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Geography of Patent Law: An Institutional Model of Variation and Convergence of Judicial Beliefs

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ABSTRACT

Legal norms are inherently open to interpretation, often leading litigants to perceive inconsistency. We introduce the concept of *judicial beliefs*—institutionalized understandings of law—to examine how patent judges foster jurisdictional consistency. Drawing on semi-structured interviews with elite judges at Germany's leading patent infringement courts, we identify career socialization, collegial deliberation, and judicial abrogation as key mechanisms of how judicial beliefs institutionalize. Because these mechanisms operate at different spatial scales, we propose a model of how judicial beliefs shape both legal variation between courts and convergence within the national jurisdiction. We extend this model to the European level, where the newly established Unified Patent Court seeks to harmonize jurisprudence across diverse national traditions. Our study underscores the crucial role of judicial beliefs in balancing legal variation and consistency, an essential condition for a robust and innovative European patent system.

1. Introduction

The future competitiveness of the European common market depends on its capacity to not only develop innovative products and services but also to secure and enforce intellectual property rights. After decades of political and legal struggles (Stierle, 2023), the UPC, a single court to uniformly deal with the infringement and validity of European patents, has opened its doors in June 2023 (Ullrich, 2023). In contrast to the geographically dispersed, nationally based predecessor system with its complex and costly enforcement of patent rights in multiple European countries, the UPC promises the advantages of more efficient litigation procedures while at the same time ensuring legal consistency and predictability for the whole of the common market, or more precisely, the 18 member states that have ratified the UPC agreement (European Union, 2013). Because the new court consists of a Court of Appeal and 20 divisions of first instance, which are all spread across the UPC member states, each of the local panels is staffed with an international team of judges, where each judge brings in specific legal training and national legal culture. It is this legal variety which poses a major challenge to the UPC in providing consistent and reliable caselaw at all of its spatially distributed divisions, and which ultimately justifies the institutionalization of the Unified Patent Court as a truly transnational institution.

Even though the UPC established a uniform set of rules to govern procedural and operational aspects of the court, these rules of procedures leave space for practical application (Glückler & Bathelt, 2017; Leebron, 1996). The well-known and often cited Improver case (Hatter, 1994) provides an illustrative example of how national courts in different EU member states applied the same legal provisions to the same patent, yet with vastly varying outcomes in judicial decisions (Khuchua, 2019). Consequently, the process of European harmonization of patent caselaw is not merely about establishing uniform regulations; rather, it is also about reaching consensus on the consistent application and interpretation of legal norms. Because interpreting legal norms happens through the localized social practice of judges, we address the tension between unitary jurisdiction and geographical diversity of judicial practice by elaborating on the concept of judicial beliefs. Given the lack of research on the formation and change of institutional beliefs in judicial practice (Drobak & North, 2008), we seek to contribute to this gap by exploring the following research questions: First, what is the role of judicial beliefs in shaping both, legal variation and convergence in caselaw? Second, what are the underlying mechanisms that help judicial

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beliefs institutionalize and change?

As the UPC has only decided a few cases of patent litigation conclusively to the date of writing this article, it cannot yet serve as a proper object for our study. Instead, we look at a structurally equivalent system at the national level: the German patent litigation system. It serves as a compelling analogy to the UPC regarding the challenges of legal variation in a federalized system. Because the Germany judiciary is federalized and features a spatial division of multiple regional courts, it allows plaintiffs to engage in "forum shopping", i.e. to freely file a lawsuit at any of twelve regional courts (RC) as the first instance (Cremers, 2004; Gaessler & Lefouili, 2017). Although the UPC is one single court, its 20 first-instance local divisions are geographically dispersed across the member states, with four being located in Germany (Unified Patent Court, 2025). Because the German patent system is the most experienced and invoked system in Europe (Khuchua, 2019) attracting two thirds of all cases field in Europe (Fei, 2013), and because its interregional federal diversity supplies us with interesting insights on how the diverse European geography of patent litigation might work, our study offers lessons for the European system of the recently established Unified Patent Court. We adopt an institutional approach to examine the stable patterns of social interaction based on mutual normative beliefs (Bathelt & Glückler, 2014) that enables scholars to study institutions on the individual level (Farrell, 2018). Grounded on in-depth qualitative fieldwork of the three most important infringement courts of the German patent litigation system, Duesseldorf, Mannheim, and Munich, we find evidence of judicial beliefs serving a key vehicle for shaping both, legal variation and convergence. Additionally, we uncover the mechanisms of their institutionalization through the processes of career socialization, collegial deliberation, and judicial abrogation. Finally, we develop an institutional model of the subtle balance between local variation and national convergence of judicial beliefs to draw implications from the German case for how to build a reliable and consistent European litigation system and innovation regime.

2. Theory

2.1. Institutions and institutional beliefs

We approach the concept of social institution from a relational perspective (Bathelt & Glückler, 2011, 2014), emphasizing the constituting role of social relations at the micro level. Such a relational view opposes common understandings of institutions as organizations (Goodwin et al., 2005) as well as formal rules or regulations (North, 1990). Instead, and to avoid unnecessary terminological redundancy by using multiple signs for the same referent (Ostrom, 2005), we argue that institutions are neither the players nor the rules of the game; rather, they signify how the game is actually played in recurrent situations and in a specific context (Glückler & Lenz, 2016). Accordingly, we define institutions as the stable patterns of social interaction based on mutual normative beliefs that can be enforced by sanctions in case of deviance (Glückler et al., 2018). This approach to institutions enables researchers to discern both the institutionalized pattern of behavior at the action level and the individual underlying beliefs that script the actors' practices (Barley & Tolbert, 1997; Hodgson, 2006; Scott, 2003). Because it is a logistical challenge to attain comprehensive field access for detailed observations of social interaction in a specific social context, and for diachronic observation of interactions in recurrent situations over time (Barley, 1986), institutions cannot always be studied at the interaction level. Our study focuses on the normative beliefs that judges have formed for two reasons.

First, in the context of a small, distinctive professional elite such as patent judges, it is impossible to accompany and trace interactions and judicial conversations owed to the confidentiality of judicial deliberation. Instead, the investigation of beliefs allows us to empirically approach institutions from the individual level without necessarily having to trace a process of social interactions. Viewed from this angle, social institutions can be conceived as "congregations of roughly similar beliefs about the specific rules that apply in particular circumstances" (Farrell, 2018, p. 39). Initially, beliefs appear as a set of principles that are individually constructed on a cognitive basis (North, 2005) and function as a code of conduct that is operationalized in practice based on each actors mutual expectations (Aoki, 2011). By guiding the actor's individual behavior, beliefs may then be codified into a shared, generally recognized normative pattern of interaction, thereby becoming an institutionalized practice (Glückler et al., 2020). While institutional patterns are only observable in daily practices of interaction, beliefs can be empirically extracted from individual actors.

Second, investigating individual beliefs further allows for the identification of the effects of competing beliefs interacting upon the same institution. Beliefs can vary from person to person and they do not come as "isolated units" because individual actors are embedded in different socio-spatial contexts (Bicchieri & Mercier, 2014, p. 61). The coexistence of different beliefs may give rise to divergent interpretations of the same rule, or alternatively, to a process of social learning amongst the actors engaged in the debate over their respective beliefs (Farrell, 2018). The juxtaposition and mixture of distinct beliefs from different individuals in their respective social setting both frames and challenges the institution, thereby accounting for endogenous institutional change (Bicchieri & Mercier, 2014; Farrell, 2018; Glückler & Lenz, 2018; Streeck & Thelen, 2005). Consequently, in addition to contributing to the formation and institutionalization of interaction orders, the existence of diverse individual beliefs also offers a view of the process of institutional change as a consequence of negotiation and adoption of new beliefs.

