

FORUM SHOPPING IN PATENT CASES: LESSONS FOR THE UNIFIED PATENT COURT

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Despite the United Kingdom's pending high-profile exit from the EU and rising Euroscepticism across the continent, the EU presses forward with its plans to unify patent litigation under a single court system. That new system—the Unified Patent Court—seeks to promote “uniformity of the Union legal order and the primacy of European Union law.” In pursuit of this goal, the UPC includes a number of provisions seeking to curb a rising problem facing jurisdictions across the globe: forum shopping in patent cases. The current European system and the U.S. system have seen a rise in forum shopping over the past couple decades, leading to increased appeals, raised litigation costs, reduced certainty for litigants, and the over-concentration of patent cases in just a few forums. This rise of forum shopping in the U.S. and Europe provides valuable lessons for the UPC's proponents as the UPC moves toward implementation. A comparison of the UPC with the U.S. and European systems reveals that the UPC, in its present form, will likely face similar problems with forum shopping. But several changes to the UPC suggested in this paper will allow that court to better combat forum shopping.

INTRODUCTION

Despite Brexit and rising Euroscepticism, many EU member states seem committed to greater unification in at least one area: patent law. In 2013, twenty-five EU member states agreed to create a unified patent court to hear disputes regarding already-existing European Patents and newly created Unitary Patents, a new type of patent that grants pan-European protection for inventors.¹ The 2013 Unified Patent Court (UPC) agreement constituted a firm starting point for the court's creation, but the contracting states

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1. Council agreement on a Unified Patent Court, 2013 O.J. (C 175) [hereinafter: UPC Agreement].

must ratify the agreement before it goes into effect.² As of August 2018, most contracting states have ratified the treaty, including the UK.³

Nevertheless, ratification delays have stymied the implementation of the treaty. The UK, Germany and France must all ratify the treaty before it goes into effect.⁴ Among these three countries, Germany remains as the sole holdout. Germany's delay is partially attributable to a German lawyer's recent constitutional challenge to Germany's participation in the UPC.⁵ Pending that appeal, the German Constitutional Court has asked the German president to hold off on ratifying already-passed legislation to implement the UPC in Germany.⁶ The German constitutional challenge and Brexit have created some uncertainty regarding the future of the UPC, but many observers remain optimistic that the court will enter into force shortly.⁷

While the UPC has struggled in fits and starts toward implementation over the past few years, the United States patent system has undergone a number of significant developments. Perhaps most notably, Congress passed its first major patent reform bill in decades in 2011: the America Invents Act (AIA).⁸ The Act's two major reforms included a transition from a "first-to-invent" system to a "first-to-file" system and the introduction of new post-grant administrative procedures to expedite the invalidation of improperly granted patents after issuance.⁹ Concurrently, major Supreme Court cases have reshaped patent law in significant ways. Over the past few years, the Court has addressed a variety of patent topics including the patent-

2. See, *id.* at art 89.

3. European Council, Agreement on a Unified Patent Court (UCP), <http://www.consilium.europa.eu/en/documents-publications/treaties-agreements/agreement/?id=2013001&DocLanguage=en> (last visited Oct. 21, 2018); Press Release, Unified Patent Court, Ratification Update (Apr. 27, 2018), <https://www.unified-patent-court.org/news/ratification-update>.

4. See UPC Agreement, *supra* note 1, at art. 89 (requiring ratification by the three contracting states with the highest number of European Patents).

5. Thorsten Bausch, *UPC – Finally Some News from the German Federal Constitutional Court*, KLUWER PATENT BLOG (Aug. 16, 2017), <http://patentblog.kluweriplaw.com/2017/08/16/upc-finally-some-news-from-the-german-federal-constitutional-court/>.

6. Thorsten Bausch, *Breaking News: Germany's Federal Constitutional Court pulls Emergency Break on UPC Agreement*, KLUWER PAT. BLOG (June 13, 2017), <http://patentblog.kluweriplaw.com/2017/06/13/breaking-news-germanys-federal-constitutional-court-pulls-emergency-break-upc-agreement/>.

7. Catherine Saez, *EU Commission Position Paper On IP And Brexit: Trademarks, Designs, GIs*, INTELL. PROP. WATCH (Sept. 12, 2017), www.ip-watch.org/2017/09/12/eu-commission-position-paper-ip-brex-it-covers-trademarks-designs-gis/; Chris de Mauny, *Conference Message Optimistic about UPC/UP System's Future*, BIRD & BIRD (July 4, 2018), <https://www.twobirds.com/en/news/articles/2018/uk/conference-message-optimistic-about-upc-up-systems-future>.

8. JOHN VILLASENOR, BROOKINGS, THE COMPREHENSIVE PATENT REFORM OF 2011: NAVIGATING THE LEAHY-SMITH AMERICA INVENTS ACT (No. 184, Sept. 2011), https://www.brookings.edu/wp-content/uploads/2016/06/09_patents_villasenor.pdf.

9. Summary of the America Invents Act, AM. INTELL. PROP. L. ASS'N (Aug. 27, 2018), <https://www.aipla.org/detail/advocacy-article/Summary-of-the-America-Invents-Act>.

eligibility of business methods and software,¹⁰ antitrust violations in patent settlements,¹¹ and proper venue in patent cases.¹² These developments have been hugely controversial. Divides have emerged primarily between supporters of stronger patent rights and those who believe overly strong patent rights and subsequent patent litigation have stymied innovation in the United States.¹³

Amidst these changes, one factor has shaped the fortunes of litigants perhaps more than any other: the availability of favorable forums. Litigants' overwhelming preference for certain forums in patent cases reveals the actual or at least perceived importance of favorable forums. For instance, patent holders began flocking to the Eastern District of Texas in the early 2000s as it developed a reputation as a favorable forum for plaintiffs.¹⁴ In recent years, that district heard roughly one third of all U.S. patent cases every year, but a recent Supreme Court case narrowly construing the patent forum venue rules may significantly reduce the number of cases heard there in the coming years.¹⁵

But the AIA turned the tides in favor of repeat patent defendants, giving them a new, more favorable forum at the United States Patent and Trademark Office (USPTO) to counteract the effect of the Eastern District of Texas. Patent defendants now have the opportunity to seek a stay of infringement proceedings in district court to seek invalidation of the litigated patent before the USPTO primarily through a process called *inter partes* review.¹⁶ Defendants have exercised that right extensively¹⁷ and often with

10. Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014).

11. F.T.C. v. Actavis, Inc., 570 U.S. 136 (2013).

12. TC Heartland LLC v. Kraft Foods Grp. Brands, 137 S. Ct. 1514 (2017).

13. Compare Rob Sterne & Gene Quinn, *PTAB Death Squads: Are All Commercially Viable Patents Invalid?*, IP WATCHDOG (Mar. 24, 2014), <http://www.ipwatchdog.com/2014/03/24/ptab-death-squads-are-all-commercially-viable-patents-invalid/id=48642/>, with Joe Mullin, *Supreme Court Will Weigh in on Troll-Killing Patent-Review Process*, ARSTECHNICA (June 13, 2017), <https://arstechnica.com/tech-policy/2017/06/supreme-court-will-weigh-in-on-troll-killing-patent-review-process/>.

14. See Andrei Iancu & Jay Chung, *Real Reasons the Eastern District of Texas Draws Patent Cases – Beyond Lore and Anecdote*, 14 SMU SCI. & TECH. L. REV. 299, 299-300 (2011).

15. Brian J. Love & James Yoon, *Predictably Expensive: A Critical Look at Patent Litigation in the Eastern District of Texas*, 20 STAN. TECH. L. REV. 1, 6, (2017); see Joe Mullin, *Many Patent-holders Stop Looking to East Texas Following Supreme Court Ruling*, ARSTECHNICA (Oct. 13, 2017), <https://arstechnica.com/tech-policy/2017/10/patent-cases-in-east-texas-plunge-more-than-60-percent/>.

16. 35 U.S.C. § 315(b) (2012) (granting defendants the option to pursue *inter partes* review before the USPTO up to one year after being served with a patent infringement complaint in district court).

17. Jim Warriner, *Measuring the Success of Motions to Stay Pending IPR*, LAW360 (June 6, 2017), <https://www.law360.com/articles/928654/measuring-the-success-of-motions-to-stay-pending-ipr>.

great success: the USPTO seems more willing to invalidate patents than district courts.¹⁸

The prevalence of forum shopping has significantly shaped the outcomes of U.S. patent cases in recent years, perhaps more than any other factor alone. And this issue is not uniquely American: Europe has seen a similar rise in forum shopping and concentration of cases. Forty percent of all patent cases in Europe are heard in a single country—Germany—despite only 11% of European patents originating in Germany.¹⁹ The American and European experience with forum shopping provides several lessons for EU members as they seek to unify their patent system under the Unified Patent Court.

But why does forum shopping matter, and why should the UPC seek to avoid it? Perhaps most notably, the UPC explicitly aims to curb forum shopping by its own terms. The UPC Agreement notes that “significant variations between national court systems are detrimental to innovation,” and the court aims to “enhance legal certainty.”²⁰ The UPC also seeks to promote “uniformity of the Union legal order and the primacy of European Union law.”²¹ Thus, by its own terms, the UPC seeks to promote unified law and enhance legal certainty by, in part, reducing forum shopping.

