and interpret case law in more transparent, human-centered ways.

AI Legal Research Assistant

Legal Research Query

Search case law, legal topics, or enter case numbers...

Search

Advanced Filters

Court Date Range Legal Topic Language

All Courts All Dates All Topics All Languages

247 results found

No results found

Enter a search query to find legal cases.

Quick Tools

Citation Generator

Citation Style

OSCOLA

Copy Citation

Figure 57. The Visual Interface of the AI Legal Research Assistant.

AI Legal Research Assistant

Help

Legal Research Query

free movement

Search

Advanced Filters

Court
Date Range
Legal Topic
Language

All Courts
All Dates
All Topics
All Languages

247 results found

European Court of Justice
15 December 1995

High Relevance

Union Royale Belge des Sociétés de Football Association and Others v Bosman

C-415/93 • [1995] ECR I-4921

AI Summary:

The Bosman ruling established that professional footballers are workers under EU law and have the right to free movement. The case invalidated the transfer fee system for out-of-contract players moving between EU clubs and restrictions on the number of EU players in teams.

View Full Document
Copy Citation
Save

Confidence: 95%

AI Legal Research Assistant

Help

Legal Research Query

migrant rights

Search

Advanced Filters

Court
Date Range
Legal Topic
Language

All Courts
All Dates
All Topics
All Languages

247 results found

European Court of Justice
4 February 1963

High Relevance

NV Algemene Transport- en Expeditie Onderneming van Gend & Loos v Netherlands Inland Revenue Administration

26/62 • [1963] ECR 1

AI Summary:

This foundational case established the doctrine of direct effect, allowing individuals to rely on EU law provisions directly in national courts. Van Gend en Loos transformed the EU legal order from a purely inter-state system to one creating individual rights enforceable by national courts.

View Full Document
Copy Citation
Save

Confidence: 98%

Figure 58. Examples of applying filters of the AI Legal Research Assistant.

The filtering interface (Figure 58) was deliberately simple to minimise cognitive friction and to meet the requirements of the research ideas R1 and R3. Users could select from primary filter categories: court, date range, and legal topic, with an additional filter for language. The court filter allowed for searches limited to the Court of Justice of the European Union, the European Court of Human Rights, or all courts. The date range filter offered four fixed intervals – last year, last five years, last ten years, or all years – ensuring that even researchers without a precise date in mind could quickly focus on relevant temporal scopes. The legal topic filter reflected common research themes, including human rights, data protection, competition law, and employment law, with the option to search across all topics. The language filter provided access to materials in English, French, or German, reflecting the linguistic coverage most relevant to the intended user base.

The main feature, and the innovation distinguishing this tool from conventional databases, was the AI Summary. Upon selecting a case from the filtered list, the assistant generated a short, structured summary covering the procedural history, relevant facts, legal issues, and the court’s reasoning. This summary aimed to support two complementary research behaviours: rapid triage, where the researcher determines whether a case merits deeper reading, and comparative analysis, where multiple case summaries can be read side-by-side to identify doctrinal trends. In general, AI here is “work in progress”, but it is an example of how advanced and user-friendly research could be. The goal to add such a feature as an AI summary is to connect to the goal of the R2 and R4 research ideas.

In developing the prototype, I sought to integrate legal information retrieval with human-computer interaction principles, focusing on clarity, minimalism, and interpretive support. The design process involved translating familiar legal research patterns into a more responsive and interpretive interface. By including only a small set of carefully chosen filters, I reduced the risk of overwhelming the user, while the AI summary component addressed the persistent challenge of information overload by foregrounding the most salient elements of each case.



Legal Research Query

migrant worker

Search

Advanced Filters

Court

Date Range

Legal Topic

Language

All Courts

All Dates

All Topics

All Languages

247 results found

European Court of Justice • 15 December 1995

High Relevance

Union Royale Belge des Sociétés de Football Association and Others v Bosman

C-415/93 • [1995] ECR I-4921

AI Summary:

The Bosman ruling established that professional footballers are workers under EU law and have the right to free movement. The case invalidated the transfer fee system for out-of-contract players moving between EU clubs and restrictions on the number of EU players in teams.

View Full Document

Copy Citation

Save

Confidence: 95%

European Court of Justice • 10 February 2022

High Relevance

European Court of Justice • 10 February 2022

High Relevance

T.G. v. Republic of Slovenia (Migrant Detention)

C-622/20 • [2022] ECLI:EU:C:2022:99

AI Summary:

This case established minimum human rights standards for the detention of irregular migrants, including requirements for adequate living conditions, healthcare access, and legal representation. It reinforced that migrant rights are protected under EU fundamental rights charter.

View Full Document

Copy Citation

Save

Confidence: 93%

European Court of Justice • 20 May 1995

High Relevance

Opinion of Advocate General Lenz in Bosman

C-415/93 • [1995] ECR I-4921

AI Summary:

AG Lenz argued that the transfer system constituted a restriction on the free movement of workers that could not be justified by sporting interests alone. The opinion laid the groundwork for the Court's landmark decision on sports law and EU workers' rights.

View Full Document

Copy Citation

Save

Confidence: 91%

Quick Tools

Citation Generator

Citation Style

OSCOLA

Copy Citation

Related Cases

Schrems II

Case C-311/18

Quick Tools

Citation Generator

Citation Style

OSCOLA

Copy Citation

Related Cases

Schrems II

Case C-311/18

Google Spain

Case C-131/12

Digital Rights Ireland

Cases C-293/12 & C-594/12

Recent Searches

free movement

Figure 59. The interface of the deployed AI Legal Research Assistant.

