

## FOREWORD

### Patent Damages: Working with Limits

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Since the start of the twenty-first century, the United States patent system has been under intense scrutiny.<sup>1</sup> Prominent representatives of whole industry sectors, including business leaders in information and communications technology, have clamored that the system is in many ways impeding innovation, rather than promoting it.<sup>2</sup> The resulting drumbeat for reform has yielded steady results but also much turbulence. The Supreme Court has repeatedly overturned holdings or policies of the Court of Appeals for the Federal Circuit or the Patent and Trademark Office (PTO).<sup>3</sup> Congress has rewritten substantial portions of the Patent Act and has added whole new forms of administrative proceedings.<sup>4</sup> The Federal Circuit

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1. See John M. Golden, *Proliferating Patents and Patent Law's "Cost Disease"*, 51 HOUS. L. REV. 455, 457 (2013) ("Since at least 1999, the exact words 'The patent system is in crisis' have appeared so often in academic literature that they might be considered a meme.").

2. See John M. Golden, *Principles for Patent Remedies*, 88 TEX. L. REV. 505, 507 (2010) ("Perhaps most saliently, information-technology incumbents such as Microsoft Corporation and Intel Corporation have pushed strongly for rules to limit the reasonable-royalty damages available to nonincumbent patent holders . . .").

3. See, e.g., *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1935 (2016) (rejecting test for enhancement of patent damages adopted by the Federal Circuit); *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2118 (2013) (holding merely isolated DNA ineligible for patent protection despite longstanding PTO issuance of patents on such subject matter); *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 393-94 (2006) (rejecting the Federal Circuit's "general rule . . . that a permanent injunction will issue once infringement and validity have been adjudged" (internal quotation marks omitted)).

4. Recent Legislation, *Patent Law—Patentable Subject Matter—Leahy-Smith America Invents Act Revises U.S. Patent Law Regime*, 125 HARV. L. REV. 1290, 1290 (2012) (noting that the 2011 Leahy-Smith America Invents Act (AIA) newly instituted "a first-inventor-to-file priority standard, opportunities to challenge patents through administrative proceedings, and new budgetary flexibility for the PTO"); David W. Trilling, Recent Development, *Recognizing a Need for Reform:*

itself has revisited and rethought various aspects of precedent or accepted practice.<sup>5</sup>

Debates over patent damages, especially damages according to a reasonable royalty measure, have frequently lain at the center of this storm.<sup>6</sup> As indicated by the symposium articles described below, such damages debates broach fundamental questions about the patent system's aims, the proper extent of the system's reach, and the best means for improving system performance. On a practical level, patent damages debates demand attention to sometimes fine points of procedure and call for imaginative ways of improving adjudication.

In many ways, the fierceness and persistence of debates relating to patent damages is predictable. Relevant points of tension reflect the often uncomfortably restrictive limits against which the patent system naturally strains. These limits include (1) limits to theoretical agreement on substantive goals and implementing methodologies; (2) limits to the information available to apply theory correctly even if theoretical agreement is assumed; (3) limits to the abilities of courts and other decision-makers to assess liability or monetary awards properly based on whatever facts and theories apply; and (4) limits on the territorial and subject-matter reach of patent law that can lead to questionable gaps in coverage or discontinuities in results.

To advance conversations about how to proceed in the face of such limits, the University of Texas School of Law hosted a

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*The Leahy-Smith America Invents Act of 2011*, 2012 U. ILL. J.L. TECH. & POL'Y 239, 241 (describing the AIA as "mark[ing] the beginning of a new era for patent law").

5. See, e.g., *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015) (en banc in relevant part) (overruling precedent "establish[ing] a heightened bar to overcoming the presumption that a [patent claim] limitation expressed in functional language without using the word 'means' is not subject to § 112, para. 6" of the Patent Act); *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1315 (Fed. Cir. 2011) (holding evidence based on a long used "25 percent rule of thumb" for the presumptive starting point over a royalty rate to be inadmissible for purposes of proving a reasonable royalty); *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 383 F.3d 1337, 1344-46 (Fed. Cir. 2004) (en banc) (overruling precedent holding that refusal to produce an opinion of counsel or "failure to obtain an exculpatory opinion of counsel" on issues relating to potential patent infringement justify "an adverse inference" about what such an opinion says or would have said), *overruled in irrelevant part by In re Seagate*, 497 F.3d 1360 (Fed. Cir. 2007), *overruled in irrelevant part by Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923 (2016).