Furthermore, sound policy justifies the UPC’s goal of reduced forum shopping. First, the primary policy justification for a patent system—creating an incentive to invest in research and development—greatly weakens if the scope of patent rights becomes uncertain or unreliable.²² And patent rights become uncertain when different courts within the same court system deliver different results regarding similar patents or even the same exact patent. Second, prolific forum shopping may lead to courts “competing” for litigants in patent cases, a frequent critique of the Eastern District of Texas’s practices in the United States.²³ This competition may unfairly benefit plaintiffs because courts may “court” plaintiffs who ultimately choose the venue for the dispute.²⁴ Third, forum shopping leads to a rise in litigation

18. Samson Vermont, *IPR Statistics Revisited: Yep, It’s a Patent Killing Field*, PATENTATTORNEY.COM (Feb. 8, 2017), <https://www.patentattorney.com/ipr-statistics-revisited-yep-its-a-patent-killing-field/>.

19. Katrin Cremers et al., *Patent Litigation in Europe*, 44 EUR. J. L. ECON. 1, 26 tbl.5 (2017); *European Patent Office Annual Report 2017 on European Patent Filings*, (2017), <https://www.epo.org/about-us/annual-reports-statistics/annual-report/2017/statistics/patent-filings.html#tab3> (last visited Jul. 3, 2018).

20. UPC Agreement, *supra* note 1, at 1.

21. *Id.*

22. See Kimberly A. Moore, *Forum Shopping in Patent Cases: Does Geographic Choice Affect Innovation*, 79 N.C. L. REV. 889, 924–27 (2001); see also Scott Cole, *The Rise and Fall of Patent Law Uniformity and the Need for a Congressional Response*, 81 CHL-KENT L. REV. 713, 716–17 (2006).

23. See J. Jonas Anderson, *Court Competition for Patent Cases*, 163 U. PA. L. REV. 631, 678–80 (2015).

24. *Id.*

and appeals regarding not only the merits of the case but also procedural issues such as improper venue and jurisdictional challenges.²⁵ The availability of multiple forums may have its benefits as well, such as the promotion of legal innovation.²⁶ Nevertheless, rising litigation costs and heightened legal uncertainty tend to undermine the central policy justification for a patent system. Thus, forum shopping should be viewed skeptically, particularly in patent cases.

Comparing forum shopping across jurisdictions requires consideration of the two necessary ingredients for forum shopping to flourish: the *opportunity* to forum shop and the *motivation* to do so. The UPC, somewhat surprisingly, greatly enhances the *opportunity* to forum shop within the new system compared to the current European system. But the UPC simultaneously eliminates many of the *motivations* to forum shop. Consequently, the UPC as it currently stands will likely have a mixed impact on forum shopping in European patent cases.

But the UPC can do better. Several changes to the UPC would decrease forum shopping once the EU establishes the court. These changes are informed by the U.S.'s experience with forum shopping and Europeans' experience with forum shopping under their current system. Part II of this paper briefly compares substantive and procedural patent law in broad strokes among the three relevant systems: the U.S. system, the current European system, and the proposed UPC. Part III analyzes how the U.S. and Europe have addressed both the *opportunity* and *motivation* to forum shop and compare the UPC's proposed ways of addressing this issue. Part III also proposes several changes to the UPC that would better combat forum shopping.

I. OVERVIEW OF PATENT LAW UNDER U.S. LAW, EXISTING EUROPEAN LAW, AND THE PROPOSED UPC

This section will provide a brief overview of patent law principles and the differences among the U.S. system, the current European system, and the proposed UPC. First, this section provides a general overview of patent procurement and enforcement as it applies across most jurisdictions. Second, this section contains a more narrow overview of some key differences between patent procurement and enforcement under U.S. law, current EU law, and the proposed UPC.

25. See Cole, *supra* note 22, at 717-18.

26. See Craig Allen Nard & John F. Duffy, *Rethinking Patent Law's Uniformity Principle*, 101 NW. U. L. REV. 1619, 1650-51 (2007).

A. Obtaining and Enforcing Patents

Once granted, patents generally give the inventor the right to exclude others from using, making, offering to sell, selling, or importing the invention disclosed in the patent in the relevant jurisdiction.²⁷ Notably, patents grant a right to *exclude* others from making, using, or selling an invention, not a right to practice the invention.²⁸ In fact, patentees may be prevented from practicing their own patented invention due to a broader patent that covers some aspect of their invention.²⁹ This right to exclude is territorial: a U.S. patent only grants the right to exclude others from making, using, importing, or selling the invention within the United States.³⁰ Thus, inventors seeking patent protection in different countries need to obtain patents in each of those countries.

So, how do inventors obtain a patent? Generally, inventors must apply for a patent in the country where they seek protection through a process called patent prosecution. Patent prosecution generally involves a “back and forth” debate between the applicant and the patent office regarding whether the patent should be granted and how broad the issued patent can be.³¹

This back-and-forth debate centers around whether the applicant’s invention, as disclosed in her application, is patentable. Most jurisdictions adhere to general principles of patentability. For instance, an invention must be “novel,” meaning it cannot have been disclosed to the public previously (subject to some exceptions).³² During prosecution, the relevant patent office will assess novelty by comparing the applicant’s invention with the prior art—essentially any publicly available information potentially pertaining to the invention that predates the inventor’s application or date of invention.³³ Patents also cannot be “obvious” extensions of the prior art and must have an “inventive step” to distinguish themselves from prior art.³⁴ Also, pa-

27. See, e.g., 35 U.S.C. § 154 (2012); Wolfgang Kellenter & Benedikt Migdal, *Patent Litigation in Germany: Overview*, THOMAS REUTERS PRACTICAL LAW (Mar. 1, 2017), <https://uk.practicallaw.thomsonreuters.com/5-622-3450>.

28. See, e.g., 35 U.S.C. § 154 (2012).

29. Robert P. Merges, *A Brief Note on Blocking Patents and Reverse Equivalents: Biotechnology as an Example*, 73 J. PAT. & TRADEMARK OFF. SOC’Y 878, 878–89 (1991).

30. 35 U.S.C. § 271(a) (2012).

31. See Timothy P. McNulty, *Quality Initiatives and Pilot Programs that Streamline Patent Prosecution at the United States Patent and Trademark Office*, AM. INTELL. PROP. L. ASS’N (July 13, 2016), <https://www.finnegan.com/en/insights/quality-initiatives-and-pilot-programs-that-streamline-patent.html>.

32. 35 U.S.C. § 102 (2012); European Patent Convention art. 54, Oct. 5, 1973, 1065 U.N.T.S. 255, <https://www.epo.org/law-practice/legal-texts/html/epc/2016/e/ma1.html> [hereinafter: EPC].

33. See *What is Prior Art?*, EUROPEAN PATENT OFFICE (Sept. 15, 2015), <https://www.epo.org/learning-events/materials/inventors-handbook/novelty/prior-art.html>.

34. 35 U.S.C. § 103 (2012) (describing the obviousness requirement under U.S. law); EPC, *supra* note 32, at art. 56 (describing the analogous “inventive step” requirement under EPC law).

tents generally must cover “patentable subject matter” which usually excludes abstract ideas, natural phenomena, and laws of nature.³⁵ These principles of patentability are not exhaustive, and jurisdictions approach some of these principles in slightly different ways. Nevertheless, the general principles of novelty, obviousness, and patentable subject matter are key principles of patentability that span most jurisdictions. If a patentee convinces the relevant patent office that they have overcome these legal hurdles, the office will grant them a patent.

After receiving a patent, patent owners have two primary means of exercising their rights. First, patentees may choose to license their rights to others who wish to practice their invention, generating royalties for the patentee. Second, particularly when license negotiations fail, the patentee can sue an alleged infringer in court. Courts can provide a number of remedies to patent owners including preliminary injunctions,³⁶ permanent injunctions,³⁷ and damages.³⁸

Enforcement comes with risk because patent litigation involves two key questions: is the patent actually *valid* (i.e., did the patent office correctly determine that the invention is patentable?), and, if so, did the defendant *infringe* the patent? Courts, or sometimes administrative bodies,³⁹ can find a patent invalid during the course of infringement litigation. Absent a successful appeal, a ruling of invalidity extinguishes a patentee’s rights completely against any other alleged infringers.⁴⁰ Thus, patent litigation can be a high-risk, high-reward endeavor for plaintiffs.

B. Key Differences Among U.S. Law, Current European Law, and the Proposed UPC

Although the U.S. system, the current European system, and the proposed UPC have similar rules governing patentability of inventions, there are several differences. In particular, several key procedural differences significantly affect the course of patent prosecution and patent litigation under these three regimes.

35. Alice Corp. v. CLS Bank Int’l, 134 S. Ct. 2347, 2354 (2014) (explaining this requirement under U.S. law). *See also* EPC, *supra* note 32, at art. 53 (explaining this requirement under EPC law).

36. *See* 35 U.S.C. § 283 (2012).

37. *See id.*

38. 35 U.S.C. § 284 (2012).

39. For example, anyone in the U.S. can challenge the validity of an issued patent before the USPTO in an inter partes review (IPR) hearing. IPR rulings are subject to judicial review by the Federal Circuit Court of Appeals. *See* 35 U.S.C. § 314 (2012).

40. 35 U.S.C. § 287(b) (2012); *Commil USA, LLC v. Cisco Systems, Inc.*, 135 S.Ct. 1920, 1929 (2015) (“Invalidity is an affirmative defense that ‘can preclude enforcement of a patent against otherwise infringing conduct.’”) (quoting 6A Chisum on Patents § 19.01, p. 19-5 (2015)).