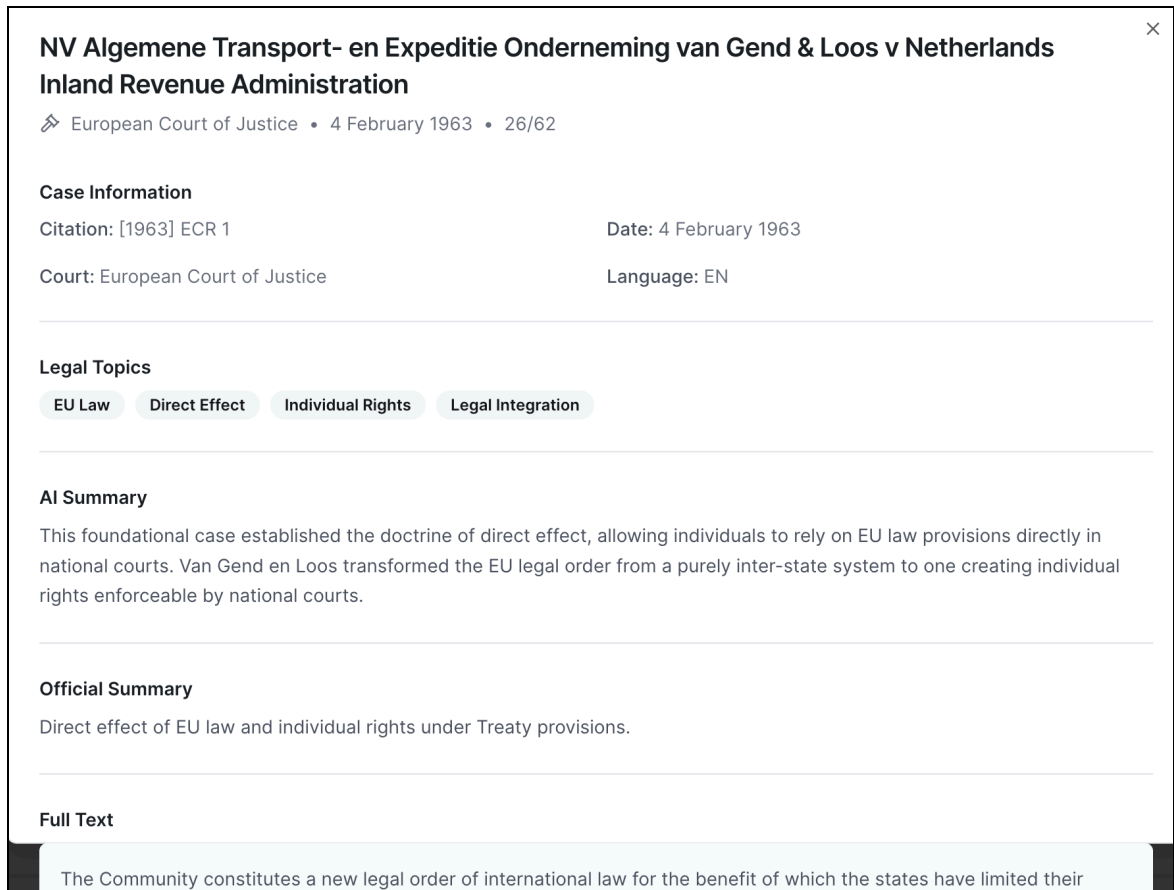


Figure 60. Pop-up window with AI summary, official summary and full official text of the judgment.

4.5. User Journey of Persona Based on Final Prototype

In this section, a comparative user journey of a legal professional interacting with the legal databases is presented. The goal is to illustrate how legal practitioners currently navigate the process of searching, evaluating, and using case law, and to highlight the key usability challenges they encounter.

Table 4 demonstrates typical pain points such as fragmented search, low discoverability of relevant cases, cognitive overload during evaluation, and the absence of personalised or contextual support of a legal adviser. The proposed AI-powered tool integrated into the same workflow shows how each pain point can be addressed through semantic search, automated summarisation, another approach to the filtering, and improved information structuring. This helps to reduce searching time, lower cognitive effort and enhance the user's ability to

understand judicial reasoning. Figure 62 represents the emotional arc of the user's journey after implementing the final prototype of an AI tool on a day-to-day work.

Stage	Pain Points	AI-Assisted Solutions	Expected Impact
1. Problem Recognition	Doesn't always remember the exact names of cases or article numbers.	Natural-Language Interface - the ability to "ask a question like a colleague lawyer"	Accelerating the start of research, reducing the cognitive load when formulating a question
2. Information Search	Complex filter structure, limited contextual search.	Semantic Search Engine - search by meaning, not keywords. AI Filter Suggestions - the system offers filters by Court, date, language, and relevance.	Improved search accuracy, reduced irrelevant results, more natural interaction.
3. Evaluation of Alternatives	There are no short summaries; the texts of judgments are long.	Automated summaries (1-2 paragraphs) highlighting key facts and legal conclusions.	Saving time when evaluating cases, improving understanding of the context and structure of the decision.
4. Decision	There is no "related cases" function, or referral links to the previous judgments, it is difficult to return to a previous search.	Related Cases Finder - AI recommendations for similar cases. Citation Generator - automatic formatting of citations in the required style.	More efficient work with results, creating ready-made citations and selections for reports or memoranda.
5. Follow-up	Irritation, cognitive overload, low satisfaction.	Learning Profile - remembers search history and offers personalized recommendations.	Increased satisfaction, adaptive interface, sense of control over the process.

Table 4. The Ideal Persona's Journey with Final Prototype of AI Tool.

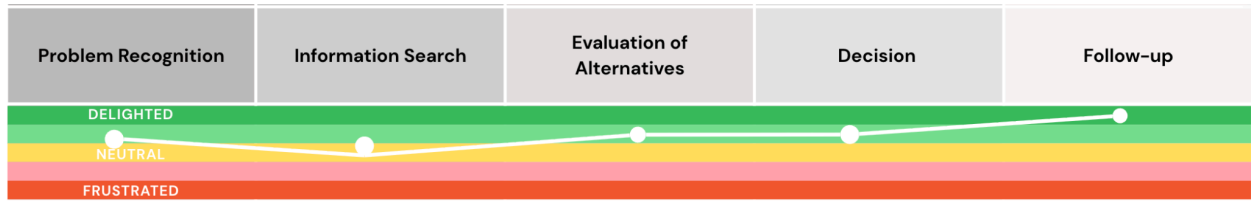


Figure 62. Emotional Arc of the Ideal Persona while Using the Final Prototype of AI Tool.

Chapter 5. User Evaluation

To evaluate the prototype's effectiveness, I conducted a user study involving 6 legal professionals with varied backgrounds in European and international law. Participants were invited to use the assistant in realistic research scenarios, such as identifying relevant cases on data protection within the last five years or comparing ECJ and ECHR jurisprudence on freedom of expression. The study followed a think-aloud protocol [20], where participants verbalised their reasoning, expectations, and frustrations as they navigated the interface. This approach allowed me to capture not only the functional adequacy of the tool but also its impact on the participants' cognitive engagement with case-law.

5.1. Description of the User Study

5.1.1. Objective

This user study was to conduct a preliminary evaluation of interaction experience with the AI-based prototype developed to help in navigation through the case law of the CJEU and the ECtHR. The study focused on user perception, usability, and the perceived usefulness of the prototype, considering the principles of Legal Design and Human-Computer Interaction.

5.1.2. User study goals

The goal of this user study was to understand the following based on the research question RQ3 of the thesis:

1. How intuitive and user-friendly is the prototype?
2. Can the tool effectively summarize and structure complex legal materials?
3. Is the tool perceived as more helpful for navigating case law than traditional platforms such as EUR-Lex and Curia?

5.1.3. Ethical Considerations

. Participation in the study was entirely voluntary. All participants were informed in advance about the purpose of the research, the nature of the prototype, and the approximate duration of the session. Each participant provided informed consent before taking part in the study. To ensure confidentiality, no personal identifiers were collected, and participants were referred to only by anonymised codes in all notes and analyses. The data gathered during the sessions – such as screen recordings, think-aloud transcripts, and written feedback – were used exclusively for academic research purposes and stored securely. Participants were free to withdraw from the study at any time without any consequence or need to provide justification.

The evaluation focused solely on user interaction with publicly available legal materials.

5.1.4. Participants

The study involved 6 volunteer participants, including:

- 2 Legal practitioners (U1LP is the experienced lawyer, legal adviser in WTO, age 35, and U2LP is the experienced lawyer in business consultancy, age 43),
- 2 Researchers in EU law (U1R is the researcher with Master diploma in EU Law, age 32, and U2R with PhD in International Law, age 40),
- 2 Non-legal users with an interest in migration-related legal topics (U1NL is IT project manager, age 38, and U2NL is the journalist with experience in research including government bases, age 42).

All participants were recruited from my personal and professional network. This approach was chosen due to time constraints and with the idea to build trust and rapport with participants. Also, this group introduced a potential bias, but it provided access to motivated participants with relevant expertise for early-stage usability testing. Both Legal practitioners (U1LP and U2LP), as well as Researchers in EU law (U1R and U2R) reported in the questionnaire that they work on a day-to-day basis with legal databases such as EUR-Lex, Curia, or HUDOC.