2.2. Conceptualizing judicial beliefs

It is the tension between variation and convergence of beliefs that shapes legal controversies over the prevailing opinion (Djeffal, 2013) on how to interpret and apply legal norms. The development of law (in German: *Rechtsfortbildung*) is an essential task provided by the local regional courts, "where most of the work of law takes place" (Seron & Silbey, 2004, p. 37). To ensure legal consistency and, hence, reliability of expectations, judges working at different regional courts need to align their interpretations in a coherent way (Baldan & van Zimmeren, 2015). Yet, judges are individuals embedded in different professional contexts with different educational backgrounds, likely causing the establishment of varying systems of beliefs of how to apply legal norms (Drobak & North, 2008). Accordingly, we conceive judicial beliefs as a particular type of institutional beliefs, denoting the collectively shared rationale or logic that underpins how judges create legitimacy for their interpretation of a legal issue.

Apart from a few exceptions (Rubin & Feeley, 1995), the term judicial beliefs is rarely used in the legal literature. Based on our institutional approach, we conceptualize judicial beliefs in the context of two related concepts in the legal literature, namely legal doctrine (Tiller & Cross, 2006) and legal attitude (Guthrie et al., 2007). Legal doctrine, initially used to describe legal sciences in general (Volkmann, 2005), portrays the systematization of law by legal principles. It can be understood as a repository of valid solutions, which are supported by reasonable justifications within the context of the relevant legal system. The general canons of legal interpretation (Volkmann, 2005), for instance, are "established methods of the interpretation of law", that are based on considerations of the wording, the systemic context, the underlying meaning and purpose, and the historical background of the relevant norm or law (Henke, 2019, p. 535). In this way, legal doctrine serves to diminish the intricacy of the law, to facilitate its intelligibility, and to substantiate novel judicial determinations (Smits, 2017). Therefore, legal doctrine has a major influence on judges' beliefs about how to address specific legal issues and, consequently, on case outcomes.

In the political and legal science debate, it has been criticized that non-doctrinal factors have been neglected in the analysis of judicial

behavior. Proponents of *Legal Realism* have argued that, apart from visible doctrinal aspects, such as written statutes and procedures, the hidden aspects of judgments based on cognition and individual characteristics are additionally important for judicial decision-making (Drobak & North, 2008; Epstein & Knight, 2013). Detailed statistical analysis of over 1,700 patent litigation decisions has provided evidence of the fact that there exist significant propensities for individual judges to nullify a patent, even when controlling for information of experience, type of technology, and industry, etc. (Hoffmann et al., 2024). With the emphasis on cognition, the focus on beliefs entered the debate and was defined as a construction of the mind (Hayek, 2012), developed by sensing reality against internalized theories made from experience. Therefore, individuals with different backgrounds and different experience are likely to build different systems of beliefs (Drobak & North, 2008). We argue that judicial beliefs develop from both doctrinal and non-doctrinal factors and affect judges in their decision-making process. However, it is not clear yet how judicial beliefs account for legal variation and convergence and how the formation process of beliefs does exactly work (Drobak & North, 2008). Our research addresses this research gap by focusing on the identification of institutional beliefs in the context of patent litigation in Germany, and on the mechanisms through which these beliefs are created, institutionalized and changed (Glückler & Lenz, 2016; Hodgson, 2003).

3. Research design, data and methods

Similar to the empirical study of routines or social habits (Feldman & Pentland, 2003), beliefs pose a significant challenge to discern from ones daily practices. Individuals tend to act in a manner that is consistent with their beliefs without necessarily engaging in conscious reflection on the actions they take. To identify judicial beliefs in practice, we opted for a qualitative case-study design in the German patent regime to elucidate the underlying beliefs of daily judicial decision-making of patent judges. The German context is especially appropriate for the study of diverse judicial beliefs because German regional courts not only attracts almost two-thirds of all cases in Europe (Fei, 2013) but also because plaintiffs can choose freely among twelve regional courts, a principle called forum-shopping (Moore, 2001). Our research proceeded in three steps.

First, to familiarize with the field, we began by examining the judgements of different infringement courts and so were able to identify the ways in which patent litigation cases are framed and what aspects emerge as fundamental issues across cases. Additionally, we examined the relevant literature on German patent courts (Alberti, 2017; Cremers, 2004; Cremers et al., 2016; Marshall, 2000) and pursued comprehensive desk research[1] on the recent developments within the German and European patent litigation system. In addition, we conducted a preliminary interview with one of the presiding judges of a patent chamber of a German regional court. Serving as a pre-test, we used this interview to consolidate our theoretical knowledge and to tailor our interview guide to the context of a narrow professional elite of patent judges. Furthermore, we attended patent litigation proceedings at both regional courts and UPC local divisions, with the intention of gaining insight into the decision-making processes as they occur in situ.

Second, we contacted patent judges at the most important regional and higher regional courts in Germany, namely Duesseldorf, Mannheim and Munich, to conduct semi-structured interviews. While talking to judges about their practices and beliefs, it was important to make sure that they did not feel interrogated and, at the same time, that we could gain an authentic view of judicial practice behind the scenes of the application of formal law. From September 2020 to December 2022, we conducted in-depth interviews with the most prestigious judges located at specialized patent litigation chambers at different regional and higher regional courts in Germany. By using a semi-structured interview we made the interviews comparable while continuously refining our interview guide to address new insights or include additional aspects throughout the interview process (Flick, 2014). In total, we conducted 12 interviews with patent judges at the regional court and respective higher regional court locations in Duesseldorf, Mannheim, and Munich (Table 1). Interviews were very intensive and had an average length of almost two hours. The interview guide addressed four issues: (i) the judge's *professional career* to date, including training stages and professional activities in associations and organizations beyond the judicial office; (ii) the *rules of procedure* at the respective court and other local specificities; (iii) the individual points of reference and *sources of judicial practice* with regard to the rendering of judgments; (iv) an *outlook* on the establishment of the UPC and its influence on judicial work. The latter also included an analysis of the potential involvement of future UPC judges and the related implications.

Third, and to analyze the interviews, we audio-recorded and transcribed all interviews verbatim. Next, we coded the interviews according to a code-tree detailing the main categories used in the interview guide as well as additional categories having emerged during the interviews. Using the Software package MaxQDA (VERBI Software, 2021), we conducted qualitative content analysis (Rädiker & Kuckartz, 2019) by iteratively coding interview text and abstracting codings into categories related to the formation and circulation of judicial beliefs. From this, we developed topic matrices to validate the statements made within and across cases (Eisenhardt & Graebner, 2007). The following results are based on including appropriate examples.

4. Judicial beliefs of legal issues related to intellectual property

We observed four different cases of legal issues (Table 2), where each case provided insight in how judicial beliefs are constituted and how they differ with respect to others. Moreover, we identified varying dynamics leading to either variation and increasing local diversity or convergence towards a harmonized and commonly shared judicial belief

Table 1
List of interviews with specialized patent judges at regional and higher regional courts in Germany.