Patent applicants in Europe currently have three routes to obtain patent rights under three respective sources of relevant law: the European Patent Convention, national law, and the Patent Cooperation Treaty.⁴¹ First, the European Patent Convention is the most significant legal framework covering the grant of patents in Europe. The Convention covers thirty-eight different countries—ten more countries than those belonging to the EU.⁴² The Convention provides a single examination procedure for applicants to obtain “European Patents.”⁴³ During this process, an inventor sends the European Patent Office a single application and indicates in which countries she seeks patent protection.⁴⁴ A single office examines the patent and determines whether it should be granted.⁴⁵ If granted, the patentee essentially receives separate patents for each of the indicated countries in her application, and each patent can be enforced separately in each of those countries.⁴⁶ Each of those countries is required to grant these European Patents the same rights during an infringement proceeding as a national patent procured from their respective national patent offices.⁴⁷ Second, inventors can seek a single patent by applying to a national patent office in the relevant country.⁴⁸ Finally, inventors can seek protection in European countries and other countries (such as the United States) under a lengthy, complicated process pursuant to the Patent Cooperation Treaty, which often overlaps or closely interacts with applications under the EPC.⁴⁹

Patent litigation in Europe—unlike prosecution—currently remains within the province of each country’s respective court system with few exceptions.⁵⁰ First, national courts oversee infringement and validity actions for all national patents. Second, national courts have exclusive jurisdiction over the validity of European Patents issued for their respective jurisdic-

41. Kellenter & Migdal, *supra* note 27, at 3–4.

42. *Member States of the European Patent Organization*, EUROPEAN PATENT OFFICE, <https://www.epo.org/about-us/foundation/member-states.html> (last visited Sept. 28, 2017); *Countries in the EU and EEA*, GOV.UK, <https://www.gov.uk/eu-eea> (last visited Sept. 28, 2017).

43. European Patent Office, *Guide for Applicants: How to Get a European Patent*, at A.II. (June 2018), <https://www.epo.org/applying/european/Guide-for-applicants/html/e/index.html>.

44. *Id.* at A.IV.

45. *See id.*

46. *Id.* at A.II.

47. EPC, *supra* note 32, at art. 2(2).

48. *See, e.g.*, European Patent Office, *supra* note 43, at A.IV.

49. *See id.*

50. Patents can be challenged before the European Patent Office for a brief time after issuance. These proceedings only cover a limited range of issues related to patentability. After this time, however, validity issues must be litigated in national courts. EPC, *supra* note 32, at art. 99.

tion.⁵¹ Consider a patentee who has a European Patent that indicates Germany, the UK, and France. No court can currently litigate the validity of the entire “bundle of rights,” but the German courts have exclusive jurisdiction over the validity of the German patent that issued from this bundle of rights. Consequently, a German court may invalidate the patent, but in the UK and France—even with identical language—the patent might remain in effect. Thus, patent litigation in Europe remains incredibly fragmented due to the exclusive jurisdiction of national courts over validity actions involving European Patents.

The proposed UPC seeks to completely unify the European system of both prosecuting and litigating patents. To further unify patent prosecution, the UPC will create a new patent right called the “Unitary Patent.”⁵² These Unitary Patents, when granted, will give the patentee protection in all of the member states party to the Unified Patent Court Agreement.⁵³ To unify the fragmented patent litigation system, the Unified Patent Court will immediately have exclusive jurisdiction over these Unitary Patents and, eventually, all European Patents as well.⁵⁴ Individual national patents will still fall under the jurisdiction of each member state’s own courts.⁵⁵

In the United States, inventors prosecute patents before the USPTO. Patent holders can sue alleged infringers in any district court where venue and jurisdiction are proper.⁵⁶ Since the passage of the America Invents Act, anyone can challenge the validity of an issued patent in a number of administrative, quasi-judicial proceedings before the patent office.⁵⁷ Issues raised in these proceedings are subject to estoppel in later district court actions, limiting petitioners’ ability to re-litigate validity issues after one of these administrative decisions.⁵⁸ And district courts will often stay pending infringement actions if the defendant submits a timely petition for one of these administrative hearings.⁵⁹ Meanwhile, patentees may also sue before the International Trade Commission to block importation of infringing goods.⁶⁰ All appeals of patent cases before the ITC, district courts, and the USPTO head to the Federal Circuit Court of Appeals which has exclusive appellate jurisdic-

51. Regulation 1215/2012, of the European Parliament and of the Council of 12 Dec. 2012 on Jurisdiction and the Recognition and Enforcement of Judgements in Civil and Commercial Matters, art. 24(4), 2012 O.J. (L 351) 1, 18 [hereinafter Brussels I].

52. See Regulation 1257/2012, of the European Parliament and the Council of 17 Dec. 2012 on Implementing Enhanced Cooperation in the Area of the Creation of Unitary Patent Protection, art. 19, 25, 2012 O.J. (L 361) 1, 3–4.

53. *Id.* at art. 5.

54. UPC Agreement, *supra* note 1, at art. 3.

55. *Id.* at art. 31(2).

56. See 28 U.S.C. §1400(b) (2012); Fed. R. Civ. P. 4(k)(1)(C).

57. See AM. INTELL. PROP. L. ASS’N *supra* note 9; *Trials*, USPTO (Sept. 6, 2018, 2:18 PM), <https://www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/trials>.

58. See 35 U.S.C. §315(e) (2012).

59. See Warriner, *supra* note 17.

60. See 19 U.S.C. §1337 (2012).

tion over these matters.⁶¹ Thus, the U.S. has a unified patent prosecution system but a diverse and somewhat fragmented set of courts and administrative bodies that oversee patent disputes.

On a broad level, the three systems are quite similar. Regarding prosecution, the current European system and the U.S. system have similar processes, but European applicants have slightly more territorial options (e.g., pursuing national patents or a European Patent). The UPC would add one more option—the Unitary Patent that has effect in all member states. On the litigation side, notable differences exist. U.S. litigation occurs in federal district courts, the USPTO, the ITC, and the Federal Circuit. In Europe, however, all litigation currently happens in the various national courts of countries with no single unifying court of appeals. The UPC aims to unify European patent litigation into a single court system. The remainder of this paper will address how well the proposed UPC will unify European patent litigation and achieve one of its stated aims of limiting forum shopping.

The chart below illustrates the aforementioned key similarities and differences between these three systems.

61. 28 U.S.C. § 1295(a) (2012).

System:	U.S. System	Current European System	Proposed UPC System
Types of patents available	U.S. utility patents issued by the USPTO.	<p>European Patents: A “bundle of national patents” enforceable in the designated countries. Issued by the EPO.</p> <p>National Patents: A patent only enforceable in a single country. Issued by the individual country’s patent office.</p>	<p>European Patents: Prosecution process will remain largely unchanged.</p> <p>National Patents: The UPC will not change National Patents.</p> <p>Unitary Patent: A new type of patent with unitary effect across all member states of the UPC.</p>
Forums for litigation	<p>1. U.S. district courts oversee patent infringement suits.</p> <p>2. The International Trade Commission addresses infringement suits for imported goods.</p> <p>3. Under the America Invents Act, the USPTO oversees several invalidation proceedings that may be concurrent with pending district court litigation.</p>	<p>1. National courts generally oversee litigation over European Patents and National Patents issued in that country.</p> <p>2. The EPO conducts invalidation hearings for a short time after European Patents are issued.</p>	<p>1. National courts will still oversee litigation concerning National Patents. They will also have jurisdiction over European Patents temporarily during a transition period.</p> <p>2. The EPO will still conduct invalidation hearings during the transition period.</p> <p>3. The new Unified Patent Court will have exclusive jurisdiction over the new Unitary Patent. The UPC will also have exclusive jurisdiction over European Patents after a transition period.</p>
Appeals	All patent-related appeals head to the Court of Appeals for the Federal Circuit and, rarely, the U.S. Supreme Court .	Appeals generally ascend within each national court system.	Appeals will be heard before a single court of appeal that is part of the Unified Patent Court.

II. FORUM SHOPPING: OPPORTUNITY AND MOTIVATION UNDER THE THREE SYSTEMS

Forum shopping proliferates when litigants have the requisite *opportunity* and *motivation*. Plaintiffs (and sometimes defendants) need courts to exercise permissive jurisdictional rules, creating an *opportunity* to forum shop. Litigants must also expect a different outcome (either on the merits or procedurally) across the available jurisdictions—creating a *motivation* to forum shop. With a strong opportunity and motivation to forum shop, litigants will exercise their options to their own advantage.

First, opportunity to forum shop flows from the jurisdiction and venue rules within a legal system. Jurisdiction and venue may be limited by a sovereign's constitution, treaties, statutes, or case law. Second, three core incentives appear to drive litigants' motivation to forum shop in patent cases: (1) different applications of substantive law; (2) different applications of procedural law; and (3) variability in the expertise of a particular court.

The current U.S. and European systems address the opportunity and motivation to forum shop in different ways, leading to varying levels of forum shopping in each jurisdiction. These different results provide a guide to how well the proposed UPC will address forum shopping and where it might improve.

A. *Opportunity to Forum Shop: Rules for Venue and Jurisdiction*

Litigants cannot forum shop if their chosen forum lacks jurisdiction or is an improper venue for the case. Thus, venue and jurisdictional rules are the chief obstacle to forum shopping. Permissive rules make forum shopping easier; strict rules make forum shopping harder.

1. The U.S. System

In the U.S., plaintiffs generally may sue defendants in a court that has general personal jurisdiction over the defendant and subject matter jurisdiction over the case.⁶² Courts located in a particular state—whether they are federal or state courts—have general personal jurisdiction over legal persons domiciled there.⁶³ And companies are domiciled in a state if they are incorporated in that state, have a principal place of business in that state, or are “at home” in that state.⁶⁴ General jurisdiction in the U.S. under the aforementioned principles, particularly after the 2014 decision in *Daimler AG v. Bauman*, is quite limited, however. In that case, the Court seemed to

62. All U.S. district courts have subject matter jurisdiction over patent cases. 28 U.S.C. § 1338(a) (2012).

63. *Daimler AG v. Bauman*, 571 U.S. 117, 137 (2014).