5.1.5. Tasks and Procedure

Participants were asked to perform three tasks using the prototype:

1. Retrieve information about the migrant rights in the case law of the ECJ.
2. Navigate to ECJ case law related to Article 39 TFEU.
3. Compare the summary generated by the prototype with the original judgment.

The prototype was assessed according to:

- **Usability** (ease of interaction) by using the questionnaire
- **Efficiency** (speed of access to relevant case law)
- **Clarity** (how well the user understood the content)
- **Satisfaction** (general user feedback)

After the user study was conducted the users completed post-task questionnaire:

1. **Background questionnaire (Questions 1-3):** Participants filled out a short survey about their professional experience, familiarity with EU law and prior experience with legal databases, such as EUR-Lex, Curia or HUDOC.
2. **Interaction with the prototype (Questions 4-7):** Participants were given access to the Final Prototype designed and built using Replit. They were asked to use the prototype to

find and interpret information from a selected case study (e.g., evaluate the result of finden cases and their relation to migrant workers' rights).

3. Each session lasted 20-30 minutes and was **conducted remotely** via Zoom. Participants were encouraged to think aloud. All of them are busy professionals with very limited time to provide feedback, and I could not provide any compensation of losing their working time, so sessions were short.
4. **Feedback questionnaire (Questions 8-10):** Participants completed 3 questions, one evaluating the clarity of the interface, one quality of the AI-generated summaries, and one overall usefulness of the tool. They could also leave open comments.

Both questionnaires included Likert-scale questions and open-ended responses. The full questionnaire is included in **Appendix 1**.

5.1.6. Tools

- The prototype developed was hosted on Replit, using backend logic via Pipedream and OpenAI GPT-5.
- The user study was distributed in a digital questionnaire format using Google Forms. Notes taken as well.
- Data collection was fully anonymous, and no personal information was stored.

5.1.7. Data Analysis

- Quantitative data (Likert-scale responses) were aggregated and visualized in charts and tables at Google Forms.
- Qualitative data (open responses) were analyzed using thematic coding to identify common feedback patterns.

5.2. Results of the User Study

The preliminary user study provided valuable insights into both the strengths and weaknesses of the AI-based prototype.

5.2.1. Quantitative results of the User Study

To complement the qualitative feedback, a short questionnaire with Likert-scale questions (4-7) was distributed among the six participants following their testing of the AI prototype (Annex I). The goal was to quantify their perception of usability, accuracy, clarity, and perceived usefulness compared to existing case law databases such as *EUR-Lex* and *Curia* primary and HUDOC as well.

Question Topic	Notes from Think Aloud	Mean	SD
----------------	------------------------	------	----

Usability and Interaction Flow of the Interface (Question 4)	“The navigation and layout of the tool were intuitive.”	3.8	0.7
Clarity of AI Summaries (Question 5)	“Summaries were clear and easy to follow.”	4.1	0.6
Usefulness for the Legal Research (Question 6)	“The tool improves accessibility to case law.”	4.3	0.5
Reliability (Question 7)	“The tool provided trustworthy legal references, but terminological inaccuracies still occurs.”	3.0	1.0

Table 5. Quantitative results.

Participants recognized the potential of the tool to improve accessibility and readability of CJEU and ECHR case law, reflected in the high scores for *Usefulness* (M = 4.3) and *Clarity* (M = 4.1). However, *Content Reliability* (M = 3.0) received lower scores, indicating that the prototype still requires technical refinement to ensure trustworthy and comprehensive results.

Participants consistently found that the interface offered a clearer structure and better readability than existing databases, even though the search precision was sometimes inconsistent. The right-side panel, for example, was seen as visually dominant but functionally underdeveloped – particularly its “Citations” feature, which some users found irrelevant to their role. That was noted by the think aloud method.

Overall, the Likert-scale findings validate that the prototype achieved high perceived clarity and accessibility, key metrics for legal design evaluation. However, the accuracy gap between user expectations and system performance remains the principal barrier to real-world adoption. These results will guide the next iteration of design improvements, particularly regarding filter precision, contextual links, and terminological reliability.

5.2.2. Qualitative Results of the User Study

The qualitative analysis, based on the think aloud method and direct observation, offered important insights into the strengths and limitations of the prototype.

Overall, participants recognized its potential to make the case law of the CJEU and the ECtHR more accessible and comprehensible, particularly for non-specialist audiences. However,

the interviews revealed several areas for improvement in terms of usability, content structure, and contextual accuracy.

The legal practitioner (U1LP) noted that the right-side panel did not fully reflect the functions most relevant to users, as its most prominent feature – “citations” – was not essential for all audiences. Both U1LP, U2LP and U1R highlighted the need to refine filters and clearly distinguish between types of legal acts, such as Advocate General opinions, judgments, and decisions at different instances. They stressed that such differentiation is crucial for maintaining legal precision and ensuring users do not conflate distinct procedural stages. Additionally, both interviewees underlined the importance of improving search adequacy and accuracy, observing that the tool occasionally produced incomplete or inconsistent results.

Titles Inconsistency: A recurring comment from LP concerned the inconsistency in how case titles were displayed. Short case names sometimes appeared only in the right panel and not in the main list of search results, which created confusion about whether the system had retrieved all relevant cases. The LP also suggested that the tool should include direct references to legal provisions, indicating which EU secondary law instruments (such as directives or regulations) were affected by the decision, and, where relevant, which national laws were influenced or modified as a result of CJEU jurisprudence. Both LP and R agreed that such contextual layers would significantly enhance the interpretive value of the tool, especially for professional users.

Hallucinations: Accuracy of generated summaries was another issue raised by both interviewees. They observed that hallucinations and terminological inaccuracies could still occur in the AI-generated summaries, potentially leading to misleading interpretations. While they acknowledged the pedagogical usefulness of such outputs for study and exploration, they emphasized that this level of precision would not suffice for professional legal counselling.

Despite these challenges, participants found several features highly effective. The “recent searches” panel was described by LP as “a very good and necessary feature”, highlighting its role in supporting continuity and efficiency during research sessions. Both LP and R also appreciated the clarity of the overall interface compared to EUR-Lex and Curia, describing it as less cluttered and more visually intuitive.

Finally, interview participants expressed optimism about the prototype’s broader potential. They perceived it as a valuable educational and exploratory instrument that could bridge the gap between complex jurisprudence and user-friendly design. As LP noted, while the system still needs refinement to meet professional standards, its structure demonstrates how

legal design and AI tools can work together to democratize access to justice and legal knowledge.

While participants recognized the potential of the tool in making the CJEU and the ECtHR case law more accessible, they also highlighted several areas requiring improvement. Here are their observations, summarized:

1. Usability and Interaction Flow

- Some users (U1LP and U1NL) struggled with the **right-side panel**, noting that its most prominent function (“citations”) was not relevant for all audiences. U1NL suggested more context-sensitive or customizable panel features.
- The **visibility of search results** was considered by U2NL inconsistent: short case names appeared in the right panel but were missing in the main results list, which created confusion.
- On the positive side, the **“recent searches” panel** was widely appreciated as a useful feature supporting efficiency and navigation by U1LP.