ID	German court affiliation	Current role	Appointed to the UPC	Duration [min]
i1	Regional Court	Presiding judge	Presidium /Regional Division	170
i2	Regional Court	Presiding judge	Regional Division	160
i3	Regional Court	Associate judge		107
i4	Regional Court	Associate judge		116
i5	Regional Court	Presiding judge	Presidium/Regional Division	107
i6	Regional Court	Presiding judge		120
i7	Regional Court	Presiding judge	Regional Division	160
i8	Regional Court	Presiding judge	Regional Division	103
i9	Regional Court	Presiding judge		120
i10	Regional Court	Associate judge	Central Division	120
i11	Higher Regional Court	Presiding judge	Central/Regional Division	120
i12	Higher Regional Court	Associate judge	Presidium/Regional Division	90

[1] We used the latest information on the European and German patent markets released by JUVE patent (https://www.juve-patent.com/). In addition, we retrieved articles, comments and other documents online, including from the German Patent and Trademark Office, the EPO, the infringement courts and leading law firms in Germany.

Table 2
Four IP-related issues exposed to varying dynamics of judicial beliefs.

Dynamics	Judicial beliefs at starting point	Actual state of judicial beliefs	Legal issue
Variation of locally distinct beliefs	**i6**: "To some extent, Regional Court (RC) 1* and RC 2 required that the patentee's offer had to meet the FRAND criteria 100 percent. […] Defendants are in the special situation that in the case of standard-essential patents they could limit themselves to complaining […]. And that didn't seem right to us, but we thought defendants also have to negotiate because they claim that they want a license […]." **i7**: "There is a decision where the RC 3 says that the defendant's counteroffer is only a fraction of the patentee's offer and therefore the defendant is not willing to license. But I can only come to that conclusion by first saying that the patentee's offer is reasonable. But maybe it is exorbitantly high, and the other one is reasonable."	**i7**: "We are observing a divergence of judicial beliefs between the Higher Regional Court (HRC) 1, the Federal Court of Justice (FCJ), and the RC 3 regarding the interpretation of the European Court of Justice ruling on standard-essential patents with FRAND. RC 2 is even split between the chambers on this matter."	FRAND
Convergence towards shared belief	**i6**: "For a considerable period, the history in RC 3 was such that it was not necessary for the patent in question to have undergone an adversarial validity procedure to obtain a PI. This was the requirement in the other locations, whereas RC 3 never had this requirement. Consequently, in RC 3, it was also possible to obtain a preliminary injunction for patents that were new."	**i1**: "As we see it, the RC 3 […] set the standards very low, and they were actually overturned on that point by the HRC 3, and they were also told that you can't set the bar that low, it's got to be higher."	Preliminary injunction
Institutionalization of shared new belief	**i11**: "There is an independent procedure for securing evidence, a so-called Duesseldorf procedure, […] the point is that I can secure evidence from someone before a trial. And this came about some years ago, in the minds of one or two presiding judges, inspired by a party's behavior or something like that, and it was developed."	**i11**: "They have looked at the civil procedure, what are the norms that are involved, how can they be combined? And this has been done and accepted ever since. And it basically went all the way to the FCJ, and finally, with amendments to the law, §140C, Patent Act, at least incorporates parts of it."	Preservation of evidence
Emergence of a new belief not yet institutionalized	**i11**: "Furthermore, in the context of disproportionality, it is possible to interpret this from certain groups of cases. Consequently, there may be a discrepancy between my own opinion and that of my colleague in RC 2 or RC 3."	**i2**: "Maybe in ten years, when we have the experience of RC 1, RC 2 and RC 3, we can do better than we do now. […] we have to get the first cases. Then we'll have to figure out how to deal with them."	Disproportionality defense

*For anonymization purposes, we use numbers instead of court names.

of how to accurately interpret a legal norm. Precisely, we found four different dynamics, leading to (i) *variation* of locally distinct beliefs, (ii) *convergence* towards a common belief, and (iii) the *institutionalization* of a new shared belief; (iv) a fourth case serves to illustrate an initial situation, in which not-yet institutionalized practices give rise to the emergence and potential effect of judicial beliefs.

4.1. FRAND: Geographical variation of judicial beliefs

With the example of FRAND, we see how different courts adapt to different localized interpretations of this legal issue based on opposing institutionalized judicial beliefs. Once granted, patents may gain further value because of their inclusion in a technological standard. In the context of the mobile communications industry, examples of this phenomenon include the 5G or LTE standard. Given the prevalence of new, innovative products based on this standard, patent holders of so-called standard-essential patents (SEPs) are legally obliged to grant licenses to other market participants for the use of this standard in their products. Such terms must be established on a fair, reasonable, and non-discriminatory (FRAND) basis. The central issue of this "most discussed, most interesting, and most widely debated question in the [legal] literature for five years" (i2) is what exactly FRAND means.

The legal issue of FRAND has become gradually substantiated (Hess, 2023) as the increasing use of technical standards has produced a large number of patent infringement cases in recent years (Tsang & Lee, 2019). However, the result of this has not been a uniform interpretation of FRAND by the German courts. Rather, the regional courts have formed different, locally specific judicial beliefs leading to different legal interpretations by the judges on the willingness to license. The ruling by the European Court of Justice in the case of Huawei/ZTE, following a referral by the Duesseldorf Regional Court, has become a key precedent for the development of diverse interpretations of FRAND. In this judgment, the European Court of Justice sets out a program of measures that the SEP holder and the defendant must take within a FRAND negotiation. This judgment has been "so disparately analyzed that there are different legal interpretations" by German courts on how this judgment should be understood (i9). The Munich Regional Court places strong emphasis on the defendant's conduct and their willingness to license in FRAND negotiations. The court considers the defendant to be actively participating in the negotiations and not merely criticizing the patentee's offer. Otherwise, there is a risk that the "patentee will not be granted injunctive relief and that is the sharpest weapon he has to

enforce his patent claim" (i6). In this context, the Munich Regional Court published instructions to communicate its way of interpreting FRAND:

> "And then we thought about how we would deal with these cases. And especially when you work across chambers, in different chambers, it makes perfect sense to think this through for different constellations. […] Yes, there was already case law. But we were the first to have these written instructions, which were somewhat abstract and didn't deal with individual cases." (i9)

These instructions were intended to guide litigants and their counsel on the court's interpretation of FRAND and to provide a unique selling point to compete with other regional courts. In contrast, the Duesseldorf court's position is informed by a distinct interpretation of FRAND. The Duesseldorf Regional Court holds that the patent owner's offer must first be examined for FRAND conformity. The defendant cannot be presumed to be unwilling to license without first determining whether the offer is, in fact, FRAND. An abstract, cross-case understanding of FRAND has already emerged as a result of a substantial number of cases and established case law. Nevertheless, this abstract understanding across cases does not lead to a uniform interpretation of the legal issue; rather, it portrays two locally specific and consolidated interpretations at the Duesseldorf and Munich courts based on distinct judicial beliefs. Both courts reproduced their interpretation through making decisions on FRAND cases according to their respective beliefs what FRAND is. In addition, Munich has even reinforced this reproduction effect through the publication of FRAND instructions to the public. Given this, the example of FRAND accounts for the ongoing process of the consolidation of localized variation as a result of different, underlying judicial beliefs.