64. *Id.*

significantly narrow the “at home” prong of general jurisdiction.⁶⁵ As a consequence, plaintiffs have few options when suing under theories of general jurisdiction and can primarily only sue where corporations are headquartered or incorporated.⁶⁶

But plaintiffs have much greater forum shopping opportunities under theories of specific jurisdiction. As the U.S. has crafted its due process limitations on specific jurisdiction over the past half-century, the opportunity to forum shop in patent cases has exploded. To confer specific jurisdiction in a patent case, the federal court must first determine whether jurisdiction falls within the long-arm statute of the state where the court sits.⁶⁷ Many of these long-arm statutes, however, assert jurisdiction to the fullest extent allowable under the Constitution. Thus, the Due Process Clauses of the Fifth and Fourteenth Amendments—and corresponding “minimum contacts” case law—are generally the primary weapon defendants can use to defeat jurisdictional claims.⁶⁸

This weapon is quite weak in patent cases, however. Under Supreme Court caselaw, a defendant’s single contact with a forum can be sufficient to establish jurisdiction if (1) the defendant “purposefully availed” itself of the forum, (2) the contact is sufficiently related to the plaintiff’s claim, and (3) the exercise of jurisdiction would be “reasonable.”⁶⁹ In patent cases, a single act of alleged direct infringement, such as a single sale in the forum or appearance at trade shows, typically confers jurisdiction.⁷⁰ Moreover, under the “stream of commerce” doctrine, manufacturers typically fall within the jurisdiction of the downstream forum where the products are sold, even if the manufacturer did not directly sell products in that forum.⁷¹ Consequent-

65. *See id.*

66. *See id.*

67. FED R. CIV. P. 4(K)(1)(A).

68. *Int’l Shoe Co. v. Washington*, 326 U.S. 310, 316 (1945) (establishing the “minimum contacts” jurisprudence for specific jurisdiction that has evolved over the past seventy years).

69. *Hanson v. Denckla*, 357 U.S. 235, 253 (1958) (elucidating the “purposeful availment” requirement); *McGee v. Int’l Life Ins. Co.*, 355 U.S. 220, 223 (1957) (allowing jurisdiction where the defendant had a single contact with the forum state); *Asahi Metal Indus. Co. v. Super. Ct. of Cal.*, 480 U.S. 102, 113-14 (1987) (elucidating the “fairness factors” relevant to whether an assertion of jurisdiction is “reasonable”).

70. *See Patent Rights Prot. Grp., LLC v. Video Gaming Techs., Inc.*, 603 F.3d 1364, 1370-71 (Fed. Cir. 2010) (vacating district court’s finding of no jurisdiction and suggesting that use of an allegedly infringing device at a trade show by out-of-state defendants may be enough to confer jurisdiction); Nathaniel Bruno, *Assessing Personal Jurisdiction in Patent Litigation Actions*, INTELLECTUAL PROPERTY & TECH. L. J. Nov. 2007 at 10-15, https://www.sheppardmullin.com/media/article/464_Assessing%20Personal%20Jurisdiction%20in%20Patent%20Litigation%20Actions%20_Bruno_.pdf.

71. *See, e.g., Beverly Hills Fan Co. v. Royal Sovereign Corp.*, 21 F.3d 1558, 1564-65 (Fed. Cir. 1994) (conferring jurisdiction in a patent case under the Supreme Court’s “stream of commerce” jurisprudence).

ly, jurisdiction generally exists where an act of alleged infringement occurred either directly or indirectly.

In the 2017 *TC Heartland* case, however, the Supreme Court curbed patent plaintiffs' opportunity to forum shop not on jurisdictional grounds but on *venue* grounds. Since the late 1980s, the Federal Circuit had interpreted the federal venue statute for patent cases as a complement to the venue statute for other cases.⁷² Consequently, venue was proper wherever personal jurisdiction existed, and generally improper venue issues were not litigated. *TC Heartland* changed these notions of proper venue when the Supreme Court held that the patent venue statute stands on its own.⁷³ As a consequence, venue in patent cases now requires (1) acts of infringement *and* (2) "a regular and established place of business."⁷⁴ What constitutes a "regular and established place of business" has been heavily litigated in the short time since the case was decided. The Federal Circuit has already provided some guidance, most critically that venue requires a physical presence in the forum.⁷⁵ Surely, the Federal Circuit will further refine this test with the lower courts over the coming years. But the message is clear. Forum shopping has been problematic—particularly in the Eastern District of Texas—and the higher courts are seeking to curtail forum shopping primarily in that district.

In short, the U.S.'s jurisdictional rules are quite permissive in patent cases. Thus, over the past few decades, forum shopping has flourished. *TC Heartland* seeks to curb this development. As a consequence, many U.S. patent plaintiffs now have fewer forum choices, but *TC Heartland's* full effects on forum shopping remain to be seen.

2. The Current European System

At first blush, the EU has a similarly permissive view of jurisdiction. Like in the U.S., plaintiffs can sue EU persons and legal entities at their place of domicile under theories of general jurisdiction.⁷⁶ EU companies have domiciles at their place of incorporation, their seat, and their principal place of business.⁷⁷ Plaintiffs may also sue under permissive views of specific jurisdiction. In tort cases—which also encompass patent infringement cases for jurisdictional purposes—plaintiffs may sue at the "place where the

72. *VE Holding Corp. v. Johnson Gas Appliance Co.*, 917 F.2d 1574, 1584 (Fed. Cir. 1990).

73. *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1520 (2017).

74. *Id.*; 28 U.S.C. § 1400(b) (2012).

75. *In re Cray Inc.*, 871 F.3d 1355, 1362 (Fed. Cir. 2017), *transferred sub nom.* *Raytheon Co. v. Cray, Inc.*, No. 18-cv-318-wmc, 2018 U.S. Dist. LEXIS 92922 (W.D. Wis. June 1, 2018).

76. *See Brussels I*, *supra* note 51, at art. 63(1).

77. *Id.*

harmful event occurred or may occur.”⁷⁸ Selling an allegedly infringing product in a jurisdiction should generally be sufficient to confer jurisdiction in the EU.⁷⁹ Thus, on its face, EU law takes an equally permissive view of jurisdiction compared to the U.S. and consequently creates a wide opportunity for forum shopping.

Nevertheless, two fairly strong limiting principles curb forum shopping in European patent cases: the *Shevill* doctrine and the territoriality of invalidity proceedings for European Patents. First, the *Shevill* case established a damages rule that limits the feasibility of forum shopping. Under that case’s doctrine, defendants may only collect damages accruing in a specific country when suing a defendant in that country based on specific jurisdiction (i.e., the place of alleged infringement).⁸⁰ To collect all damages in a single case, plaintiffs must sue the defendant at its domicile.⁸¹ Thus, plaintiffs have less incentive to forum shop: they can either sue at the defendant’s domicile for a consolidated case or litigate numerous essentially identical cases across all of Europe. Second, when defendants raise an invalidity defense, the country where the patent was issued immediately gets exclusive jurisdiction over the invalidity issue.⁸² This principle generally places the original infringement proceeding on hold until the issuing jurisdiction resolves the validity issue.⁸³

But patent litigants have identified two key loopholes to these doctrines that allow for forum shopping. First, preliminary injunctions (made by plaintiffs/patentees) are not subject to the *Shevill* doctrine, which only covers damages.⁸⁴ Preliminary injunction actions also escape the exclusive invalidity jurisdiction rule because they are considered a “pre-merits” challenge.⁸⁵ Second, declarations of non-infringement do not run afoul of the invalidity jurisdiction rule because the plaintiffs in those cases are the master of their own case. Plaintiffs in these cases, who are typically would-be defendants seeking a declaratory judgment that they are not infringing a competitor, can simply choose not to challenge the validity of the patent in question and keep the case in their selected forum. So, these two powerful remedies remain ripe for forum shopping, and an evaluation of how litigants have exploited these remedies is more thoroughly explored later in this paper.⁸⁶ Litigants have a wide opportunity to forum shop under the current Eu-

78. *Id.* at art. 7(2).

79. See Ralph Minderop et al., *Cross-Border Patent Litigation in Europe: Change Is Coming*, IAM MAGAZINE (June 17, 2015), <https://www.iam-media.com/cross-border-patent-litigation-europe-change-coming>.

80. Case C-68/93, *Shevill v. Presse All. SA*, 1995 E.C.R. I-415, ¶ 33.

81. *Id.*

82. Minderop et al., *supra* note 79.

83. *Id.*

84. *See id.*

85. *See id.*

86. *See infra* Section III.B.ii.2.

ropean system, but the *Shevill* doctrine and the territoriality of invalidity proceedings somewhat limit the feasibility of forum shopping.