2. Content Accuracy and Relevance

- Concerns were raised regarding the **adequacy and accuracy of search results**. All users pointed out that the prototype sometimes produced incomplete or inaccurate matches.
- In generated summaries, **terminological precision** was not always reliable, and users (U1R and U2R, as well as U1LP and U2LP) noted a risk of **hallucinations** (fabricated references or concepts).
- Participants (U1LP and U2LP) emphasized the importance of clearly distinguishing between different **types of legal acts** (e.g., Advocate General opinions vs. Court judgments), and suggested adding **filters** to separate them.

3. Legal Contextualization

- Users (U2LP and U2NL) expressed interest in having direct **references to affected provisions of EU primary law** as well as **secondary EU legislation** (e.g., directives, regulations) discussed in the judgments.
- Another recommendation by U2LP was to include **indications of relevant national laws** that were modified or influenced by CJEU jurisprudence.

4. Strengths Identified

- Compared to traditional platforms (EUR-Lex, curia.eu), the prototype was perceived as **clearer and easier to navigate**, particularly in presenting structured summaries by all users.

- The ability to access **recent searches** and view results in a more user-friendly interface was considered a step forward from existing tools by U1LP.

5. Suggestions for Improvement

- Refine **filters** to distinguish between case law layers (first instance, appeals, AG opinions) by U1R and U2R, U1LP and U2LP.
- Improve **search adequacy and precision**, reducing irrelevant or incomplete outputs by all users.
- Provide explicit **links to legal provisions** and secondary/national acts affected by U2LP and U2NL.
- Enhance **summary reliability**, especially regarding terminology by U2LP.
- Reconsider **interface hierarchy** (e.g., de-emphasize “citations” if not relevant to all users) by U2LP, U1R and U2R.

Chapter 6. Discussion

The current section focuses on what users' paths mean in the broader context of legal design and AI-assisted legal research. The discussion draws connections between user experience, cognitive processes, and the legal reasoning practices that support the interpretation of case law. It also revisits the initial research questions to demonstrate how this study contributes to the understanding of engagement of legal professionals and researchers with AI tools in practice.

6.1. RQ1: How does the author's experience using traditional EU case law research tools (EUR-Lex, CURIA, etc.) reveal challenges and opportunities for improving legal research workflows?

The experience with EUR-Lex, Curia, and HUDOC, as well as other traditional legal databases demonstrated that legal research is influenced by the availability of information, and current research is focused mostly on the path through which that information is accessed. The main challenge is that traditional tools rely on complex search logic and document-heavy interfaces that require the user to manually filter and validate large volumes of case law before legal analysis can begin [11]. Wide searches offer completeness but quickly become overwhelming; narrow filters risk excluding important cases. Moreover, in some cases the filter system prescribes that the user "should know the answer first", e.g. knows the particular terminology of facts of the case – this is the second challenge.

Traditional legal databases place a considerable cognitive burden on the legal researcher, who must constantly navigate between search results, e.g. judgments of the international court, and substantive reasoning in order to reconstruct the legal relevance of each funded case. And Sweller's cognitive load theory support this – such environments impose a high cognitive load: the user must make substantial effort simply navigating the system before meaningful legal reasoning can begin [7].

The autoethnographic observations confirm this as well: a large portion of the workflow is consumed by defining search parameters and manually validating each document's relevance [41]. It also mirrors communication challenges described in visual law and legal UX research, where legal interfaces often reproduce expert-centric assumptions that burden non-expert or cross-disciplinary users. These challenges lead to the opportunities for improving legal research workflows.

The legal design and legal UX literature consistently identifies excessive length, structural complexity, and linear presentation of legal texts as central barriers to effective access to legal

information, particularly in judicial contexts [47], [48], [74]. These works argue that legal systems frequently fail users not because of doctrinal complexity per se, but because information is organised around institutional and expert-centric logic rather than user needs and interpretive tasks [54], [78]. In response, the literature typically proposes two main strategies: the use of visualisation techniques or AI-tools as an additional support, mostly textual. While visualisation has proven effective in areas such as contracts, procedural guidance, and rights communication [74], its applicability to judicial decisions is limited, as judgments must preserve structure of a judicial document and precise citation [54]. Consequently, visual abstraction risks oversimplifying legal reasoning or disrupting its normative coherence. Within this constraint, AI-assisted summarisation is a more viable design intervention, as it allows reduction of cognitive load while maintaining links to primary sources. This approach directly informs the design choices explored in RQ2 and the development of the prototype evaluated in this study.

Recent studies show that AI-tools for legal research can produce accurate summaries and can assist both expert and non-expert audiences [40], [50]. AI-driven summaries – especially when linked to specific sections of judgments – provide both efficiency and transparency. This aligns with empirical findings that augmented search tools reduce search friction and increase accuracy in legal information retrieval [50], especially when previews and summaries significantly improve comprehension and navigation in complex legal materials [51]. The fact that international courts already publish human-prepared press summaries means that hybrid human-AI workflows are at least feasible in current practice. Consistent with the literature, the autoethnography experience suggests that access to case law becomes more effective when the researcher has access to the essence of case law early in the workflow: identifying the core reasoning and the contextual background without being forced to read entire judgments line by line.

6.2. RQ2: How can insights from the author’s research experience be translated into the design of an AI-assisted EU case law research prototype?

The insights received through practice-based research directly informed the conceptual and functional design of the AI-assisted prototype. Consistent with HCI and legal design principles, the design process followed an iterative, human-centred logic: issues encountered during real research tasks were transformed into actionable design requirements [3], [8].

First, the difficulty navigating large volumes of documents underscored the need for integrated summarisation as a core feature rather than an optional add-on. In line with information design literature, early access to concise, structured, and visually clear legal

information is an important tool for drawing attention to key information [16], as a result, it reduces extraneous cognitive load and supports more efficient interpretation. The final prototype therefore focuses on short and legally accurate summaries of judgments, reducing the time required to assess relevance and enabling earlier, more informed decision-making. This transforms the workflow from a process dominated by exhaustive, sequential reading to one centred on fast, informed triage and deeper engagement only with documents that matter [39].

Second, the challenges associated with finding and comparing cases across court systems motivated the inclusion of a unified interface that brings the CJEU and the ECtHR case law together. This reflects the reality of contemporary legal analysis, in which cross-jurisdictional reasoning is increasingly necessary but insufficiently supported by the existing websites of international courts. The attempt to integrate the two databases in practice demonstrated how AI-driven harmonisation – through common filters, categories, and AI summaries – can simplify comparative research that would otherwise require navigating separate platforms [34].

Third, the cognitive load experienced during the traditional workflow led to the decision to prioritise minimalistic design. By reducing the amount of textual information on the screen and presenting key procedural and substantive components through clean filtering and categorisation, the prototype helps the user focus on interpretation rather than navigation [19]. The evaluation indicated that this approach supports different types of users – legal practitioners, academic researchers, and non-legal users – highlighting the importance of flexibility and principles of legal design [2].

In sum, the autoethnographic insights were translated into a prototype that does not merely automate existing tasks but re-imagines the workflow. It brings together search, evaluation, and comprehension into a single integrated interaction model, demonstrating how AI and legal design can be used to bridge the gap between the availability of case law and its practical usability [2], [23]. Recent studies, such as iCourts Working Paper of Johan Lindholm and Henrik Palmer Olsen, show that AI tools have the potential to streamline regulatory implementation, enhance legal oversight and compliance across jurisdictions [69].