6. Golden, *supra* note 2, at 507 (noting the role of "information-technology incumbents" in advocating limitations on reasonable royalty damages).

conference on patent damages (“PatDam1”) in June of 2016.<sup>7</sup> A gift to the School of Law from Intel Corporation supported the conference as well as the offering of honoraria to authors of conference papers. At the same time, control over agenda and speakers for the conference was left wholly within the law school’s discretion. The conference featured three separate panels of trial judges, damages experts, and in-house counsel. The conference also featured sessions for the discussion of draft papers to be published as articles in three separate issues of *The Review of Litigation* and the *Texas Intellectual Property Law Journal*. The journal issue in which this Foreword appears presents four of those articles.

The twelve articles prepared in association with PatDam1 address a variety of issues related to patent damages via a mix of scholarly approaches. Through a series of one-paragraph descriptions, this Foreword highlights aspects of the individual papers. The Foreword concludes with a brief discussion of common threads.

In *Patent Damages Heuristics*,<sup>8</sup> Thomas Cotter argues for addressing the limited fact-finding and decision-making capacities of courts by having them make more conscious and thoughtful use of heuristics—i.e., “shortcuts or ‘rules of thumb’ for reducing the time and effort needed to reach a solution or decision.”<sup>9</sup> Cotter starts with the proposition that policymakers should use a “proposed heuristic when the sum of the administrative and error costs associated with its use is lower than the sum of the administrative and error costs resulting from” any competing alternative.<sup>10</sup> Cotter then discusses how to weigh error costs versus administrability savings in selecting appropriate heuristics.<sup>11</sup> He also develops a taxonomy for different types of heuristics in assessing patent damages, including heuristics for determining patentee eligibility for a particular form of damages, for providing a more readily calculated proxy for the amount of damages to which a patentee is theoretically entitled, and for informing more granular aspects of calculational methodology.<sup>12</sup> Finally, Cotter discusses the role of heuristics of various forms in

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7. Using funds donated by the Intel Corporation, the University of Texas School of Law also hosted a second conference on patent damages (“PatDam2”) in February of 2017.

8. Thomas F. Cotter, *Patent Damages Heuristics*, 25 TEX. INTELL. PROP. L.J. (forthcoming 2017).

9. *Id.*

10. *Id.*

11. *Id.*

12. *Id.*

past and present case law and suggests paths by which courts can improve their use, including through deployment of better heuristics for employing evidence of royalty rates from allegedly comparable licenses.<sup>13</sup>

In *Gatekeeping Trends in Reasonable Royalty Cases*,<sup>14</sup> Andrew Amerson chronicles recent doctrinal developments in the case law on reasonable royalties<sup>15</sup> and provides a descriptive empirical study of *Daubert* motions challenging proffered expert testimony on patent damages.<sup>16</sup> Invoking concerns with predictability, efficiency, and effective judicial gatekeeping, Amerson suggests the desirability of simplifying the assessment of reasonable royalties, whether through use of one or more heuristics or through courts' commitment to a "baseball arbitration" approach in which the court will invariably use one or another of the parties' proposed reasonable royalty figures, rather than some value of the court's devising.<sup>17</sup> A hope is that a baseball arbitration approach would moderate party positions by encouraging parties to compete to present more reasonable figures than their opponents, rather than to compete to anchor the court's decision-making on a very high or low value from which a compromise might be derived.<sup>18</sup>

In *How Patent Damages Skew Licensing Markets*,<sup>19</sup> Erik Hovenkamp and Jonathan Masur focus specifically on the problem of using allegedly comparable licenses for purposes of assessing reasonable royalty damages.<sup>20</sup> They argue that reliance on past licenses to set reasonable royalty damages has problematic effects that include distortion of private incentives in licensing and the promotion of secrecy and obfuscation in contract design.<sup>21</sup> Specifically, courts' use of such patent licenses can generate deadweight loss by encouraging patentees to maintain uniformly

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13. *Id.*

14. Drew Amerson, *Gatekeeping Trends in Reasonable Royalty Cases*, 25 TEX. INTELL. PROP. L.J. 1.

15. *Id.*

16. *Id.* In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), the Supreme Court held that, although "'general acceptance'" of scientific evidence is not required, *id.* at 588–89, "the trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable." *Id.* at 589.