3. The UPC and Suggested Changes

In many ways, the UPC's proposed structure greatly expands litigants' opportunity to forum shop. The UPC will have three types of courts: local divisions, regional divisions, and the central division. All member states which desire a local division can establish one under the UPC.⁸⁷ Member states with fewer patent cases may choose to join a neighboring member state and create a "regional division" with competence across both member states.⁸⁸ Finally, a central division will hear cases when no local division is available and under certain circumstances that allow transfer to the central division, such as when a plaintiff brings a case before a regional division and seeks damages across more than three countries.⁸⁹

The UPC retains the traditionally permissive view of jurisdiction that allows plaintiffs to file in the local or regional division of any member state where infringement occurred or "may occur."⁹⁰ And four policies in the proposed UPC either expand the opportunity to forum shop even further or largely retain the current, permissive rules: the UPC (1) greatly diminishes the *Shevill* doctrine for damages in patent infringement cases; (2) continues to allow general jurisdiction over one defendant to confer jurisdiction over all defendants; (3) allows lower courts to invalidate all designations of European patents, even designations outside of the forum's country; and (4) grants lower courts pan-European injunctive power.

First, the UPC greatly diminishes the *Shevill* doctrine for damages. Under that doctrine, current European courts can only grant damages for infringement that occurred within their host member state.⁹¹ But the UPC allows a single local division to grant damages across multiple member states for European patents.⁹² The UPC has one limiting factor: a defendant sued in a *regional* division can request transfer to the central division if infringement occurred in three or more *regional* divisions.⁹³ Inexplicably, the UPC appears to provide no such rule for local divisions, and it is possible that member states may choose to only set up local divisions, rendering this provision moot. Thus, the UPC punches a huge hole in the *Shevill* doctrine.

Second, the UPC allows general jurisdiction over one defendant to confer specific jurisdiction over all other defendants who have a "commercial relationship" with the first defendant and were involved in the "same in-

87. UPC Agreement, *supra* note 1, at art. 7.3.

88. *Id.* at arts. 7(5) and 33(2).

89. *Id.* at art. 33(1)(b)-33(2).

90. *Id.* at art. 33(1)(a).

91. Case C-68/93, *Shevill v. Presse All. SA*, 1995 E.C.R. I-00415, ¶ 33.

92. *See* UPC Agreement, *supra* note 1, at art. 34.

93. *Id.* at art. 33(2).

fringement” as the first defendant.⁹⁴ Even the U.S.’s permissive personal jurisdictional rules require separate analyses for each individual defendant.⁹⁵ Moreover, the UPC’s conflation of general and specific jurisdiction will create ripe opportunities for forum shopping that will not make sense. Imagine a wholesaler incorporated in Greece but with a principal place of business in Germany. Now imagine that a British manufacturer sold the wholesaler allegedly infringing goods that the wholesaler later sold downstream to a retailer who only operates in France. Under the UPC, a plaintiff patentee can sue the British manufacturer and French retailer in Greece *even if they have zero unilateral contacts* with Greece. Their only fault was to do business with a company that happened to incorporate in Greece (but does not operate in Greece). This jurisdictional rule aims to consolidate cases and promote judicial efficiency. But it does so at the expense of fairness and reason in some cases.

Third, after a transitional period, local UPC divisions will have the power to invalidate *all* designations of a European patent.⁹⁶ Currently, plaintiffs may only seek a declaration of invalidity one country at a time.⁹⁷ But granting plaintiffs the ability to extinguish the entire “bundle of rights” in a single forum will create a huge opportunity to seek favorable local divisions.

Finally, also after a transitional period, local UPC divisions can grant pan-European preliminary and permanent injunctions against alleged infringers. Most national courts in Europe today refuse to do that. The higher EU courts have curtailed the Dutch courts’ ability to grant pan-European injunctions over the past few years.⁹⁸ The UPC, by design, grants broad power to the local divisions and, as a consequence, creates the opportunity to forum shop for powerful remedies.

To combat the opportunity to forum shop, the UPC’s drafters should consider (1) retaining the heart of the *Shevill* doctrine, (2) eliminating the jurisdictional “hook” that captures co-defendants who share “commercial relationships,” and (3) limiting the power of local divisions to issue pan-European injunctions.

First, the UPC’s gutting of the *Shevill* doctrine allows for widespread forum shopping within the UPC system, and a single local division can grant pan-European money damages. The *Shevill* doctrine curbs forum

94. *Id.* at art. 33(1)(b).

95. *Calder v. Jones*, 465 U.S. 783, 790 (1984).

96. *See* UPC Agreement, *supra* note 1, at art. 34.

97. *Minderop et al.*, *supra* note 79.

98. *Id.*

shopping in most other cases before EU courts, and patent law likely justifies even stricter controls on the opportunity to forum shop.⁹⁹

Second, the EU rule that allows jurisdiction over one defendant to “stand in” for a co-defendant as long as the defendants share a commercial relationship also unnecessarily promotes the opportunity to forum shop. Although the UPC did not create this rule, its drafters should consider amending it to create stronger protections for defendants with limited connections to forum courts.

Third, allowing local divisions to issue pan-European preliminary injunctions and permanent injunctions will create a huge opportunity to shop for favorable courts which readily issue these remedies. Although improper injunctions may be addressable on appeal, these remedies can inflict massive damage even if issued for a short period of time. For instance, preliminarily enjoining a competitor from making an allegedly infringing product could cripple that competitor even if it is later vindicated on the merits. Thus, the UPC’s drafters should constrain the court system’s jurisdictional rules in the aforementioned ways to limit the opportunity to forum shop.

As demonstrated, the UPC has greatly widened the opportunity for plaintiffs to forum shop. Plaintiffs will no longer face the shackles of territorial invalidity proceedings, the *Shevill* doctrine, or territorial injunctive power. Moreover, plaintiffs will continue to enjoy permissive rules on personal jurisdiction and expansive jurisdiction in cases of multiple defendants. But these provisions do not guarantee that forum shopping will occur. Although these provisions grant litigants more forum choices, one question remains: will they exercise that choice?

B. Motivation to Forum Shop

Under both the United States and European systems, two jurisdictions have emerged as the dominant patent forums within those systems. In the United States, the Eastern District of Texas reigns supreme, hearing more than a third of all patent suits in the United States (with one judge hearing a quarter of all patent cases).¹⁰⁰ In Europe, Germany dominates, hearing roughly two-thirds of all patent cases in Europe.¹⁰¹

What explains plaintiffs’ overwhelming preference for the Eastern District of Texas and Germany, respectively? A number of factors likely explain litigants’ strong motivation to shop for these two fora: (1) the courts’

99. See *supra* Section I, at 5–6 (“First, the primary policy justification for a patent system—creating an incentive to invest in research and development—greatly weakens if the scope of patent rights becomes uncertain or unreliable”).

100. Love & Yoon, *supra* note 15, at 6.

101. Cremers et al., *supra* note 19, at 26; Matthew Bultman, *What You Need to Know About Patent Litigation in Germany*, LAW360 (July 27, 2018), <https://www.law360.com/articles/1067438/what-you-need-to-know-about-patent-litigation-in-germany>.

application of substantive patent law; (2) the procedural rules of the two jurisdictions, including the availability of juries; and (3) the expertise of judges and existence of systematic rules for patent cases in each jurisdiction. And these three motivations to forum shop vary under the United States system, the current European system, and the proposed UPC.

1. Differences in Substantive Law

Substantive patent law generally addresses the rules for invalidity and infringement, and substantive differences in these laws create a strong incentive for forum shopping. For instance, expansive definitions of infringement will invite plaintiffs seeking an easy avenue to prove infringement. Alternatively, a forum with strict validity rules may deter plaintiffs worried about invalidation of their patents. All three systems allow for some variance in the application of substantive patent law, and the Unified Patent Court slightly unifies substantive patent law in Europe—particularly the law concerning infringement.

a. The U.S. System

In the U.S. system, fairly-detailed national statutes govern substantive patent law but courts still have room to apply different interpretations of substantive patent law. These statutes detail the requirements for patent validity,¹⁰² infringement,¹⁰³ and remedies.¹⁰⁴ All courts (and administrative bodies such as the USPTO) must apply these statutes to patent cases. But statutory ambiguity inevitably leads to different interpretations across the district courts until the Federal Circuit or Supreme Court resolves these discrepancies.¹⁰⁵ Sometimes, the Federal Circuit will refuse to address these district-splits, leading to uncertainty over the law unless the Supreme Court grants a petition for certiorari.¹⁰⁶ Thus, in practice, substantive patent law often does vary within the U.S. district court system, and district-splits sometimes remain unresolved for years.¹⁰⁷

There are also substantive differences between district courts and the USPTO's primary internal procedure for invalidating patents, *inter partes* reviews. Perhaps most critically, the USPTO applies a different substantive standard to the interpretation of patent claims—the “broadest reasonable in-

102. See, e.g., 35 U.S.C. §§ 102–103 (2012).

103. See, e.g., *id.* § 271.

104. See, e.g., *id.* § 283–284.

105. See, e.g., Charles R. Manedo & Sandra Hudak, *SCOTUS Asked to Resolve Splits in Patent-Eligibility Analysis in Context of Video-on-Demand Technology*, IP WATCHDOG (Apr. 19, 2017), <http://www.ipwatchdog.com/2017/04/19/scotus-asked-resolve-splits-patent-eligibility-analysis/id=82212/>.