6.3. RQ3: How do legal professionals interact with and perceive the AI-assisted EU case law research prototype in relation to their existing research practices?

Our findings show that legal professionals who tested the prototype approached the AI-based legal tool with a dual mindset: they were both curious and cautious. On one hand,

they appreciate the efficiency gains from structured summaries, quick searches, and visual clarity – features that make the prototype more usable than traditional platforms such as EUR-Lex, Curia or HUDOC. On the other hand, their interaction remains highly evaluative: they continuously cross-check the AI's outputs against authoritative sources, maintaining the interpretive rigor typical of legal reasoning.

These issues reflect the broader cognitive tension identified in legal design literature - legal professionals require transparency in how AI constructs its summaries and recommendations [52], [69]. This finding aligns with theories of human-centered AI, which emphasize that usability in contexts, especially legal, is inseparable from trust – the ability of users to understand how a conclusion is reached [54].

The results indicate that legal design principles – particularly those emphasizing clarity, hierarchy, and transparency – can directly enhance the usability and interpretability of AI-driven legal interfaces [64]. The participants' feedback supports the application of information design principles (e.g., better visual hierarchy, modular panels, role-based customization) and content design strategies (e.g., consistent terminology, contextual filters distinguishing types of acts).

Moreover, trust comes from clarity of context: legal professionals expressed greater confidence in outputs that clearly referenced the underlying legal sources, including EU primary and secondary law and affected national legislation. Recent studies also underline that trustworthiness is crucial and suggest using RAG system for such AI tools [69]. In sum, the research supports the view that the integration of legal design can transform AI tools from simple assistants into collaborators, supporting the dialogical rather than deterministic model of human-AI interaction [74].

6.4. Moving Towards Broader Implications

Across the three research questions, this study contributes an understanding of how EU case-law research workflows shape the realistic role and limitations of AI assistance. First, the autoethnographic analysis of traditional legal research tools (RQ1) shows that interface of these tools is largely text-centric rather than task-centric [47][48][70]. These findings refine existing descriptions of legal information search [67], showing that the difficulty faced by legal practitioners is not simply one of search inefficiency, but of a structural gap between the needs of doctrinal reasoning and the opportunities provided by current EU platforms. The design of the AI-assisted prototype (RQ2) demonstrates how human-AI collaboration can be re-configured to address the needs of legal researcher. While previous work on legal summaries or topic classification [50][51][68] primarily focuses on model performance, this study shows that

workflow alignment equally determines perceived usefulness. The prototype's emphasis on traceability, multilingual function, and easy-to-navigate explanations addresses concerns raised in debates about responsible innovation and value-based design [62][79].

Finally, a user study among lawyers (RQ3) reveals how legal practitioners build relationships of trust, authority, and responsibility when interacting with AI tools. Their responses partly contradict the optimistic visions of AI-enabled efficiency presented in EU institutional strategies [73] and in legal technology industry [49]. Participants did not primarily seek automated reasoning; instead, they requested support in contextualizing case relevance. These findings are consistent with criticisms that warn against “automation bias” and the risk of smoothing over legal nuances [52][61][66]. At the same time, the study extends usability research in legal contexts [75], [76] by showing that usability in law is inseparable from epistemic usability – whether a tool supports the interpretative commitments of the legal method.

Taken together, this results in further broader implications. This study supports user-centered design approaches [74][78] and emphasize that cultural conservatism, noted in the literature [63][64], remains a greater obstacle than technological capabilities. These findings highlight that future tools must combine advances in LLM with design methods that consider accessibility [55] and the realities of multilingual legal systems [56]. For technology developers, this means creating systems that prioritize clarity over automation. For researchers, this work points to the need for transdisciplinary approaches that integrate HCI, legal methods, and governance perspectives [63][79], particularly in the context of evolving AI regulatory frameworks [82][83].

Any exploration of AI-based legal information systems must also be situated within the emerging European regulatory framework. The EU AI Act establishes principles of transparency, accountability, and reliability for AI systems, particularly in high-risk domains such as law [82], [83]. Legal professionals increasingly acknowledge that AI-generated outputs cannot be accepted uncritically; they must be cross-checked against primary sources, evaluated for doctrinal consistency, and interpreted within the appropriate jurisdictional and contextual boundaries [61], [66]. Even advanced commercial tools situated on market, which recently introduced case-law search functionalities, are not yet capable of supporting legal reasoning itself.

6.5. Limitations and Future Work

When discussing digital technologies in law and justice, it is essential to acknowledge that judges and legal professionals remain the primary user groups for whom these tools are typically designed. At the same time, there are quite a few examples of testing of AI models by legal professionals.

Conrad and Zeleznikow, in a structured review of AI & Law publications, found that usability testing appeared in only 7% of evaluated applications [64]. Such findings indicate that the discipline traditionally privileged computational performance over human-centered evaluation. The evaluation of such systems has often relied on quantitative benchmarks, with human users included only sporadically. Recent studies suggest a shift toward greater user involvement. An informal review of articles published in 2023 shows that at least 30% of AI & Law applications now include some form of evaluation with human participants, ranging from expert feedback to assessments conducted in real-world settings with practitioners [63]. Nevertheless, the number of AI & Law systems that have transitioned from research prototypes into practical applications remains small [63]. Working with stakeholders from practice is essential to understand the real consequences of AI tools for judicial reasoning, organizational practices, and societal trust.

This gap highlights a broader challenge noted in the literature on digital justice and the rule of law: technological efficiency must be balanced with transparency, accountability, and accessibility – core elements of the principle of open justice [52], [53], [54], [57]. As initiatives such as user-centred interfaces for EU law [70], or the CJEU’s AI Strategy [73] demonstrate, improving usability is essential not only for professionals but also for the wider public seeking meaningful access to legal information. AI-enabled legal interfaces should therefore be designed to support clarity and user comprehension, in line with broader design-for-law guidelines [74], [78], [79].

Preliminary findings of this research were presented at *the International Conference on Legal Knowledge and Information Systems (JURIX 2026)*, a leading peer-reviewed venue in the field of AI and Law, at the workshop on the AI for Access to Justice, Dispute Resolution, and Data Access.

The research presented as an early validation of the research problem and methodological approach, and as the study within ongoing debates on AI-assisted legal research, legal design, and human-AI interaction in judicial contexts. At this stage, the research was explicitly presented as exploratory and descriptive, reflecting the pilot nature of the study and the iterative logic of design-oriented HCI research.

Feedback received during the conference discussions informed the refinement of the research questions, highlighted the need for broader empirical engagement with legal professionals, and helped identify key directions for future data collection and prototype development.

Taking into consideration these results, future research could continue the current study in several directions. First, it could be a basis for a larger-scale mixed-methods studies, including think-aloud protocols, interaction logs, microtask analysis, and validated usability metrics such as the SUS [81], to obtain more robust data on user behavior and system performance.

Second, this research could lead to the implementation of long-term testing to observe how AI-based interfaces integrate into real workflows of legal professionals over time. This direction consistent with the third-wave HCI focus on situated practice [65].

Third, it could help to develop subsequent iterations using storyboards, wireframes, and low/medium-detail prototypes and evaluate them with technology experts. Features such as structured summaries, reasoning maps, argument visualization, and transparent search paths should be explored further in judicial contexts.