4.2. Preliminary injunction: Convergence towards a shared belief

In contrast to FRAND, different judicial beliefs about the prerequisites for granting a preliminary injunction have been erased by the judgement of a higher regional court, making this an example for the convergence of judicial beliefs across different court locations. As with a patent infringement, the patentee brings an action against a potential infringer. However, a preliminary injunction "is a special case of a lawsuit" (i5) because it comes along with specific conditions for the injunction to be granted by the court and the court procedure. First, the higher regional court represents the highest court, not the Federal Court of Justice. Second, for the preliminary injunction to be granted, patent infringement must be mandatory. Third, the preliminary injunction must be based on substantial reasons. For example, the preliminary injunction is an appropriate remedy in case a firm recognizes competitors infringing their patent rights while offering products at a trade fair (Rupprecht, 2009). Given the situation of the "need for urgency" (i4), a normal litigation procedure would be unreasonable for the plaintiff. Another valid reason is given when the plaintiff makes explicit the potential harm to be expected when the injunction would be rejected (Lynch, 2014). A third valid reason is when the plaintiff has proven evidence on the validity of the patent in question (Cunningham, 1994). With regard to the question of whether the patent of the plaintiff seeking the injunction must have undergone an adversarial validity procedure, there are differing beliefs at the Munich and Duesseldorf/Mannheim courts:

> "To ensure reliability, [the chamber] must align its position accordingly. Preliminary injunction proceedings provide an illustrative example where Duesseldorf/Mannheim and Munich differ in this respect." (i12)

In Duesseldorf and Mannheim, the prerequisite for obtaining a preliminary injunction was that the patent in question must have survived a validity procedure. In Munich, however, this requirement was not present, which made the court an attractive location for plaintiffs to obtain preliminary injunctions. Conversely, there was the possibility for the defendant to argue that the injunction patent was not sufficiently legally valid. This was examined by the court on a case-by-case basis. However, the Munich Higher Regional Court has revised its legal positioning to the effect that this aspect should no longer be subject to case-by-case examination. Instead, it has established a more abstract rule, in alignment with the other higher regional court locations:

> "We simply say that if it has survived the legal validity process, then there is an indication that it is simply new and inventive, i.e., you not only need the grant, but you also need a legal validity process. And if you have both, then it's belt and braces, the pants hold." (i6)

The example demonstrates how disparate judicial beliefs regarding the prerequisites for a preliminary injunction vary across different court jurisdictions. In contrast to the FRAND model, the consolidation of legal interpretation based on the abstract characteristics of a preliminary injunction has prevailed over a deviating practice. The key event was the involvement of the higher regional court and the rectification of the procedure employed by the regional court as the lower court. The result is the convergence of judicial beliefs underlying the practice in question by changing the settled case law and harmonizing legal variation across different courts.

4.3. Preservation of evidence: Convergence to a belief via legislative embodiment

The example of preservation of evidence illustrates how a localized procedure gained popularity across the German jurisdiction, resulting in the convergence of judicial beliefs by their legislative embodiment. In the event that a patentee suspects a patent infringement, evidence may be obtained through a court-ordered inspection. This is particularly the case when the suspected object of the potential defendant is protected by confidentiality. The preservation of evidence, as it is now carried out across all infringement courts, originated as the "so-called Duesseldorf procedure" (i11) at the Duesseldorf Higher Regional Court and has since become an integral part of the German patent law. The example demonstrates how the role of the presiding judge, particularly the presiding judge at the higher regional court, can exert a significant influence on the development and consolidation of judicial beliefs, ultimately leading to a renowned procedure that is uniformly adopted throughout the judicial system. The starting point for understanding the locally specific characteristics of the preservation of evidence procedure is the ability of the presiding judge to "have the opportunity and the possibility, and also the power to disseminate and advance [your] ideas in this small community" (i11). One judge provided insight into the various mechanisms for achieving this.

> "If you wish to pursue this avenue, you should consider giving lectures, writing essays, and publishing in specialist books. Additionally, depending on your standing, it is sufficient to do this in presentations and lectures." (i11)

In response to a suggestion from one of the parties, the presiding judges of the court considered the structure of the preservation of evidence. As a result, cases in this regard proceeded to the Federal Supreme Court, where the procedure gained popularity and is now practiced across all court locations. The presiding judges then examined how this understanding could be reconciled with the relevant abstract standards in the Code of Civil Procedure. The outcome was the partial materialization of the local-specific understanding with regard to the preservation of evidence procedure in a provision as part of an amendment to the law, leading to its harmonized application.

4.4. Disproportionality defense: creation of a belief not yet institutionalized

The fourth example focuses on the actual novel legal issue of disproportionality defense that yet has to be filled with judicial beliefs and interpretations by the courts through deciding cases and leaves room for

either competing beliefs or a harmonized abstract interpretation. Paragraph 139 of the German Patent Act stipulates that, in the event of patent infringement by the defendant, the court must order the defendant to cease and desist from infringing the patent (Patent Act, § 139). This central infringement standard has been amended to the effect that the court must now first examine whether the injunction granted, and the associated consequences are proportionate to the infringement in question. The automotive industry has been a driving force behind this development. The constant expansion of digital technologies and the focus on connectivity in the automotive sector mean that car manufacturers must monitor the patent portfolios of all cell phone manufacturers. In light of this, the automotive lobby has approached the German government with the argument that "it should no longer have to fear a complete production stop due to the enforcement of minor mobile phone patents [by cell phone manufacturers]" (i2).

This example demonstrates how judges must address a novel legal issue – namely, what is proportionate – solely on the basis of the specific case at hand, without the ability to reference it with existing case law. This situation gives rise to the need for judges to develop judicial beliefs concerning the meaning of the legal issue at hand, thereby framing the legal concept of proportionality. The formation of localized judicial beliefs and potential legal variation may occur as a result of individual cases or specific groups of cases being initiated in different locations. Once this is the case, attorneys are constrained to provide their clients with only limited assurance regarding the manner in which the courts interpret this "undefined legal term" (i2). One judge highlighted the issue of disproportionality defense as follows:

> "When will a chamber consider something to be proportionate and when not? I say: We are in God's hands" (i2)

However, legal certainty is of paramount importance for Germany's reputation as a location for international patent disputes and is the primary criterion for the high number of patent cases negotiated (Cremers et al., 2017). In terms of legal certainty, it is crucial that the undefined legal issue be concretized through the processing of a large number of cases by the courts. It is only through this mechanism that it will be possible to form judicial beliefs across cases and establish an abstract understanding of disproportionality. It remains to be seen how the substantiation process will unfold. However, even the concretization of the legal concepts through the development of legal doctrine by the courts does not automatically guarantee legal convergence. Instead, as the case of FRAND has shown, it could offer the possibility of competing beliefs about the legal issue consolidated at different court locations.

5. Dynamics of variation and convergence of judicial beliefs

5.1. How judicial beliefs institutionalize

Based on the findings about different configurations of judicial beliefs surrounding selected legal issues in patent law, we go further to examine how judicial beliefs collectively institutionalize and eventually change. To answer this question, we conducted a qualitative content analysis of the interview transcripts and identified three types of processes– socialization, deliberation, and overruling, as well as different social mechanisms driving the dynamic institutionalization of judicial beliefs (Table 3).

Career socialization. The "tools of the trade" that are imparted in judicial training programs help judges structure cases and write their judgments (i8). However, a significant portion of the expertise of patent judges, being a heavily "case-driven" field, derives from practical experience in deciding cases (i6). Hence, the process of socialization, particularly through mechanisms of day-to-day work, judicial secondments and other experience within their ongoing career paths, plays a formative role in the institutionalization of judicial beliefs. When judges join a court chamber as assessors, they primarily depend on the wealth of experience and work routines of the presiding judge, facilitating an

Table 3
Mechanisms driving the institutionalization of judicial beliefs.