106. See *id.*

107. *Id.* (noting that one such district-split arose after a 2014 Supreme Court ruling and remains unresolved in 2017).

terpretation” instead of the “plain and ordinary meaning” interpretation applied in district courts.¹⁰⁸ This more expansive interpretation of patent claims makes invalidation more likely because broader claims are more likely to be anticipated by prior art. And litigants see this difference as more than semantic: an appeal on this issue made it to the Supreme Court.¹⁰⁹ The Supreme Court upheld the USPTO’s differing standard, finding that the USPTO rule was within their authority under the office’s authorizing statute.¹¹⁰

Therefore, varying substantive law (1) among the district courts and (2) between the USPTO and the district court system have created incentives for forum shopping in the U.S. Some of this forum shopping was built into the system: Congress wanted to encourage the use of newly-created *inter partes* reviews as an administrative alternative to district court litigation. But Congress may not have intended the wide-scale adoption of *inter partes* reviews as a go-to strategy in so many patent lawsuits. Moreover, while variance among the district courts may be somewhat inevitable, it remains undesirable because it increases unpredictability, raises litigation costs over jurisdictional/forum issues, and can “unfairly” favor one class of litigants contrary to the policy goals of the patent regime.

b. The Current European System

The current European System allows for a similar amount of variation pertaining to substantive patent validity law and an even greater variation regarding substantive patent infringement law. The European Patent Convention and regulations promulgated pursuant to that Convention provide detailed requirements for patent validity that are binding on all national courts overseeing a dispute over a European Patent.¹¹¹ The national law of the forum fills in the gaps.¹¹² Because most member states of the EPC are civil law countries, the statutory system under the EPC tends to provide similarly detailed guidance to courts compared to the United States. This fairly specific statutory system, in theory, should lead to limited discrepancies in the application of law across the member states.

But a countervailing force can lead to different interpretations across different courts even within a single European country—the lack of a strict adherence to *stare decisis*.¹¹³ Courts in a single civil law country generally are not bound to a higher court’s interpretation in future cases, but fairly uniform precedent can create significant persuasive authority for these low-

108. See *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2139 (2016).

109. *Id.*

110. *Id.* at 2146.

111. See EPC, *supra* note 32, at art. 2(2), art. 52–74.

112. See *id.* at art. 74.

113. See generally Vincy Fon & Francesco Parisi, *Judicial Precedents in Civil Law Systems: A Dynamic Analysis*, 26 INT’L REV. L. & ECON. 519 (2006).

er courts.¹¹⁴ So, despite the binding effect of the European Patent Convention's rules on patent validity, dozens of national law systems fill in the gaps, and the lack of *stare decisis* allows for greater disparities among courts even within a single country. Even more importantly, no unifying law covers patent infringement across the member states. Thus, substantive law for validity seems to vary at roughly the same levels as it does in the United States, but substantive law for infringement might vary even more within Europe due to the lack of a unifying code.

Some limited empirical evidence has revealed incongruous decisions regarding the same patent across multiple European jurisdictions, suggesting a variation in the application of substantive patent law.¹¹⁵ Courts in multiple jurisdictions can explicitly and implicitly apply different substantive patent law even to validity issues covered by the EPC. National law still fills in the gaps, and different courts will interpret the EPC differently. Thus, the EPC, by its own terms and in practice, allows for variable application of substantive patent law across the member states.

c. The UPC and Suggested Changes

The Unified Patent Court would create a slightly more unified substantive law for patent infringement, but it is primarily concerned with procedural changes. Under the UPC, courts will still draw from a number of sources for substantive patent law including EU regulations, the EPC, and national law.¹¹⁶ Nevertheless, the UPC itself does introduce a few unifying changes to the substantive law of infringement and validity. Concerning infringement, the UPC provides unifying definitions of infringement and various infringement immunities.¹¹⁷ But these definitions are necessarily broad, and their application in the UPC's courts will guide the outcomes of future cases. Also, the EPC, EU regulations, and national law will continue to dictate the "substantive law" in patent cases for both infringement and invalidity.¹¹⁸

So how does the UPC address the motivation to seek favorable substantive law? The UPC appears to slightly unify the substantive law of infringement with some uniformly applicable provisions. Invalidity remains largely unchanged, but the substantive law for invalidity applied across European national courts is already largely uniform under the EPC, even though national courts can only invalidate the part of a European Patent that designates their country. Thus, the UPC might resolve some of the substan-

114. *Id.*

115. Malwina Mejer & Bruno van Pottelsberghe, *Economic Incongruities in the European Patent System*, 34 EUR. J. L. & ECON. 215, 224–32 (2012).

116. UPC Agreement, *supra* note 1, at art. 24.

117. *Id.* at art. 25–26.

118. *Id.* at art. 24.

tive law differences pertaining to infringement, but it does little else to further unify substantive patent law in Europe.

Although substantive law differences will promote the motivation to forum shop, the UPC drafters should allow the UPC's appellate court to carve out the nuances of substantive infringement law. Substantive infringement issues include the standards for infringement, available remedies, and interpretive standards/tools (e.g., for claim construction). In the U.S. system, for instance, these nuances of substantive infringement law are frequently retooled in a central court—typically the Circuit Court of Appeals for the Federal Circuit and, sometimes, the Supreme Court. Careful statutory prescriptions for these types of rules generally do not work partly because the rules often depend on the type of technology at issue. Thus, caselaw should determine these rules, and the UPC's drafters should not intervene to further unify this law, particularly at this early stage of the court's existence.

2. Differences in Non-Jurisdictional Procedural Law

Aside from jurisdictional rules and variable substantive law, procedural rules can strongly influence litigants' choice of forum. Courts' varying burdens of proof, different discovery schedules, and differing willingness to grant certain remedies all create significant incentives to forum shop.

a. The U.S. System

Differences in procedural law likely provide the greatest motivation to forum shop within the U.S. system. There are two sets of differences worth exploring: (1) the differences among the U.S. district courts and (2) the differences between district courts and the USPTO's quasi-judicial proceedings.

First, although the Federal Rules of Civil Procedure uniformly bind all U.S. district courts, gap-filling local rules, high levels of deference to many lower court decisions, and variations in district jury pools create a system with variable procedural law. A number of district courts, including those in the Eastern District of Texas and the Northern District of California, have created their own local rules that specify timetables for patent cases. These rules likely attract plaintiffs and defendants seeking higher predictability regarding issues including waiver, scheduling, and required disclosures.¹¹⁹ Also, many procedural decisions including those for briefing schedules, the scope of discovery orders, and the scope of summary judgment motions are only reviewable under a highly deferential abuse of discretion standard. Finally, perhaps the most unpredictable aspect of patent litigation is uniquely American: jury trials. Patentees often seek jury trials in patent cases. Many commenters attribute the "plaintiff-friendly" jury pool in the Eastern Dis-

119. See, e.g., N.D. Cal. Pat. L.R. 2-1, 3-1, 3-3.

trict of Texas and the jury pool's predilection to hand out huge damage awards to the District's rise as the most popular destination for patent plaintiffs.¹²⁰ Other commentators doubt this "East Texas jury" theory to explain the District's popularity.¹²¹ Nevertheless, repeat patent defendants have shamelessly attempted to sway the jury pool in East Texas; in fact, Samsung paid to build an ice rink in Marshall, Texas to allegedly curry favor with potential jurors.¹²² Thus, among the U.S. district courts, variations in local rules, particular judges' procedural decisions, and jury pools all create incentives to bring suits in particular districts.

In addition to the variances among the district courts, the district courts as a whole differ procedurally from invalidity proceedings before the USPTO in several key areas, creating significant incentives for *defendants* to "forum shop." Defendants may seek a stay of district court proceedings and institute an *inter partes* review proceeding before the USPTO to invalidate the litigated patent.¹²³ And many district courts will grant that request in most cases.¹²⁴ So, why move the litigation to the patent office? First, the USPTO has significantly more limited discovery: a particularly attractive quality for budget-conscious defendants seeking to cheaply invalidate the plaintiff's patent.¹²⁵ Second, the USPTO requires a lowered burden of proof to invalidate patents, creating yet another incentive for defendants to seek an *inter partes* review.¹²⁶ Thus, more limited discovery and a defendant-friendly burden of proof have motivated defendants to transfer litigation from district courts to the USPTO.

120. See, e.g., Julie Blackman et al., *East Texas Jurors and Patent Litigation*, THE JURY EXPERT (Mar. 1, 2010), <http://www.thejuryexpert.com/2010/03/east-texas-jurors-and-patent-litigation/>.

121. See, e.g., Iancu & Chung, *supra* note 14, at 299–300.

122. See Bruce Berman, *For Samsung Charity Begins at "Home," Marshall, Texas*, IP CLOSEUP (Feb. 25, 2015), <https://ipcloseup.com/2015/02/25/for-samsung-charity-begins-at-home-marshall-texas/>.

123. Within one year from the commencement of a district court action, defendants may seek a stay and institute an *inter partes* review of the disputed patent's validity before the USPTO. Courts generally grant stays for IPRs, and estoppel provisions prevent re-litigation of the validity issue once the case returns to district court. 35 U.S.C. § 315(a)–(b); (e) (2012); Samson Vermont, *IPR Statistics Revisited: Yep, It's a Patent Killing Field*, PATENTATTORNEY.COM (Feb. 8, 2017), <https://www.patentattorney.com/ipr-statistics-revisited-yep-its-a-patent-killing-field/>.

124. Warriner, *supra* note 17; Samson Vermont, *IPR Statistics Revisited: Yep, It's a Patent Killing Field*, PATENTATTORNEY.COM (Feb. 8, 2017), <https://www.patentattorney.com/ipr-statistics-revisited-yep-its-a-patent-killing-field/>.

125. See Michael J. Flibbert & Maureen D. Queler, *5 Distinctions Between IPRs and District Court Patent Litigation*, FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP (Dec. 16, 2015), <https://www.finnegan.com/en/insights/5-distinctions-between-iprs-and-district-court-patent-litigation.html>.

126. See *id.* Some might characterize the different standards of proof as a "substantive" difference rather than a "procedural" difference. Regardless, the difference appears to matter to litigants.