Following these directions, future research could move beyond exploratory evaluation and toward a more rigorous, theoretically informed, and practice-based understanding of how AI-enabled interfaces can improve the accessibility, usability, and interpretability of international case law.

Conclusion

This thesis examined how AI tools can support research in case law of international courts, situating the issue within the broader field of human-computer interaction (HCI). HCI reminds us that technologies are not neutral artifacts: they mediate behavior, shape interpretive practices, and influence what users pay attention to and how they make sense of information [65]. In the legal field, where audiences include judges, experts, civil servants, academics, legal practitioners, civil society, and sometimes the general public, this understanding is particularly important. Therefore, the development of AI-enabled legal information tools requires a balance between precision and clarity, transparency and inclusiveness.

So, this master's thesis originated from a designer-researcher perspective within international adjudication, with the hypothesis that barriers to accessing case law are as much about communication design as they are about doctrine or data. Working through legal design frames shifted focus from “better search” to “better journeys”: start from user goals, then layered machine-assisted summaries with citations. The literature confirmed this: access-to-justice research emphasises institutional design and user participation. At the same time, evaluating LLMs on legal tasks (using ChatGPT) allowed me to adjust expectations and identify the control mechanisms I propose (information provenance, error disclosure). RQ1 thus revealed that the main problems are not merely technical but deeply tied to design choices that shape how legal information can be understood, compared, and applied.

The challenges identified in RQ1 lead to the development of a prototype focused on “improving interaction” rather than simply “improving search.” Drawing on legal design principles [74], [78], HCI concepts [65], and value-based design approaches [62], the prototype integrated structured summaries and document linking features to reduce the interpretation load. Working through iterative design phases – storyboarding, low-fidelity sketches, and controlled testing – demonstrated that AI can effectively support tasks such as rapid orientation, identifying key issues, and navigating relevant regulations. However, it also revealed that the results obtained using LLM require careful design, provenance control, and error handling mechanisms, consistent with emerging research on LLM in law [59], [68], [80].

Feedback from six user study participants confirmed both the promise and limitations of AI assistance in legal research. Participants praised the time savings, clarity-enhancing features, and the ability to understand a new case more quickly. However, they consistently resisted emphasizing the need for review and examination of primary sources. This contradiction reflects trends observed in empirical studies of AI implementation in jurisprudence [63] [69]

and confirms that AI currently accelerates the performance of certain tasks but does not replace human. Thus, user research validates the design direction while simultaneously mitigating expectations regarding automation: there is still need for review that shifts, rather than eliminates, cognitive effort.

The key conclusion is that AI can significantly assist in the study of EU case law, but only if integrated into design strategies that prioritize user goals and still preserve human interpretive role. AI is changing the form of legal research, not its normative foundations. For the foreseeable future, human expertise will remain an indispensable tool for establishing connections between facts, doctrine, and institutional logic in a manner consistent with the standards of legal reasoning.

This thesis makes several contributions to the fields of legal informatics, HCI, and legal design. It provides the autoethnographic approach of the working processes of researching case law of international courts – something rarely documented in the AI and law literature, so it makes empirical contribution. Research formulates design principles for AI-assisted legal interfaces, drawing from principles of legal design and better access to justice. These principles offer actionable guidance for developers, courts, and policymakers. This thesis developed and evaluated a prototype that links structured AI-powered summaries and document search. In a field where few prototypes undergo real-world user testing, this represents a significant methodological contribution. The user study adds new insights into how legal professionals understand, trust, and verify AI-generated legal information. It highlights the verification burden and describes how AI shifts cognitive labour rather than replacing it.

The findings of the research offer important recommendations for legal technology developers on design of their products based on hybrid workflows, for law firms and government agencies to develop validation protocols for AI-enabled research, for academic and judicial training institutions to teach AI literacy, critical approach, and human-AI collaboration, for policymakers to align design decisions with the goals of the AI Act [82, 83], focusing on reliability, explainability, and accountability.

Ultimately, this research argues that improving access to international case law requires more than just technological advancements, it requires a human-centered rethinking of how legal information is communicated, processed, and understood. Artificial intelligence, based on the real needs of users, can help bridge the gap between complex legal documents and its interpretation. However, the human factor remains at the heart of legal interpretation. The future lies not in replacing human reasoning, but in developing tools that make it clearer, more informed, and more accessible.

References

- [1] Eppler, M. J., & Burkhard, R. A. (2007). Visual representations in knowledge management: Framework and cases. *Journal of Knowledge Management*, 11(4), 112-122. <https://doi.org/10.1108/13673270710762756>
- [2] Hagan, M. (n.d.). *Law by design*. <https://lawbydesign.co> (accessed August 12, 2025).
- [3] Hagan, M. (2020). Legal design as a thing: A theory of change and a set of methods to craft a human-centered legal system. *Design Issues*, 36(3), 3-15. https://doi.org/10.1162/desi_a_00600
- [4] Metin, E., & Haapio, H. (2025). *Breaking the complexity curse: The legal design revolution*. Tallinn University of Technology; University of Vaasa; Lexpert Ltd. https://www.digitallawcenter.ch/sites/default/files/inline-files/ebru-metin-and-helena-haapio-breaking-the-complexity-curse-13-may-2025-handout_1.pdf
- [5] Papagiannenas, S. (n.d.). *Smart courts, smart justice? Automation and digitisation of courts in China*. <https://hdl.handle.net/1887/4039574> (accessed August 12, 2025).
- [6] United Nations Development Programme. (2022). *E-justice: Digital transformation to close the justice gap*. <https://www.undp.org/sites/g/files/zskgke326/files/2022-06/E%20justice-Report%2005.pdf>
- [7] Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12 (2), 257-285. [https://doi.org/10.1016/0364-0213\(88\)90023-7](https://doi.org/10.1016/0364-0213(88)90023-7)
- [8] Haapio, H., & Passera, S. (2013). Visual law: What lawyers need to learn from information designers. *Communicating Law*, 4(2). <https://blog.law.cornell.edu/voxpath/2013/05/15/visual-law-what-lawyers-need-to-learn-from-information-designers/>
- [9] Katz, D. M., Bommarito, M. J., & Blackman, J. (2014). Predicting the behavior of the Supreme Court of the United States. *PLoS ONE*, 9(4). <https://doi.org/10.1371/journal.pone.0091549>
- [10] Passera, S. (2017). Beyond the wall of text: How information design can make contracts user-friendly. *The Design Journal*, 20(1). https://link.springer.com/chapter/10.1007/978-3-319-20898-5_33
- [11] Verheij, B. (2020). Artificial intelligence as law. *Artificial Intelligence and Law*, 28, 181-206. <https://doi.org/10.1007/s10506-020-09266-0>
- [12] Walton, D. (2007). Visualization tools, argumentation schemes and expert opinion evidence in law. *Law, Probability and Risk*, 6(1-4), 119-140. <https://doi.org/10.1093/lpr/mgm008>
- [13] Hagan, M. (2019). The justice is in the details: Evaluating different self-help designs for legal capability in traffic court. *Communicating Law*, 7(1). <https://ojs.law.cornell.edu/index.php/joal/article/download/97/94/320>
- [14] Doherty, M. (2021). The relationship between legal and design cultures: Tension and resolution. In M. Corrales, H. Haapio, M. Hagan, & M. Doherty (Eds.), *Legal design: Integrating business, design, & legal thinking with technology*. Edward Elgar Publishing.
- [15] De Souza, S. P. (2022). The spread of legal tech solutionism and the need for legal design. *European Journal of Risk Regulation*, 13(3), 373-388. <https://doi.org/10.1017/err.2022.4>