Social process	Mechanism	Anchor examples
Career socialization	Learning on the job	"The conversation with colleagues is very important. Mr. X is right next door. We put our heads together all day and talk to Ms. Y. […] And now, in times of pandemic, we're constantly on the phone. The exchange in the chamber is indispensable. Otherwise, we wouldn't need the chamber; otherwise, each of us could do it alone. The six-eyes principle must lead to an exchange if it is to be profitable." (i2).
	Secondments and career path	"Yes, I think it's this fundamental way of dealing with these cases or how to interpret them, all this experience that you build up because you've worked with others. I was in the chamber of Mr. X for a while, he's at the FCJ now. I was with Mr. Y for a while, he's also at the FCJ. And in that sense, for instance, this assignment to the FCJ as a research assistant is not that insignificant that you get this feedback in some way. […] In that respect I wouldn't say we're entrenched, but we've grown into it. Even if you've been to the HRC secondment, you know how they tick, and this is how you turn out, in a way" (i7).
Collegial deliberation	Publications and commentaries	"Judges communicate about their jurisprudence and then embed it in the system through presentations, how is that seen in Germany? And then, of course, you read the decisions that the other courts have published, and you can learn a lot from that. […] So you get a very good insight into what is being thought at the respective court locations." (i6).
	Citations of decisions	"So, at the end of the day, when I make legal decisions and then justify them with citations, I try to cite the case law of the higher courts, especially the decisions of the FCJ. Or, I would say, on the next level, the second best for us are the decisions of the HRCs" (i3).
	Informal networks	"Obtaining assessments, that is really more about personal contacts. It's not institutionalized, it's been tried from time to time, but for various reasons it didn't work out. […] So I'm already asking the presidents of the other HRC senates, i.e. those with whom I have good contact, have you ever dealt with this or that issue? What is your opinion about it? There have also been exchanges of this kind in connection with FRAND, and because everybody is involved in a way, some people have discussions with each other on the basis of personal contacts. Like sitting on a panel to discuss an issue, you come to the same conclusion" (i11).
Judicial abrogation	Formal appellate process	"And one of the chambers of the Munich Regional Court in particular was very open-minded and set the standards very low from our point of view. And they were overruled on this point by the Munich Higher Regional Court, and they were also told that you can't set the bar that low, it has to be higher. […] A higher regional court observes something like that. And at some point, there will be a case, and then such a practice will be abolished." (i5).

exchange that fosters understanding of how legal issues are addressed and how they are justified. Conversely, the continuous deliberation among judges within a chamber is essential to convey legal consistency and predictability for the disputing parties. In this way, junior judges become gradually socialized within the established practice of their mentors and colleagues at the local office. The typical career of a patent judge in the state judiciary includes a period of around three years as a research assistant at the Federal Court of Justice. During this time, the regional court judges "help to prepare proceedings, write preliminary opinions for internal use, and attend the meetings and deliberations of the patent infringement cases heard by the Federal Court of Justice" (i4). To qualify for the role of presiding judge, the judiciary mandates a nine-month secondment to the respective higher regional court evaluating suitability. Additionally, this secondment offers the opportunity for judges to assess how work and thinking is conducted within a judge's own court of appeal. Both the secondment to the higher regional court and the assignment to the Federal Court of Justice as a research assistant are crucial for shaping a judge's professional identity and perspective on legal matters.

Collegial deliberation. The second process for the institutionalization of judicial beliefs is found in professional deliberation among colleagues, both in immediate and intermediate communication. Grounded on the interviews, we identified three widely practiced mechanisms. (i) In the field of patent law, there is extensive *commentary literature* on court decisions, as well as on legal aspects of those decisions. This literature can play a crucial role in guiding the decision-making process for specific legal issues:

> "Is it a direct or indirect patent infringement? […] I look in the commentaries on paragraph ten of the Patent Act for information on indirect patent infringements. What does it say? What is obvious and what is not? Then there are references to decisions made by the Federal Court of Justice or to other literature."

At the same time, the publication of legal commentaries provides an opportunity for judges to articulate and spread their preferred interpretations, thereby influencing the formation and dissemination of judicial beliefs. This practice corresponds with what Lawrence and Suddaby (2006) refer to as a theorizing practice in institutional work. The impact of commentaries can be reinforced by public lectures and talks to make sure that preferred judicial beliefs can be promoted in open dialogue. (ii) Another mechanism is represented by the practice of *citations of legal decisions* to justify a judgement and align with what is considered appropriate legal opinion. Judges make reference to prior cases of precedence in order to establish a framework for their own decision-making process, thereby ensuring its comprehensibility and enhancing its legitimacy. In this regard, the Federal Court of Justice serves as the preeminent authority for guidance. Furthermore, the higher regional court, as the subsequent higher authority, is likewise regarded as a legitimate source of argumentation. However, it is crucial to emphasize that, as a judge of a regional court, one must accord precedence to the decisions made by the respective higher regional court over those of other such courts, "particularly in cases where they account for diverging views on a legal issue" (i3). (iii) Finally, *informal networks* of personal collegial contacts are a means by which judges exchange and deliberate on judicial beliefs. Because judges must not exchange case-specific issues for confidentiality, collegial deliberation addresses general or novel legal issues that emerge from cases of precedence or new legislation that need to be incorporated into case law, e.g. FRAND (Table 2). Ongoing personal exchange facilitates conversations and exchange of opinions that gradually convey agreement about the treatment of a controversial legal issue.

Judicial abrogation. Being the final and formal process for the institutionalization of judicial beliefs, it is imperative to acknowledge the overarching role of the appellate process, which leads to either confirmation or abrogation of judicial decisions and underlying legal opinions. The appeal mechanism, when utilized in the first instance by the higher regional court and subsequently in the third and final instance by the Federal Court of Justice, contributes to the enhancement of legal interpretation. Notably, appellate processes serve to rectify errors committed by lower courts (OLG München, 2019), thereby ensuring the establishment of a foundation for subsequent court proceedings. Consequently, the Court of Appeal, as the highest court, has the capacity to reverse the legal opinions of lower courts concerning particular legal matters, thereby contributing to the establishment of consistent judicial beliefs within the court system as a whole.

5.2. An institutional model of variation and convergence of judicial beliefs

Career socialization, collegial deliberation and judicial abrogation are social mechanisms through which judicial beliefs are institutionalized, reproduced, and eventually, changed. In a system of horizontal division of labor, multiple regional courts, and the right to choose freely between them (forum-shopping), these mechanisms, when operating on different geographical scales, can facilitate both variation and convergence in judicial beliefs. Grounded in the empirical evidence of the three most prominent regional courts in Germany: Duesseldorf, Mannheim and Munich, we develop an institutional model (Fig. 1) that represents these dynamics, which together generate a subtle balance between centrifugal forces of legal *variation* and centripetal forces of *convergence*. The regional courts are distributed across the geography of the national jurisdiction, with Higher Regional Courts (appellate court of second instance) and the Federal Court of Justice being located in the center of the legal regime of the jurisdiction. The model identifies three dynamics that together shape the balance between variation, institutionalization and convergence in judicial beliefs and case law:

(i) *Variation.* The very cause for variation of judicial practices within the same jurisdiction is rooted in the geographically dispersed divisions of multiple regional courts. Based on this spatial conditions, plaintiffs have the right to freely choose their forum where to file a lawsuit (Cremers et al., 2017). Regional courts have incentives to compete for patent-holder-friendly, efficient, reliable, and predictable judicial practices. Attracting a higher caseload has serval advantages for a regional court, including: (i) the opportunity for a court panel to specialize on patent litigation cases law rather than having to deal with cases from other fields of civil law to fill the capacity of the panel; (ii) disproportional revenues for the regional court as values in dispute are usually much higher in patent litigation than in other areas of civil law; (iii) leadership in shaping judicial beliefs of IP-related legal issues due to the accumulation of expertise, popularity and prestige across the justice system. To achieve these advantages, regional courts seek to attract cases by adopting patentee-friendly practices and procedures. Practices such as offering a speedy trial, setting high values in dispute, and demonstrating high consistency in decisions over time raise the predictability and attractiveness for plaintiffs. Variation may not only be the outcome of competition for better procedures due to forum shopping within the same legislation but also result from the emergence of new legal issues either in unique cases or novel legislation, as discussed in section 4.