In effect, the introduction of *inter partes* reviews and other post-grant proceedings has pushed the U.S. toward a bifurcated system (like the current German system) for resolving invalidity and infringement issues. District courts (and to a lesser extent, the ITC) remain the sole arbiters of patent infringement at the trial level. And district courts retain exclusive jurisdiction over some invalidity issues outside the scope of the USPTO's *inter partes* review procedures.¹²⁷ But district courts have increasingly deferred the key invalidity issues arising in most cases—anticipation and obviousness—to the *inter partes* review process.¹²⁸ Thus, the USPTO increasingly decides invalidity issues while district courts still decide infringement issues, assuming the USPTO's invalidation of the patent has not rendered infringement moot.

b. The Current European System

The current European system has even wider variance of procedural law across different countries. Understandably, procedural law varies significantly among court systems in countries with different languages, legal cultures, and history. These procedural differences can make huge differences to litigants even well before the merits of a case are addressed. In particular, procedural differences have given rise to two notable forum shopping phenomena in Europe: preliminary injunction relief in the Netherlands and declarations of non-infringement in Italy.

First, the Dutch courts have historically been much more willing to grant cross-border injunctions, creating a significant incentive to forum shop.¹²⁹ For instance, consider a European patent that designates the Netherlands, Germany, and France. Historically, Dutch courts were willing to issue injunctions enforceable in all three countries after hearing cases solely on infringement of the Netherlands part of the European patent.¹³⁰ Moreover, Dutch courts would issue cross-border injunctions on defendants who did not even infringe the Dutch version of the European patent if they were sufficiently connected to a defendant who had committed such infringement.¹³¹ Several European Court of Justice cases significantly narrowed Dutch courts' ability to issue cross-border injunctions, but the Court explicitly left

127. See 35 U.S.C. § 311(b) (2012).

128. Warriner, *supra* note 17; USPTO Panels can only invalidate patents on grounds of anticipation or obviousness during *inter partes* review. District courts usually stay proceedings when an IPR is pending, suggesting a deference to the USPTO. Samson Vermont, *IPR Statistics Revisited: Yep, It's a Patent Killing Field*, PATENTATTORNEY.COM (Feb. 8, 2017), <https://www.patentattorney.com/ipr-statistics-revisited-yep-its-a-patent-killing-field/>; *Inter Partes Review*, USPTO, <https://www.uspto.gov/patents-application-process/appealing-patent-decisions/trials/inter-partes-review>.

129. See Minderop et al., *supra* note 79.

130. *Id.*

131. *Id.*

the door open for preliminary injunctions due to their pre-merits nature.¹³² Consequently, there remains an incentive to seek cross-border preliminary injunctions in the Netherlands, but other economic concerns may dissuade plaintiffs from filing in that country.¹³³

Second, differences in Italian procedural law have motivated would-be defendants to preemptively file declarations of non-infringement in Italy—a phenomenon known as the “Italian torpedo.”¹³⁴ Italian courts have taken an expansive view of EU jurisdiction rules, extending their jurisdiction for non-infringement declaratory judgment actions even to foreign versions of European Patents that also indicate Italy.¹³⁵ Other EU courts (such as a German court) must decline hearing substantially similar cases if a party filed elsewhere first.¹³⁶ Moreover, Italian courts notoriously take a long time to resolve cases, leading to protracted litigation while the patentee remains unable to sue for infringement.¹³⁷ Thus, would-be defendants can “torpedo” a patentee’s potential case if they file in Italy before the patentee sues for infringement.

Thus procedural law and procedural outcomes vary significantly in the current European climate. These differences have created a huge incentive to forum shop, giving rise to two popular jurisdictions that grant uncommonly generous remedies to certain classes of litigants.

c. The UPC and Suggested Changes

Unified procedural law is the driving motivation and aim of the proposed UPC, and if the court successfully achieves that aim it will likely greatly reduce this motivation to forum shop. The UPC’s currently proposed structure includes several provisions that will further unify procedural law. But other structures will either do little to constrain this motivation to forum shop or even exacerbate the problems within the current European system.

Compared to the current European system, the UPC’s combination of a unified court hierarchy, a single appeals court, and elimination of “torpedo” declaratory judgments will likely reduce the incentive to forum shop. Under the current European system, appeals travel within each country’s court system, sometimes leading to conflicting decisions on invalidity for designa-

132. *Id.*

133. *See id.* (noting that two percent of European patent cases are filed in the Netherlands).

134. Gabriel Cuonzo, *The “Italian Torpedo” Never Ending Saga*, KLUWER PATENT BLOG (Sept. 2, 2013), <http://patentblog.kluweriplaw.com/2013/09/02/the-italian-torpedo-never-ending-saga/>.

135. *See id.*

136. *Id.*; Brussels I, *supra* note 51, at art. 21.

137. Cuonzo, *supra* note 134; Riccardo Perotti, *A Requiem for Torpedo Actions? A Catalogue of the Most Recent Decisions on the Issue*, IPLENS (Sept. 4, 2017), <https://iplens.org/2017/09/04/a-requiem-for-torpedo-actions-a-catalogue-of-the-most-recent-decisions-on-the-issue/>.

tions of the same patent in two separate countries.¹³⁸ The UPC's single appeals court and the first division's ability to rule on all designations of European Patents will likely greatly diminish this problem.¹³⁹ This will not be a cure-all, however. For instance, in the U.S., a jurisdiction with effectively a single appeals court for almost all patent cases, circuit splits remain.¹⁴⁰ Similarly, the UPC's appeals court caseload and the expense of appealing cases may limit the court's effectiveness at unifying decisions, leading to results analogous to the U.S.'s circuit splits.

Despite this potential shortcoming, the UPC *does* explicitly eliminate the possibility of an "Italian torpedo." In particular, two provisions will essentially abolish forum shopping with declaratory judgments. First, all declaratory judgment actions must be brought before the central division under the UPC.¹⁴¹ Second, the central division must stay those declaratory judgment actions if the patent holder files an infringement suit within three months of the filing of the declaratory action.¹⁴² Thus, would-be defendants will no longer be able to kill cases simply by filing a declaratory judgment action first. Therefore, the creation of a single court system with a single appeals court and the elimination of the "Italian torpedo" will likely greatly diminish the incentive to forum shop within the UPC.

Compared to the U.S. system, the UPC's lack of a jury trial may lead to comparatively less forum shopping. But the European system generally already rejects jury trials for patent cases, and the availability of jury trials in the U.S. may have limited effects on forum shopping. Some U.S. commentators attribute plaintiffs' strong preference for the Eastern District of Texas to that District's jury pool and the District's willingness to grant jury trials in patent cases.¹⁴³ Others doubt this theory, suggesting that other factors drive forum selection rather than the "myth" of the preferable East Texas jury.¹⁴⁴ Consequently, the lack of a jury trial may have little to do with forum shopping, and the UPC maintains the European status quo anyway.

But one change in the UPC that mirrors recent changes in the U.S. may actually promote forum shopping: giving courts discretion to bifurcate invalidity and infringement. As discussed earlier, the U.S.'s recent adoption of *inter partes* review proceedings has created a large incentive for *defendants* to forum shop. Defendants can, and frequently do, stay district court proceedings to invalidate the patent at issue before the USPTO, often with

138. See Mejer, *supra* note 115, at 224–25; Walter Holzer, EFFECTIVE MECHANISMS FOR CHALLENGING THE VALIDITY OF PATENTS 6, http://www.wipo.int/export/sites/www/meetings/en/2006/scp_of_ge_06/presentations/scp_of_ge_06_holzer.pdf.

139. UPC Agreement, *supra* note 1, at art 9.

140. Macedo & Hudak, *supra* note 105.

141. UPC Agreement, *supra* note 1, at art. 33(4).

142. *Id.* at art. 33(6).

143. See, e.g., Blackman et al., *supra* note 120.

144. See Iancu & Chung, *supra* note 14, at 300.

greater success than in district court.¹⁴⁵ The UPC envisions a similar system in which local divisions—roughly analogous to U.S. district courts—can choose to hear invalidity issues or transfer them to a central division.¹⁴⁶ In the U.S., slightly different “caselaw” has developed within the USPTO and within the district court system, leading many defendants to prefer the USPTO.¹⁴⁷ A similar situation may unfold under the UPC if cases at the central division start to diverge from those at local divisions. This will create a system where plaintiffs choose local divisions that are less likely to transfer invalidity issues and may incentivize defendants to push hard for transfers of invalidity decisions. Like in the U.S., this will increase litigation costs and may lead to divergent outcomes in similar cases heard in separate forums.

Thus, the UPC will likely reduce the motivation to forum shop due to its unified appeals court, continued prohibition on jury trials, and elimination of “torpedo” declaratory judgment actions, but allowing local divisions to decide whether to bifurcate invalidity and infringement actions will likely create a huge incentive to forum shop. Perhaps the contracting members should rethink their permissive attitude toward bifurcation. Instead, the UPC could either force local divisions to hear infringement and invalidity issues together or transfer all invalidity issues to the central division. Giving local divisions the discretion to split up these cases, however, represents a middle ground that will engender more forum shopping than either extreme would. Thus, bifurcation itself does not promote forum shopping, but wide judicial discretion does. With these lessons from the U.S. experience in mind, the UPC can limit the motivation to forum shop for venues with more favorable procedural rules.