- [16] Larsen, J. (2021). Using visuals to better communicate logic in legal reasoning. *Legal Writing*, 25, 285-301. <https://www.legalwritingjournal.org/article/24787-using-visuals-to-better-communicate-logic-in-legal-reasoning>
- [17] Craig, P., & de Búrca, G. (2020). *EU law: Text, cases, and materials* (7th ed.). Oxford University Press.
- [18] Lenaerts, K., & Gutiérrez-Fons, J. A. (2013). The role of the ECJ in EU law development: From treaty interpretation to rule of law. *Yearbook of European Law*, 32(1), 3-27.
- [19] Norman, D. A. (2013). *The design of everyday things* (Rev. & expanded ed.). Basic Books.
- [20] Ericsson, K. A., & Simon, H. A. (1993). *Protocol analysis: Verbal reports as data*. MIT Press.
- [21] Koulu, R., & Pohle, J. (2024). Legal design patterns: New tools for analysis and translations between law and technology. *DISO*, 3, 22.
- [22] Compagnucci, M., Fenwick, M., Haapio, H., & Vermeulen, E. (2022). Integrating law, technology, and design: Teaching data protection and privacy law in a digital age. *International Data Privacy Law*, 12(3), 239-252.
- [23] Santuber, J., Krawietz, L., Owoyele, B., & Edelman, J. (2019). A framework theory of legal design for the emergence of change in the digital legal society. *Rechtstheorie*, 50, 41-57.
- [24] Hagan, M. (2022). *How do you design a user-friendly court form?* <https://medium.com/legal-design-and-innovation/how-do-you-design-a-user-friendly-court-form-ab241ed1e134> (accessed August 12, 2025).
- [25] Toivonen, N., Ketola, A., & Haapio, H. (2025). Transforming norms: Legal design, plain language and AI for personalized law. *Journal of Ethics and Legal Technologies*, 7(1).
- [26] Attuo, H., Haapio, H., & Nuottila, J. (2024). Contracts rethought and redesigned: A new era with AI. *International Journal of Commerce and Contracting*, 8(1-2), 7-34.
- [27] Becher, S., & Alarie, B. (2025). LexOptima: The promise of AI-enabled legal systems. *University of Toronto Law Journal*, 75(1), 73-121.
- [28] Ben-Shahar, O., & Porat, A. (2021). *Personalized law: Different rules for different people*. Oxford University Press.
- [29] Doherty, M. (2020). Comprehensibility as a rule of law requirement: The role of legal design in delivering access to law. *Journal of Open Access to Law*, 8(1), 1-11.
- [30] Doherty, M., Corrales Compagnucci, M., Haapio, H., & Hagan, M. (2021). A new attitude to law's empire: The potentialities of legal design. In M. Corrales, H. Haapio, M. Hagan, & M. Doherty (Eds.), *Legal design: Integrating business, design, & legal thinking with technology*. Edward Elgar Publishing.
- [31] Bernal Fandiño, M. (2021). Legal design in judicial decisions: Colombian case study. In M. Corrales, H. Haapio, M. Hagan, & M. Doherty (Eds.), *Legal design: Integrating business, design, & legal thinking with technology*. Edward Elgar Publishing.
- [32] Legal Design Alliance. (n.d.). *The legal design manifesto* (Version 2). <https://www.legaldesignalliance.org> (accessed November 14, 2025).
- [33] Toivonen, N., & de Francisco Vela, S. (2024). Exploring the dimensions of participation in legal design. In R. Ducato, A. Strowel, & E. Marique (Eds.), *Design(s) for law*. Ledizioni.

- [34] Šavelka, J., et al. (2023). Can GPT-4 support analysis of textual data in tasks requiring highly specialized domain expertise? *arXiv preprint*. <https://arxiv.org/abs/2306.13906>
- [35] Ashley, K. D. (2017). *Artificial intelligence and legal analytics: New tools for law practice in the digital age*. Cambridge University Press.
- [36] Lindholm, J. (2024). Textual insights: what can computers teach legal scholars about law? *Stockholm IP Law Review*, (2), 25–32. <https://doi.org/10.53292/33313cc8.3f967df2>
- [37] Kim, M.-Y., et al. (2024). Legal information retrieval and entailment using transformer-based approaches. *The Review of Socionetwork Strategies*.
- [38] Deroy, A., Ghosh, K., & Ghosh, S. (2023). How ready are pre-trained abstractive models and LLMs for legal case judgement summarization? *arXiv preprint*. <https://arxiv.org/abs/2306.01248>
- [39] Dal Pont, T., et al. (2023). Legal summarisation through LLMs: The PRODIGIT project. *arXiv e-prints*. <https://arxiv.org/abs/2308.04416>
- [40] Liu, S., et al. (2024). Low-resource court judgment summarization for common law systems. *arXiv preprint*. <https://arxiv.org/abs/2403.04454>
- [41] Autoethnography in human–computer interaction: Theory and practice. <https://www.researchgate.net/publication/326012173> (accessed August 12, 2025).
- [42] Ellis, C., & Bochner, A. (2000). Autoethnography, personal narrative, and personal reflexivity. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 733–768).
- [43] Kaltenhauser, A., Stefanidi, E., & Sching, J. (2024). Playing with perspectives and unveiling the autoethnographic kaleidoscope in HCI. In *Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI'24)*. ACM. <https://doi.org/10.1145/3613904.3642355>
- [44] Lucero, A. (2018). Living without a mobile phone: An autoethnography. In *Proceedings of DIS '18*. <https://doi.org/10.1145/3196709.3196731>
- [45] Jones, S. H., Adams, T. E., & Ellis, C. (Eds.). (2013). *Handbook of autoethnography*. Left Coast Press.
- [46] Ellis, C., Adams, T. E., & Bochner, A. P. (2011). Autoethnography: An overview. *Historical Social Research*, 36(4), 273-290.
- [47] Scott, T. (2022). A good user experience for the legal industry. <https://www.uxmatters.com/mt/archives/2022/02/a-good-user-experience-for-the-legal-industry.php> (accessed August 12, 2025).
- [48] Sharma, N. Why user interface matters in legal tech. <https://www.getwidget.dev/blog/why-user-interface-matters-in-legal-tech> (accessed August 12, 2025).
- [49] Financial Times. Skills to future-proof a legal career. <https://www.ft.com/content/5b00b6b1-96cf-4426-af8b-1411049e9604> (accessed August 12, 2025).