(ii) *Institutionalization.* To build a positive reputation for consistency and predictability, local judicial panels harmonize legal interpretations and procedural practices. The three regional courts Duesseldorf, Mannheim and Munich are setting themselves apart from each other by claiming their own, location-specific procedures and practices. One example of this is the so-called "Munich procedure" (i5), which was introduced as part of the FRAND debate and can therefore be seen as a geographically anchored reputation effect for attracting cases. Younger associate judges often learn the prevailing local approach, while the regional appellate court provides formal guidance for consistent legal interpretations (*judicial abrogation*). Through *career socialization* at the local court, abstract judicial beliefs can be internalized and anchored locally. Various mechanisms of *collegial deliberation*, including publications and lectures (section 5.1), promote the local variety of judicial

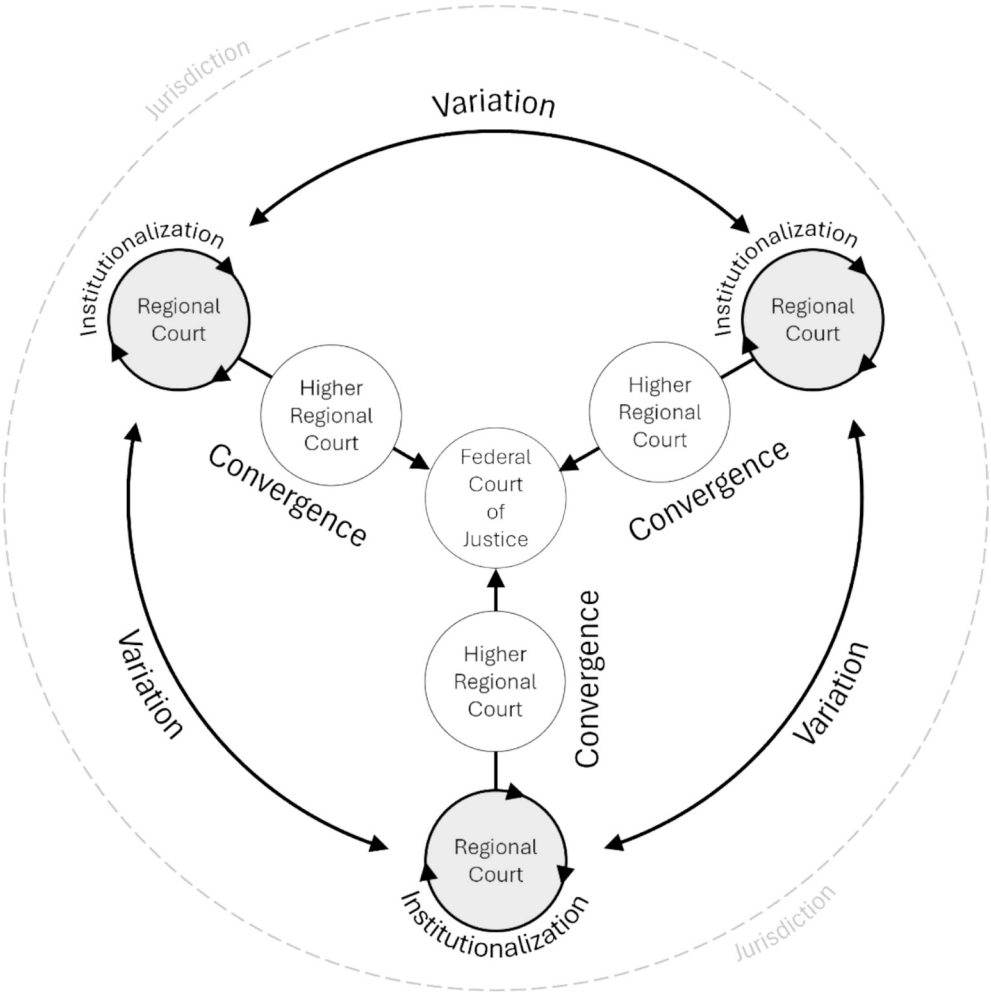

Fig. 1. Variation, institutionalization, and convergence of judicial beliefs in the German patent litigation system.

beliefs and so adds to its institutionalization and legitimization. This comes full circle, as plaintiffs tend to choose the forum in which to bring their case according to their expectations (Dodson, 2024).

(iii) *Convergence.* Finally, convergence mechanisms are in force to harmonize existing variation in judicial beliefs and practices within the same jurisdiction. Convergence operates through legal and social mechanisms. (i) *Legal convergence* is conducted through *judicial abrogation* by the appellate system. In addition, a higher regional court has authority to correct what it considers to be non-compliant opinions or beliefs held at 'its subordinate' regional court. As the higher regional courts are geographically anchored to a respective regional court location, also the higher regional courts can eventually divert from rulings of other courts of second instance and so reinforce a regional variety of judicial belief. Yet, to prevent illicit variation, the Federal Court of Justice represents the highest authority to correct erroneous decisions by lower courts. In addition, the Federal Court of Justice issues guiding decisions aimed at providing orientation and setting standards on generally applicable legal issues for future decisions in the jurisdiction. (ii) *Social convergence* is facilitated through personal networks of professional exchange among judges at conferences and in committees, and personal deliberation networks (*collegial deliberation*). Within the context of state judiciary, it is customary for regional court judges to attend the Federal Court of Justice and/or the respective higher regional court as a research assistant at the regional court (*career socialization*). These training stages serve as a valuable repository of experience, fostering adoption of judicial beliefs. Furthermore, readings of legal commentaries and the citation of previous judgments are common practices of adopting legitimate beliefs.

6. Conclusions

We have shown how different IP-related issues are subject to both varying and converging judicial beliefs. Based on the pioneering insights of a professional elite and grounded on a qualitative in-depth analysis of how patent judges thrive for the interpretation of legal norms, we have proposed an institutional model of how judicial beliefs develop, institutionalize and change amid continuous forces of legal variation and convergence. The institutionalization of judicial beliefs occurs through the formal and informal mechanisms anchored in processes of career socialization, collegial deliberation and judicial abrogation.