3. Different Levels of Expertise and Local Patent Rules

The popular and legal press often overlook courts’ expertise as a motivating factor for plaintiffs’ choice of venue, but expertise may be the most dominant factor that shapes plaintiffs’ choices in U.S. and European patent cases. Patent cases are among the most difficult cases to try. Judges have to grapple with not only complicated and constantly-evolving legal doctrines but also the highly sophisticated engineering and scientific knowledge necessary to understand most modern patents. Consequently, litigants seek legally and technically qualified judges for their cases. More competent judges can speed up the resolution of a dispute and lower uncertainty for the litigants. Thus, patent expertise likely is a critical but oft-overlooked explanation behind the popularity of certain fora. And litigants also seek fora

145. See Vermont, *supra* note 18.

146. UPC Agreement, *supra* note 1, at art. 33(3).

147. See Flibbert & Queler, *supra* note 125.

with clear timetables for litigation and codified local patent rules, enhancing the predictability of a case for both parties.

a. The U.S. System

A few empirical observations strongly suggest that a court's patent expertise, both technically and legally, significantly influences plaintiffs' forum selection. The history of the Eastern District of Texas illustrates this point. The Eastern District of Texas was not always nearly as popular as it is today: in the late 1990's, the district was not even in the top ten patent districts nationwide.¹⁴⁸ And other districts remain relatively popular even though they seem to lack "plaintiff friendly" jury pools. The Eastern District of Texas, the District of Delaware, the Central District of California, the Northern District of Illinois, and the Northern District of California rounded out the top five patent fora in 2016.¹⁴⁹ Three of these districts have local rules specific to patent cases.¹⁵⁰ And all five, except for the District of Delaware, participate in the USPTO's patent pilot program for assigning patent cases to capable judges willing to oversee such cases.¹⁵¹ Only thirteen districts across the country participate in that program.¹⁵² Local patent rules expedite cases and create a predictable discovery schedule for litigants. Moreover, litigating in a court participating in the patent pilot program likely increases the odds that one's judge will engage with the case more closely. And designated judges in the patent pilot program resolve cases thirty days faster on average.¹⁵³ So, unsurprisingly, the top five patent forums in the U.S. have demonstrated a commitment to making patent cases more efficient either through local patent rules or participation in the USPTO's patent pilot program. Thus a court's expertise in patent law seems to play a large role in the popularity of courts in the U.S.

b. The Current European System

Judicial expertise also likely explains plaintiffs' overwhelming preference for Germany for European patent litigation. Germany heard almost seventy percent of all patent cases in Europe's four primary patent jurisdic-

148. See Iancu & Chung, *supra* note 14, at 299 n.58.

149. Pedram Sameni, *Patexia Chart 6: Top 10 Venues for Patent Litigation*, PATEXIA (Aug. 10, 2016), <https://www.patexia.com/feed/weekly-chart-top-10-venues-for-patent-litigation-20160809>.

150. Travis Jensen, *Local Patent Rules Adoption Dates*, LOCAL PAT. RULES (Aug. 25, 2017), <http://www.localpatentrules.com/adoption-dates/>.

151. Margaret S. Williams et al., *Designated Judges, FED. JUD. CTR. PAT. PILOT PROGRAM: FIVE-YEAR REPORT* (Apr. 1, 2016), [https://www.fjc.gov/sites/default/files/2016/Patent%20Pilot%20Program%20Five-Year%20Report%20\(2016\).pdf](https://www.fjc.gov/sites/default/files/2016/Patent%20Pilot%20Program%20Five-Year%20Report%20(2016).pdf).

152. *Id.* at 9.

153. See *id.* at 22 tbl.16.

tions between 2000 and 2008.¹⁵⁴ And the Dusseldorf court—Germany’s Eastern District of Texas—heard almost forty percent of all patent cases in those jurisdictions during that time period.¹⁵⁵ German regional courts have specialist panels of patent judges to oversee patent cases.¹⁵⁶ Moreover, Germany requires bifurcation of invalidity and infringement decisions: a specialized federal patent court oversees all trial-level invalidity decisions while the specialized panels at the regional courts hear all infringement cases.¹⁵⁷ This highly specialized and predictable system for patent cases likely explains much of the preference for German courts in Europe.

c. The UPC and Suggested Changes

The UPC, like the current German system, highly prioritizes the legal and technical competence of its judges. Judges of all local divisions must be “legally qualified” for patent cases.¹⁵⁸ Moreover, at the request of one of the parties, the UPC will appoint an additional judge qualified in the technical field pertaining to the patent in that case.¹⁵⁹ These two provisions should greatly reduce the motivation to forum shop because expertise should be evenly distributed across local divisions. Moreover, judges from the central pool of judges may be imported for a case at the request of a single party. Therefore, plaintiffs have less incentive to choose a particular local division for a particular panel of judges when the defendant can later alter the composition of the panel of judges once hearings commence.

The UPC’s emphasis on judicial competence should not only reduce forum shopping but also increase judicial efficiency. The U.S. system’s more limited focus on judicial competence for patent cases, on the other hand, has increased the costs of patent litigation and heightened uncertainty in these cases. The Federal Circuit’s high reversal rates of lower district court’s decisions illustrate this problem. Fifty percent of Section 101 (subject matter eligibility) rulings are reversed; 71 percent of Section 102 (anticipation) rulings are reversed; and 31 percent of Section 103 (obviousness) rulings are reversed.¹⁶⁰ On the other hand, the technically qualified administrative judges at the USPTO are reversed less frequently. In those cases, 38 percent of Section 102 (anticipation) rulings are reversed; and 29 percent of Section

154. Cremers et al., *supra* note 19, at 23.

155. Katrin Cremers et al., *Patent Litigation in Europe* 43 (Ctr. for European Econ. Research, Discussion Paper No. 13-072, 2013), <http://ftp.zew.de/pub/zew-docs/dp/dp13072.pdf>.

156. Kellenter & Midgal, *supra* note 27, at 5.

157. *Id.*

158. UPC Agreement, *supra* note 1, at art. 8(2)–8(3).

159. *Id.* at art. 8(5).

160. Mark A. Perry & Michael Sitzman, *Federal Circuit Year in Review 2015/2016*, GIBSON DUNN 1, 13 (Dec. 7, 2016), https://www.gibsondunn.com/wp-content/uploads/documents/publications/Federal-Circuit-2015-2016-Year-in-Review.pdf?utm_source=IA&utm_medium=email&utm_campaign=alert.

103 (obviousness) rulings are reversed.¹⁶¹ Thus, these more legally and technically qualified judges are overruled significantly less frequently on at least one issue—anticipation/novelty.

Fostering a system with more uniformly qualified judges not only reduces forum shopping by leveling the playing field but also increases judicial efficiency by reducing the need for appeals. And the UPC appears to be on the right track. The UPC requires legal qualification in patent law for all of its judges and creates a pool of technically qualified judges for cases requiring such expertise. These uniformly qualified courts will reduce forum shopping and likely reduce the likelihood of a backlogged appeals docket.

III. CONCLUSION

Proponents of the proposed Unified Patent Court seek to unify European patent litigation under a single umbrella of courts. One of the key aims of this project is to reduce forum shopping in patent cases across Europe. Both the United States and the current European system have dealt extensively with this issue, providing valuable lessons for the UPC and its proponents. The UPC, as currently imagined, will significantly increase the *opportunity* to forum shop by relaxing current jurisdictional rules and effectively eliminating the territorial boundaries of patent courts. But the UPC makes significant strides toward reducing the *motivation* to forum shop, primarily by requiring uniformly expert judges and unifying procedural law across the courts. These findings are summarized in the table below.

161. *Id.* at 14.

System:	United States	Current European System	Unified Patent Court (proposed)
Opportunity to forum shop: rules on jurisdiction and venue	Status: strongly permissive jurisdictional rules but moderately permissive venue rules after <i>TC Heartland</i> . Effect: high but decreasing opportunity to forum shop.	Status: moderately permissive jurisdiction rules tempered by (1) territoriality of invalidity and (2) the <i>Shevill</i> doctrine. Effect: moderate opportunity to forum shop.	Status: very strongly permissive jurisdictional rules due to elimination of <i>Shevill</i> , expansive joinder rules for jurisdiction, and elimination of territorial limits on jurisdiction over remedies. Effect: very high opportunity to forum shop.
Motivation #1: do courts apply different substantive patent law?	Status: slight difference among district courts and moderate difference between district court and USPTO proceedings. Effect: moderate incentive to forum shop, particularly for USPTO proceedings.	Status: slight/moderate difference (different national laws). Effect: slight motivation to forum shop.	Status: likely slight difference across different divisions. Effect: slight/minimal motivation to forum shop.
Motivation #2: do courts apply different procedural laws?	Status: moderate difference among district courts and moderate/significant difference between district court and USPTO proceedings. Effect: moderate/significant motivation to forum shop.	Status: significant differences , particular for available remedies. Effect: significant motivation to forum shop.	Status: slight/minimal differences in procedural rules and single appeals court Effect: minimal (and greatly diminished) motivation to forum shop.
Motivation #3: varying expertise of judges and predictability of proceedings	Status: significant differences among district courts. significant difference between district court and USPTO proceedings. Effect: significant motivation to forum shop.	Status: significant differences (German courts dominate primarily for this reason.) Effect: significant/very significant motivation to forum shop.	Status: minimal variance in judicial competence or local rules. Effect: minimal (and greatly diminished) motivation to forum shop.

Thus, the UPC's effects on forum shopping will be mixed: the UPC reduces motivation but increases opportunity. Only time will tell whether litigants will exercise their increased opportunity to forum shop, considering

the benefits will decrease. But several small changes can reduce this likelihood even further. The UPC should tighten its jurisdictional rules, impose stricter rules concerning bifurcation of invalidity and infringement, and, at an appropriate time down the road, further unify substantive patent law. With these changes, the UPC will better achieve its aim of reducing forum shopping.