17. *Id.*

18. *See id.* at 4.

19. Erik Hovenkamp & Jonathan Masur, *How Patent Damages Skew Licensing Markets*, 36 REV. LITIG. 379 (Symposium 2017).

20. *Id.* at 380.

21. *Id.* at 381–82.

high royalty rates in light of possible reference to those rates in later litigation.<sup>22</sup> Hovenkamp and Masur propose that, except perhaps in the context of patents subject to a prior commitment to reasonable and nondiscriminatory licensing, courts should uniformly approach the determination of patent damages as if there were no prior analogous licenses.<sup>23</sup> Hovenkamp and Masur contend that, as long as the results of courts' ad hoc calculations are randomly distributed without systematic bias, there will then be better ex ante incentives for both patent holders and members of society at large.<sup>24</sup>

Colleen Chien and Eric Schulman provide a different take on the use of past patent licenses in *Patent Semi-Comparables*.<sup>25</sup> They argue that the courts' emphasis on using "truly 'comparable licenses'" to determine a reasonable royalty can wrongly lead to neglect or outright rejection of evidence of a patented invention's value that can be gleaned from "'semi-comparable' licenses" that differ substantially from the sort of bare license of a single patented invention that courts commonly envision as the model for a reasonable royalty.<sup>26</sup> To put their recommendation in context, Chien and Schulman describe three main categories of circumstances in which patent purchases or licenses can arise: *ex ante* transactions prior to the development or adoption of a new technology, *ex post* transactions to avoid or end litigation, and freedom-to-operate transactions commonly associated with acquiring, licensing, or cross-licensing large patent portfolios.<sup>27</sup> In situations in which damages or an "ongoing royalty" rate<sup>28</sup> are difficult to estimate, Chien and Schulman suggest that courts might revisit the desirability of appropriately tailored injunctions as a means to provide proportionate protection of patent rights.<sup>29</sup>

In the *Final Report of the Berkeley Center for Law & Technology Patent Damages Workshop*,<sup>30</sup> Stuart Graham, Peter

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22. *Id.* at 382.

23. *Id.*, Part V.

24. *Id.*

25. Colleen Chien & Eric Schulman, *Patent Semi-Comparables*, 25 TEX. INTELL. PROP. L.J. (forthcoming 2017).

26. *Id.*

27. *Id.*

28. *Paice LLC v. Toyota Motor Corp.*, 504 F.3d 1293, 1314 (Fed. Cir. 2007) ("Under some circumstances, awarding an ongoing royalty for patent infringement in lieu of an injunction may be appropriate.").

29. Chien, *supra* note 25.

30. Stuart Graham, Peter Menell, Tim Simcoe & Carl Shapiro, *Preliminary Report of the Berkeley Center for Law & Technology Patent Damages Workshop*, 25 TEX. INTELL. PROP. L.J. 113 (2017).

Menell, Carl Shapiro, and Tim Simcoe report on a roundtable-style workshop that the Berkeley Center for Law & Technology, with support from Intel Corporation, hosted on March 3, 2016.<sup>31</sup> Graham, Menell, Shapiro, and Simcoe summarize points of agreement and disagreement that emerged during the discussions. For example, they report consensus on the points “that the patent holder is entitled to a royalty based on the value contributed by the patented invention”<sup>32</sup> and that past licenses are often a problematic way to determine this value.<sup>33</sup> Graham, Menell, Shapiro, and Simcoe suggest a number of potential ways to improve courts’ handling of damages claims, including the development of a technical guide for judges on patent valuation; greater use of independent, court-appointed experts; a code of conduct for expert witnesses that could help establish greater independence even for party experts; early exchanges of damages contentions, acceleration of the schedule for damages-related discovery; and earlier consideration of *Daubert* challenges to damages experts.<sup>34</sup>

In *Rationalizing FRAND Royalties: Can Interpleader Save the Internet of Things?*,<sup>35</sup> Jason Bartlett and Jorge Contreras propose another procedural mechanism that courts might use, that of interpleader.<sup>36</sup> This procedural device “affords a party who fears being exposed to the vexation of defending multiple claims to a limited fund or property . . . a procedure to settle the controversy and satisfy the obligation in a single proceeding.”<sup>37</sup> Bartlett and Contreras contend that courts can helpfully use interpleader to bring together all owners of standard-essential patents (SEPs) in one proceeding in which the portion of an overall royalty attributable to each owner’s set of SEPs might be determined.<sup>38</sup> Bartlett and Contreras suggest that such use of interpleader could help prevent “royalty stacking” problems in which separately determined royalty rates for subsets of SEPs result in an aggregate royalty rate that is

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31. *Id.*

32. *Id.* at 124.