Because the German patent system is the most experienced and invoked system in Europe (Khuchua, 2019), and because its interregional, federal diversity is to some extent comparable with the diverse European geography of patent litigation, our model offers lessons for the European system of the recently established Unified Patent Court. At the European level, judicial variation may represent an even greater challenge as the Unified Patent Court (UPC) integrates the distinct legal cultures and practices of 18 member states within a single judicial framework. In the German patent system, we have demonstrated that forum shopping (Dodson, 2024) is a crucial precondition for driving judicial variation across competing regional courts—a characteristic that also shapes the European UPC framework (Jacobsmeyer, 2018). The UPC's decentralized structure comprises a court of first instance with divisions in almost all 18 current member states and a central Court

of Appeal based in Luxembourg. Germany is the exception, with four local divisions (Duesseldorf, Mannheim, Munich and Hamburg) within one national jurisdiction, where 76 percent of all cases filed were accepted in early 2025 (Unified Patent Court, 2025). The presence of 81 cases in Munich and 20 cases in Hamburg underscores the significance of forum shopping, which has been identified as a key factor in the dynamics of the competition to attract cases, both within the German and the European system. Within the transitional period of seven years since the start of the UPC in 2023, the court must prove its capacity to provide consistent, reliable and predictable case law across Europe to foster a competitive European innovation regime.

Because the UPC lacks the presence of a single court location in a common building, collegial exchange and conversations across geographically scattered locations require either travel or, more frequently, online conferences. Hence, for the UPC to institutionalize judicial beliefs and to harmonize these across the many spatial divisions, judges need to establish formats of social exchange beyond mere training events. As we have shown, the convergence of judicial beliefs depends on processes of socialization, deliberation and abrogation. In this regard, the UPC realizes a high-transparency policy. By providing public access to written pleadings and documents the UPC strengthens the court's legitimacy (Galeotta et al., 2025). Emphasis on detailed transparency could also help communicate its legal opinions being applied to decision-making processes and to align judicial beliefs across the first instance courts. In contrast to our study in Germany, where limited access to case files and decision documents constrained our ability to triangulate interview findings with case outcomes, future research will benefit from the UPC's transparency policy. The availability of a detailed case database, information on caseloads across divisions, the number of judges, and their career backgrounds will provide rich quantitative and qualitative data. The transparency of location-specific data has the potential to contribute to the generation of valuable insights into the institutional work (Lawrence & Suddaby, 2006; Zilber, 2013) of an influential group of elite professionals. Furthermore, it helps bridging the disciplines of geography and law, thereby enriching the interdisciplinary field of legal geography (Bennett, 2016; Kymäläinen, 2025).

CRediT authorship contribution statement

Marius Zipf: Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Formal analysis, Data curation, Conceptualization. **Johannes Glückler:** Writing – review & editing, Writing – original draft, Supervision, Project administration, Methodology, Funding acquisition, Conceptualization. **Emmanuel Lazega:** Writing – review & editing, Project administration. **Jakob Hoffmann:** Writing – review & editing, Data curation.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Data availability

The data that has been used is confidential.

References

Alberti, J. (2017). New developments in the EU system of judicial protection: The creation of the Unified Patent Court and its future relations with the CJEU. *Maastricht Journal of European and Comparative Law*, *24*(1), Article 1.

Aoki, M., 2011. Institutions as cognitive media between strategic interactions and individual beliefs. J. Econ. Behav. Organ. 79 (1), 20–34. https://doi.org/10.1016/j.jebo.2011.01.025.

Baldan, F., van Zimmeren, E., 2015. Exploring different concepts of judicial coherence in the patent context: the future role of the (new) unified patent court and its interaction with other (old) actors of the European patent system. Review of European Administrative Law 8 (2), 377–408. https://doi.org/10.7590/187479815X14465419060785.

Barley, S.R., 1986. Technology as an occasion for structuring: evidence from observations of CT scanners and the social order of radiology departments. Adm. Sci. Q. 31 (1), 78–108. https://doi.org/10.2307/2392767.

Barley, S.R., Tolbert, P.S., 1997. Institutionalization and structuration: Studying the links between action and institution. Organ. Stud. 18 (1), 93–117. https://doi.org/10.1177/017084069701800106.

Bathelt, H., & Glückler, J. (2011). *The Relational Economy. Geographies of Knowing and Learning*. Oxford University Press.

Bathelt, H., Glückler, J., 2014. Institutional change in economic geography. Prog. Hum. Geogr. 38 (3), 340–363. https://doi.org/10.1177/0309132513507823.

Bennett, L., 2016. How does law make place? Localisation, translocalisation and thing-law at the world's first factory. Geoforum 74, 182–191. https://doi.org/10.1016/j.geoforum.2016.06.008.

Bicchieri, C., & Mercier, H. (2014). Norms and beliefs: How change occurs. In M. Xenitidou & B. Edmonds (Eds.), *The Complexity of Social Norms* (pp. 37–54). Springer International Publishing. Doi: 10.1007/978-3-319-05308-0_3.

Cremers, K., 2004. Determinants of patent litigation in Germany. ZEW Discussion Papers 04–72, 1–29.

Cremers, K., Ernicke, M., Gaessler, F., Harhoff, D., Helmers, C., McDonagh, L., Schliessler, P., van Zeebroeck, N., 2017. Patent litigation in Europe. Eur. J. Law Econ. 44 (1), 1–44. https://doi.org/10.1007/s10657-016-9529-0.

Cremers, K., Gaessler, F., Harhoff, D., Helmers, C., Lefouili, Y., 2016. Invalid but infringed? an analysis of the bifurcated patent litigation system. J. Econ. Behav. Organ. 131, 218–242. https://doi.org/10.1016/j.jebo.2016.08.005.

Cunningham, M.A., 1994. Preliminary injunctive relief in patent litigation. IDEA: the Journal of Law and Technology 35 (3), 213–259.

Djeffal, C., 2013. Die herrschende Meinung als Argument. Ein didaktischer Beitrag in historischer und theoretischer Perspektive. Zeitschrift Für Das Juristische Studium 5, 463–466.

Dodson, S.W., 2024. The culture of forum shopping in the United States. International Lawyer 57, 307–321.

Drobak, J.N., North, D.C., 2008. Understanding judicial decision-making: the importance of constraints on non-rational deliberations. Wash. Univ. J. Law Policy 26, 131–152.

Eisenhardt, K.M., Graebner, M.E., 2007. Theory building from cases: Opportunities and challenges. Acad. Manag. J. 50 (1), 25–32. https://doi.org/10.5465/amj.2007.24160888.

Epstein, L., Knight, J., 2013. Reconsidering judicial preferences. Annu. Rev. Polit. Sci. 16 (1), 11–31. https://doi.org/10.1146/annurev-polisci-032211-214229.

European Union. (2013). Agreement on a Unified Patent Court. *Official Journal of the European Union*, *56*. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2013:175:FULL&from=en.

Farrell, H., 2018. The shared challenges of institutional theories: Rational choice, historical institutionalism and sociological institutionalism. In: Glückler, J., Suddaby, R., Lenz, R. (Eds.), *Knowledge and Institutions*. Springer, pp. 23–44.

Fei, C., 2013. Justice delayed is justice denied: the principle of bifurcation in the german patent litigation system. Wake Forest Journal of Business and Intellectual Property Law 14 (4), 619–670.

Feldman, M.S., Pentland, B.T., 2003. Reconceptualizing organizational routines as a source of flexibility and change. Adm. Sci. Q. 48 (1), 94–118. https://doi.org/10.2307/3556620.

Flick, U. (2014). *The SAGE Handbook of Qualitative Data Analysis*. London: SAGE Publications. Doi: 10.4135/9781446282243.

Gaessler, F., Lefouili, Y., 2017. What to buy when forum shopping? Analyzing court selection in patent litigation. TSE Working Paper 17 (775), 1–51.