- [50] Ash, E., Kesari, A., Naidu, S., Song, L., & Stambach, D. (2023). Translating legalese: Enhancing public understanding of court opinions with legal summarizers. *arXiv preprint*. <https://arxiv.org/abs/2311.06534>
- [51] Sargeant, H., Izzidien, A., & Steffek, F. (2024). Topic classification of case law using a large language model and a new taxonomy for UK law. *arXiv preprint*. <https://arxiv.org/abs/2405.12910>
- [52] Kouroutakis, A. (2024). Rule of law in the AI era: Addressing accountability and the digital divide. *Discover Artificial Intelligence*, 4, 115. <https://doi.org/10.1007/s44163-024-00191-8>
- [53] van den Hoven, J., et al. (2024). *Democracy in the digital age*. <https://shs.hal.science/halshs-04844505v1> (accessed August 12, 2025).
- [54] Koulu, R. (2024). In search of living law: How should we design for (digital) legal interaction? *DISO*, 3, 31. <https://doi.org/10.1007/s44206-024-00117-y>
- [55] Kakembo, A. A. (2025). Communication barriers in cross-cultural legal situations. *Research Invention Journal of Current Issues in Arts and Management*. <https://doi.org/10.59298/RIJCIAM/2025/423437>
- [56] Sousa Domingues, J. (2017). The multilingual jurisprudence of the Court of Justice and the idea of uniformity in European Union law. *UNIO – EU Law Journal*, 3(2).
- [57] Cappelletti, M., & Garth, B. G. (1978). Access to justice: The newest wave in the worldwide movement to make rights effective. *Buffalo Law Review*, 27, 181-292.
- [58] European Commission, Directorate-General for Translation. (2012). *How to write clearly*. Publications Office of the European Union. <https://doi.org/10.2782/54318>
- [59] Guha, N., et al. (2023). LegalBench: A collaboratively built benchmark for measuring legal reasoning in large language models. <https://doi.org/10.48550/arXiv.2308.11462>
- [60] Dragičević Dičić, R. (2018). Opening of the judicial year of the European Court of Human Rights: Communication strategies. <https://www.echr.coe.int> (accessed August 12, 2025).
- [61] Giampieri, P. (2024). The use of AI in the translation of legal documents: A critical analysis. *trans-kom*, 17(2), 343-358.
- [62] van den Hoven, J. (2013). Value sensitive design and responsible innovation. In R. Owen, M. Heintz, & J. Bessant (Eds.), *Responsible innovation* (pp. 75-83). Wiley.
- [63] Bex, F. (2024). Transdisciplinary research as a way forward in AI & law. *Journal of Cross-Disciplinary Research in Computational Law*, 2(2).
- [64] Conrad, J. G., & Zeleznikow, J. (2015). The role of evaluation in AI and law: Past, present and future. *Artificial Intelligence and Law*, 23(3), 279-301.
- [65] Bødker, S. (2015). Third-wave HCI, 10 years later: Participation and sharing. *Interactions*, 22(5), 24-31.
- [66] Liepiņa, R., Lagioia, F., Lippi, M., Pałka, P., Micklitz, H.-W., & Sartor, G. (2025). Automating legal tasks: LLMs, legal documents, and the AI Act. <https://doi.org/10.1017/9781009492553.029>
- [67] Mogotsi, I. C. (2010). Review of *Introduction to information retrieval*. *Information Retrieval*, 13, 192–195. <https://doi.org/10.1007/s10791-009-9115-y>.

- [68] Deroy, A., Ghosh, K., & Ghosh, S. (2024). Applicability of large language models and generative models for legal case judgement summarization. *Artificial Intelligence and Law*. <https://doi.org/10.1007/s10506-024-09411-z>
- [69] Lindholm, J., & Olsen, H. P. (2025). Designing EurLexGPT: Foundational components for a domain-specific AI for European legislative data. *SSRN*. <https://doi.org/10.2139/ssrn.5470830>
- [70] Codecoda. (n.d.). *Case study: New UI for increased usability and searchability of EU law framework*. <https://codecoda.com> (accessed October 12, 2025).
- [71] *CaseScope: An enhanced search tool for European Court cases*. (2023). In *Proceedings of ASAIL 2023*. <https://ceur-ws.org/Vol-3441/paper13.pdf>
- [72] *Improving the accessibility of EU laws: The Chat-EUR-Lex project*. (2023). In *Proceedings of ASAIL 2023*. <https://ceur-ws.org/Vol-3762/545.pdf>
- [73] Court of Justice of the European Union. (2023). *Artificial intelligence strategy*. <https://curia.europa.eu> (accessed October 12, 2025).
- [74] Raffin, C., Desmares, C., & Brulé Naudet, L. (2022). Law by design: How design can make legal services more usable, useful & engaging. <https://doi.org/10.13140/RG.2.2.26676.12169>
- [75] European Union. *Usability study in the context of the use of the European Legislation Identifier (ELI)*. <https://eur-lex.europa.eu> (accessed October 12, 2025).
- [76] Contini, F. (2014). Searching for maximum feasible simplicity: The case of e-Curia at the Court of Justice of the European Union. In *The circulation of agency in e-justice* (Vol. 13, pp. 217-242). Springer. https://doi.org/10.1007/978-94-007-7525-1_9
- [77] European Court of Human Rights. (2024). *Annual report 2024*. Council of Europe. <https://www.echr.coe.int> (accessed October 12, 2025).
- [78] Michigan Advocacy Program. (2025). *Graphic advocacy project: Strategies for user-informed legal design*. <https://www.lsnatp.org> (accessed October 12, 2025).
- [79] Salo-Lahti, M., & Haapio, H. (2024). Possibility-driven design and responsible use of AI for sustainability. In R. Ducato, A. Strowel, & E. Marique (Eds.), *Design(s) for law* (pp. 205–252). Ledizioni. <https://doi.org/10.5281/zenodo.11221501>
- [80] Đurić, M., Martinec, T., Porobija, M., & Štorga, M. (2023). Designing for legal practitioners: Lessons learned from legal tech development and implementation. In *Proceedings of ICED23*. <https://doi.org/10.1017/pds.2023.138>
- [81] Đurić, M., Martinec, T., Porobija, M., & Štorga, M. (2023). Designing for legal practitioners: Lessons learned from legal tech development and implementation. In *Proceedings of ICED23*. <https://doi.org/10.1017/pds.2023.138>
- [82] European Commission. (2025). *Regulatory framework for AI*. <https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai>
- [83] European Commission. (2025). *Ethics guidelines for trustworthy AI*. <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai>

Appendix 1.

2. How many years of experience do you have in legal research?

- ☐ <1
- ☐ 1–3
- ☐ 4–7
- ☐ 8+

...

3. What tools do you usually use to access case law? (Select all that apply)

- ☐ EUR-Lex
- ☐ Curia.eu
- ☐ HUDOC
- ☐ Google Scholar
- ☐ Westlaw/LexisNexis
- ☐ Other...

Task Feedback - for each task you completed:

4. How easy or difficult was the task overall?

	1	2	3	4	5	
Very difficult	☐	☐	☐	☐	☐	Very easy

5. How confident are you that you completed the task correctly?

	1	2	3	4	5	
Not confident at all	☐	☐	☐	☐	☐	Very confident

6. What challenges did you face during the task?

Long answer text

Post-Study Reflection

7. Please rate the following statements on a scale.

1) I found the interface intuitive

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

2) The AI summaries were clear and helpful

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

3) I would use AI tool in my legal research

1	2	3	4	5
☐	☐	☐	☐	☐



8. What aspects of AI Legal Research did you find most helpful?

Long answer text

9. What would you improve about AI Legal Research?

Long answer text

10. Any additional comments or reflections?

Long answer text

Participant Feedback Form — AI Legal Research User Study

B *I* U  

Thank you for participating in this study! Please take 5–10 minutes to share your feedback.

Email *

Valid email

This form is collecting emails. [Change settings](#)

Background Information

1. Your current role:

- ☐ Practicing lawyer
- ☐ Legal researcher/academic
- ☐ Legal assistant/clerk
- ☐ Master's/PhD student
- ☐ Other...