33. *Id.* at 125.

34. *Id.* at 128.

35. Jason R. Bartlett & Jorge L. Contreras, *Rationalizing FRAND Royalties: Can Interpleader Save the Internet of Things?*, 36 REV. LITIG. 285 (Symposium 2017).

36. *Id.* at 310.

37. 7 CHARLES ALAN WRIGHT ET AL., FEDERAL PRACTICE AND PROCEDURE §1704 (2016).

38. Bartlett & Contreras, *supra* note 35, at 310.

unreasonably large overall.<sup>39</sup> Bartlett and Contreras also suggest that interpleader will help lead to less inconsistency between, and more justification for, the relative sizes of rewards achieved by different owners of SEPs associated with the same standard.<sup>40</sup>

In *A Restitution Perspective on Reasonable Royalties*,<sup>41</sup> Karen Sandrik and John Golden, the author of this foreword, look to the law of restitution for instruction on how courts might better approach assessment of reasonable royalty damages. Golden and Sandrik note how the role of reasonable royalty damages as a residual remedy in patent law compares to the role that restitution remedies play in areas of law like contract, in which monetary relief based on a restitution measure may result when there is a failure of proof with respect to expectation damages.<sup>42</sup> Golden and Sandrik describe how, in order to promote appropriate private bargaining and to deter bad behavior, the Restatement (Third) of Restitution and Unjust Enrichment lays out both a multilayered set of measures for monetary relief and corresponding tiers of relative fault or responsibility.<sup>43</sup> Golden and Sandrik suggest that, even without straightforward translation of restitution's measures and tiers, patent law might follow restitution in adopting an approach to reasonable royalty damages that incorporates greater sensitivity to relative fault and better advances patent system goals through (1) more context-sensitive allocation of burdens of proof and production, (2) at least partial attention to questions of innovation cost and social value, and (3) deployment of different potential damages measures.<sup>44</sup>

In *Innovation Factors for Reasonable Royalties*,<sup>45</sup> Ted Sichelman highlights both the potential utility of patent-related costs in reasonable royalty determinations<sup>46</sup> and, more generally, the possible desirability of a more reliance-oriented damages regime.<sup>47</sup> Sichelman comes to his proposal on use of cost information from a different direction than that taken by Golden and Sandrik: Sichelman works primarily upward from patent law's aim "to promote

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39. *See id.* at 316-17.

40. *Id.* at 320.

41. John M. Golden & Karen E. Sandrik, *A Restitution Perspective on Reasonable Royalties*, 36 REV. LITIG. 335 (Symposium 2017).

42. *Id.* at 336.

43. *Id.* at Part II.

44. *Id.* at 377.

45. Ted Sichelman, *Innovation Factors for Reasonable Royalties*, 25 TEX. INTELL. PROP. L.J. (forthcoming 2017).

46. *Id.*

47. *Id.*

innovation,”<sup>48</sup> rather than laterally from inquiry into what the law of patent damages might learn from another legal area.<sup>49</sup> Sichelman also does more than merely suggest that cost might be a factor in the damages calculus or perhaps an occasional measure of damages itself. Sichelman contends that courts should jettison perhaps the most widely accepted part of the prevailing *Georgia-Pacific* “test”<sup>50</sup> for reasonable royalty damages<sup>51</sup>—namely, the notion that reasonable royalty damages should equal a royalty to which a willing licensor and willing licensee would have agreed in a hypothetical negotiation occurring before infringement started.<sup>52</sup> Sichelman argues that courts should instead look more to ensuring “a sufficient return” on the costs of research, development, and commercialization, including the opportunity costs of such investments.<sup>53</sup> Sichelman also emphasizes the relevance of technological value in awarding reasonable royalty damages, noting that such value or relative lack thereof can be indicated by whether “there would have been viable noninfringing alternatives [to the patented technology] for a substantially lower cost.”<sup>54</sup>

In *Enhanced Damages for Patent Infringement: A Normative Approach*,<sup>55</sup> Keith Hylton investigates the question of what standard for supra-compensatory patent damages is best designed to advance social welfare.<sup>56</sup> Under the Patent Act, district courts have discretion to enhance damages “up to three times the amount [of compensatory

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48. *Id.*

49. *See supra* text accompanying notes 41–44.