Galeotta, G., Khuchua, T., Stierle, M., 2025. Public access to the register of the Unified Patent Court: Unprecedented transparency with unfounded limitations. Journal of Intellectual Property Law and Practice 20 (1), 23–31. https://doi.org/10.1093/jiplp/jpae078.

Glückler, J., Bathelt, H., 2017. Institutional context and innovation. In: *The Elgar Companion to Innovation and Knowledge Creation*. Edward Elgar Publishing, pp. 121–137.

Glückler, J., Lenz, R., 2016. How institutions moderate the effectiveness of regional policy: a framework and research agenda. Investigaciones Regionales - Journal of Regional Research 36, 255–277.

Glückler, J., Lenz, R., 2018. Drift and morphosis in institutional change: evidence from the 'Walz' and public tendering in Germany. In: Glückler, J., Suddaby, R., Lenz, R. (Eds.), Knowledge and Institutions, Vol. 13. Springer International Publishing, pp. 111–133. https://doi.org/10.1007/978-3-319-75328-7_6.

Glückler, J., Punstein, A.M., Wuttke, C., Kirchner, P., 2020. The 'hourglass' model: an institutional morphology of rural industrialism in Baden-Württemberg. Eur. Plan. Stud. 28 (8), 1554–1574. https://doi.org/10.1080/09654313.2019.1693981.

Glückler, J., Suddaby, R., Lenz, R., (Eds.), 2018. Knowledge and Institutions Vol. 13. https://doi.org/10.1007/978-3-319-75328-7.

Goodwin, M., Jones, M., Jones, R., 2005. Devolution, constitutional change and economic development: explaining and understanding the new institutional geographies of the british state. Reg. Stud. 39 (4), 421–436. https://doi.org/10.1080/00343400500128432.
Guthrie, C., Rachlinski, J.J., Wistrich, A.J., 2007. Blinking on the bench: how judges decide cases. Cornell Law Rev. 93 (1), 1–44.
Hatter Jr., J.P., 1994. The doctrine of equivalents in patent litigation: an analysis of the Epilady controversy comment. Indiana International & Comparative Law Review 5 (2), 461–494.
Hayek, F.A., 2012. *The Sensory Order: an Inquiry into the Foundations of Theoretical Psychology*. University of Chicago Press.
Henke, C.C., 2019. Zur Auslegung Von Richterrecht. Rechtstheorie 50 (4), 521–548. https://doi.org/10.3790/rth.50.4.521.
Hess, F.K., 2023. *Anti-Suit Injunctions in FRAND-Streitigkeiten*. Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-43123-5.
Hodgson, G.M., 2003. The hidden persuaders: institutions and individuals in economic theory. Camb. J. Econ. 27 (2), 159–175. https://doi.org/10.1093/cje/27.2.159.
Hodgson, G.M., 2006. What are institutions? J. Econ. Issues 40 (1), 1–25.
Hoffmann, J., Glückler, J., Khuchua, T., Lachapelle, F., Lazega, E., & Zipf, M. (2024). Legalist and realist decision-making in patent law: Validity cases in Germany. *SocArXiv*, Article p354r. https://ideas.repec.org//p/osf/socarx/p354r.html.
Jacobsmeyer, B., 2018. Forum Shopping in Patent cases: Lessons for the Unified Patent Court Notes. Michigan Technology Law Review 25 (1), 131–162.
Khuchua, T., 2019. Different 'Rules of the Game. Journal of Intellectual Property, Information Technology and E-Commerce Law 10 (2), 15.
Kymäläinen, P., 2025. Legal geography II: the possibilities and disruptions of place. Prog. Hum. Geogr. 03091325251320244. https://doi.org/10.1177/03091325251320244.
Lawrence, T., Suddaby, R., 2006. Institutions and institutional work. In: Clegg, S.R., Hardy, C., Lawrence, T., Nord, W. (Eds.), *The SAGE Handbook of Organization Studies*. Sage, pp. 215–254.
Leebron, D.W., 1996. Claims for harmonization: a theoretical framework. Canadian Business Law Journal 27 (1), 63–107.
Lynch, K.J., 2014. The lock-in effect of preliminary injunctions. Florida Law Review 66 (2), 779–821.
Marshall, H., 2000. The enforcement of patent rights in Germany. International Review of Intellectual Property and Copyright Law 31 (6), 646–669.
Moore, K.A., 2001. Forum shopping in patent cases: does geographic choice affect innovation? Journal of the Patent and Trademark Office Society 83 (8), 558–603.
North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge University Press.
OLG München. (2019). *Urteil vom 12.12.2019—6 U 4009/19*. https://openjur.de/u/2277050.html.
North, D.C., 2005. Institutions and the process of economic change. Manag. Int. 9 (3), 1–7.
Ostrom, E., 2005. *Understanding Institutional Diversity*. Princeton University Press.
Rädiker, S., & Kuckartz, U. (2019). *Analyse qualitativer Daten mit MAXQDA: Text, Audio und Video*. Springer. Doi: 10.1007/978-3-658-22095-2.
Rubin, E., Feeley, M., 1995. Creating legal doctrine. South. Calif. Law Rev. 69 (6), 1989–2038.
Rupprecht, B., 2009. How to protect your ip rights at trade fairs. Manag. Intellect. Prop. 187, 18.
Scott, W.R., 2003. Institutional carriers: reviewing modes of transporting ideas over time and space and considering their consequences. Ind. Corp. Chang. 12 (4), 879–894.
Seron, C., Silbey, S.S., 2004. Profession, science, and culture: an emergent canon of law and society research. In: *The Blackwell Companion to Law and Society*. Blackwell Publishing, pp. 30–59.
Smits, J.M., 2017. What is legal doctrine? on the aims and methods of legal-dogmatic research. In: *Rethinking Legal Scholarship: A Transatlantic Dialogue*. Cambridge University Press, pp. 207–228.
Stierle, M., 2023. The rise of the Unified Patent Court: a new era. IIC - Int. Rev. Intellect. Prop. Compet. Law 54 (5), 631–633. https://doi.org/10.1007/s40319-023-01342-7.
Streeck, W., Thelen, K., 2005. *Beyond Continuity: Institutional Change in Advanced Political Economies*. Oxford University Press.
Tiller, E.H., Cross, F.B., 2006. What is legal doctrine? Northwest. Univ. Law Rev. 100 (1), 517–534.
Tsang, K.F., Lee, 2019. Unfriendly choice of law in FRAND. Virginia Journal of International Law 59 (2), 220–304.
Ullrich, H., 2023. The Unified Patent Court. Yearbook of European Law 42, 135–168. https://doi.org/10.1093/yel/yead007.
Unified Patent Court. (2025). *Case Load of the Court since Start of Operation in June 2023. Update by 1 January 2025*. Unified Patent Court. https://www.unified-patent-court.org/en/news/case-load-court-start-operation-june-2023-update-1-january-2025-0.
VERBI Software. (2021). *MAXQDA* (Version MAXQDA 2022) [Computer software]. VERBI. https://www.maxqda.com/.
Volkmann, U., 2005. Veränderungen Der Grundrechtsdogmatik. Juristenzeitung 60 (6), 261–271.
Zilber, T. B. (2013). Institutional logics and institutional work: Should they be agreed? In M. Lounsbury & E. Boxenbaum (Eds.), *Institutional Logics in Action, Part A: Vol. 39 Part A* (pp. 77–96). Emerald Group Publishing Limited. Doi: 10.1108/S0733-558X(2013)0039AB007.