50. A district court opinion in *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970), *modified in irrelevant part*, 446 F.2d 295 (2d Cir. 1971), is often characterized as laying out a “test” for the value of reasonable royalty damages, *see, e.g.*, Daralyn J. Durie & Mark A. Lemley, *A Structured Approach to Calculating Reasonable Royalties*, 14 LEWIS & CLARK L. REV. 627, 628 (2010) (criticizing “the non-exclusive, fifteen-factor ‘Georgia-Pacific’ test now taken as the gold standard for calculating reasonable royalty damages”), although the case technically only lists a non-exclusive set of fifteen potentially relevant factors, *id.* at 629.

51. Sichelman, *supra* note 45, Part I; *see also* David O. Taylor, *Using Reasonable Royalties to Value Patented Technology*, 49 GA. L. REV. 79, 122 (2014) (“It is important to recognize that the last of the fifteen Georgia-Pacific factors, the hypothetical negotiation construct, has, to a large degree, superseded the remainder of the factors in terms of importance.”).

52. Sichelman, *supra* note 45.

53. *Id.*

54. *Id.*

55. Keith N. Hylton, *Enhanced Damages for Patent Infringement: A Normative Approach*, 36 REV. LITIG. 417 (Symposium 2017).

56. *Id.* at 417–18.



damages] found or assessed.”<sup>57</sup> To analyze when courts should enhance damages, Hylton combines bottom-up analysis from the patent system’s interest in promoting innovation with lateral analysis of what patent law might learn from tort. Hylton observes that social interests in generating and preserving innovation incentives for would-be patent holders should be weighed against social benefits from unauthorized use of an invention.<sup>58</sup> Hylton concludes that, in determining whether to enhance patent damages, courts should consider analogs of many of the factors used to determine whether to enhance damages in tort law—for example, the level of reprehensibility of the wrongdoer’s conduct,<sup>59</sup> the likelihood that infringing activity will be detected and subjected to patent enforcement,<sup>60</sup> and the magnitude of social harm inflicted by infringement.<sup>61</sup>

In *Buying Monopoly: Antitrust Limits on Damages for Externally Acquired Patents*,<sup>62</sup> Erik Hovenkamp and Herbert Hovenkamp look to antitrust law not so much for instruction on how patent law might be doctrinally structured as for guidance on the extent to which patent acquisition and enforcement problematically suppress competition.<sup>63</sup> In particular, Hovenkamp and Hovenkamp look to antitrust law in proposing the denial of patent damages if (1) the patent in question was “externally acquired”—i.e., did not result from the patent holder’s own research and development efforts—and (2) “the acquisition [of that patent] serves materially to expand or perpetuate the [patent holder’s] dominant position in the relevant technology market.”<sup>64</sup> Hovenkamp and Hovenkamp distinguish externally acquired patents from patents resulting from internal research efforts on grounds that “[d]eveloping valid patents internally and enforcing them is unilateral conduct” that the Patent Act authorizes and antitrust laws may not prohibit.<sup>65</sup> They acknowledge the general desirability of alienability of patent rights<sup>66</sup> but note broad agreement among economists that “relatively

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57. 35 U.S.C. § 284.

58. Hylton, *supra* note 55, at 429.

59. *Id.* at 432–33.

60. *Id.* at 435.

61. *Id.* at 437–38.

62. Erik Hovenkamp & Herbert Hovenkamp, *Buying Monopoly: Antitrust Limits on Damages for Externally Acquired Patents*, 25 TEX. INTELL. PROP. L.J. 37 (2017).

63. *Id.* at 39.

64. *Id.* at 40.

65. *Id.* at 50.

66. *Id.* at 39.

competitive markets are more conducive to innovation than monopolized markets.”<sup>67</sup> Hovenkamp and Hovenkamp observe that courts have previously fashioned rules that limit patents’ effective enforceability<sup>68</sup> and argue that limiting patent damages could be a more efficient means to advance competition than standard mechanisms for antitrust enforcement.<sup>69</sup>

In *Allocating Patent Litigation Risk Across the Supply Chain*,<sup>70</sup> Michael Meurer considers situations in which multiple parties—for example, product manufacturers and their customers—are liable for a single course of patent infringement.<sup>71</sup> For such situations, Meurer investigates how damages or risk of damages might be best allocated among parties via indemnification, insurance, and court proceedings.<sup>72</sup> Most particularly, Meurer investigates the extent to which indemnification agreements, including agreements that cap a party’s liability, affect the parties’ bargaining positions with respect to a relevant patent owner.<sup>73</sup> Meurer observes that caps on liability can create conflicts between the interests of contracting parties when they bargain with a patent owner.<sup>74</sup> On the other hand, liability caps can also generate benefits by potentially making at least one of the parties a harder bargainer.<sup>75</sup> Meurer suggests that these hard-bargaining benefits might be especially useful when “patent notice works poorly and patent clearance is difficult.”<sup>76</sup>

In *Patent Damages Without Borders*,<sup>77</sup> Sapna Kumar questions current case law that restricts the availability of monetary relief for U.S. patent infringement when relevant profit-making occurs abroad.<sup>78</sup> She contends that such case law misapplies the general presumption against extraterritorial reach for U.S. law.<sup>79</sup> Kumar discusses the justifications for this presumption<sup>80</sup> and its

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67. *Id.* at 42.

68. *Id.* at 67.

69. *Id.* at 46.

70. Michael J. Meurer, *Allocating Patent Litigation Risk Across the Supply Chain*, 25 TEX. INTELL. PROP. L.J. (forthcoming 2017).

71. *Id.*

72. *Id.*

73. *Id.*

74. *Id.*

75. *Id.*

76. *Id.*

77. Sapna Kumar, *Patent Damages Without Borders*, 25 TEX. INTELL. PROP. L.J. 71 (2017).

78. *Id.* at 77–78.

79. *Id.* at 76.

80. *Id.*

historical application to not only U.S. patent law but also trademark and copyright law.<sup>81</sup> Kumar concludes that, with respect to extraterritorial damages, U.S. patent law is out of step with other areas of law.<sup>82</sup> In her view, U.S. courts should be able to award extraterritorial damages for domestic patent infringement,<sup>83</sup> but they should do so only after appropriately weighing concerns of comity against the U.S. “interest in making victims of domestic patent infringement whole.”<sup>84</sup> Further, courts should not award extraterritorial damages when their connection to domestic infringement is “too speculative or tenuous.”<sup>85</sup>

These twelve symposium articles cover disparate ground but feature common themes. Authors such as Amerson, Cotter, and Kumar explore how decision-making might be simplified or made more evenhanded and coherent. Amerson, coauthors Bartlett and Contreras, and coauthors Graham, Menell, Shapiro, and Simcoe discuss procedural innovations that might improve aggregate and even individual results. Chien, Sichelman, and coauthors Golden and Sandrik investigate additional factors or evidence that courts might use in assessing reasonable royalties. Meurer and coauthors Hovenkamp and Masur study interactions between court-awarded damages and contractual mechanisms of private ordering. Finally, Hylton, Kumar, coauthors Hovenkamp and Hovenkamp, and coauthors Golden and Sandrik show how other areas of law—tort, copyright, trademark, antitrust, and restitution—can provide direction and insight for the law of patent damages. In short, despite taking widely different approaches to frequently distinct endpoints, the symposium articles feature repeated use of certain tactics to achieve better understanding of how the awarding of patent damages functions and might be improved.

Of course, there are further potential tactics that are missing from this limited set of articles. Just as the patent system must work with limits inevitable in any human-made and human-implemented system of law, so too is the academic enterprise bounded by the limited capacities of its practitioners and the circumstances in which they appear. Thus, this symposium’s articles will not bring an end to patent damages debates. Nonetheless, these embodied applications of the legal thinker’s toolkit deepen those debates and point out ways to move forward. The symposium articles offer a richly rewarding read.

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81. *Id.* at 94–97.

82. *Id.* at 109.

83. *Id.*

84. *Id.* at 110.

85. *Id.* at 111.