

PROMOTING A ROBUST, BALANCED & FLEXIBLE EUROPEAN PATENT ECOSYSTEM TO PREVENT ABUSIVE PATENT PRACTICES OF PATENT ASSERTION ENTITIES

The number of highly-complex, multi-functional and integrated products and services supporting Europe's digital economy will increase exponentially in the coming years. The increasing pervasiveness of internet connectivity and the advent of connected cars, homes, "Industry 4.0" and the broader internet of things (IoT) lie at the heart of European policy-making and its ambitions for a digital single market. Research and development (R&D) and innovation in these areas will increasingly be a key driver of future jobs and growth in Europe. Such multi-featured, integrated products and services however are relatively new in our modern society and pose new challenges for Europe's patent ecosystem.

One new challenge is the rise of patent assertion entities (PAEs) in Europe seeking to exploit Europe's patent legal system for their own financial gain. PAEs do not make anything. Their activity is a pure financial play designed to squeeze productive companies solely for their own benefit. They buy up patents, often of poor quality, and use the shortcomings of the legal system which enable them to force companies to accept high settlement payments, often against companies that cannot afford to defend themselves, even when infringement and patent validity are highly questionable. And unlike manufacturers who assert their patents, PAEs do not face the risk of countersuit against their products or reputational harm from bringing abusive litigation.

PAE lawsuits in Europe are fuelled, in part, by a PAE's ability to obtain an automatic, permanent injunction against a product following a finding of infringement even though the PAE makes or sells no product, the patent covers only a trivial aspect of the accused product, or the patent's validity is doubtful or not yet decided. Although there are many circumstances in which injunctions are appropriate and necessary, the automatic issuance of such a drastic remedy fails to take account of the circumstances of the particular case and the interests of the parties, the interests of society, including the interests of consumers in the specific markets concerned. Automatic injunctions can slow innovation and discourage R&D investment by creating unwarranted leverage for a PAE compared to the value of the patented invention and enormous uncertainty for a defendant.

To achieve its digital and growth ambitions, Europe needs to support, nurture and safeguard its patent ecosystem by promoting the highest standards possible for the quality of its patents, ensuring balance in patent litigation, and addressing the root causes of abusive litigation practices. Strong IP protection must be a pillar of any digital-based economy, but such protections must be balanced so that they not only take into account the legitimate interests and rights of the patent holder to be fairly rewarded, but also the many additional interests at stake, including the public's interest in fuelling innovation and investment in new digital economy technologies.

A. Europe's innovators are under threat from abusive patent practices

Patents support innovation by allowing companies to protect their technology from copying, to share and develop new technology, and to obtain the freedom to operate necessary to bring new products to market. But a patent system that can be manipulated through abusive litigation tactics, including the assertion of low quality patents, will undermine rather than support innovation, disserving consumers and the economy by draining scarce resources from the development of new products.

The dramatic rise in patent litigation involving PAEs is a dangerous trend that merits the attention of EU policy makers. In the United States, lawsuits brought by PAEs have nearly quadrupled over the past decade.¹ PAEs now account for a majority of all patent litigation.² Small and medium-sized entities (SMEs) are frequently the targets of these assertions, facing lawsuits that can disrupt their business and even threaten their survival.^{3,4}

In Europe, PAE lawsuits have begun to follow the same trajectory, growing in number and often targeting SMEs. PAE activity has long existed in Europe, accounting for roughly 10% of the lawsuits filed in Germany between 2000 and 2008 and in the United Kingdom between 2000 and 2013.⁵ More recent evidence, however, suggests that PAE activity is accelerating rapidly. An empirical study of the registers for recording patent ownership in Europe demonstrated that PAE purchases of European patents increased ten-fold from 2005 to 2015.⁶ Most of the transferred patents involved communications or computer technology and were purchased by PAEs based in the United States. Those purchases now form the basis of a growing number of PAE lawsuits in Europe against productive companies. European countries together received 80% of all PAE cases filed outside the US over the past five years.⁷ Germany receives by far the greatest number, with the large majority of those cases proceeding during 2015 and 2016.⁸ A recent study provides examples of lawsuits brought by PAEs in Europe.⁹ According to this study, while PAEs

¹ Rational Patents, NPE Litigation Is Up in Q2 2016—and New Plaintiffs Emerge (2016), <http://www.rpxcorp.com/2016/06/30/npe-litigation-is-up-in-q2-2016-and-new-plaintiffs-emerge/>.

² Unified Patents, 1st Half 2016 Patent Dispute Report (2016), <https://www.unifiedpatents.com/news/2016/1sthalfpatentdisputereport>.

³ Rational Patents, 2015 Report: NPE Litigation, Patent Marketplace, and NPE Cost (2016), <https://www.rpxcorp.com/wp-content/uploads/sites/2/2016/07/RPX-2015-Report-072616.FinalZ.pdf>, (companies with less than \$100 million in revenue accounted for over 60% of unique defendants in 2015, and most were much smaller than that).

⁴ Colleen Chien, Startups and Patent Trolls, 17 Stanford Technology Law Review 461–506, 461-506 (2014), <https://journals.law.stanford.edu/sites/default/files/stanford-technology-law-review/online/startupsandpatentrolls.pdf>.

⁵ Brian Love, Christian Helmers, Fabian Gaessler, and Max Ernicke, Patent Assertion Entities in Europe (2015), <http://digitalcommons.law.scu.edu/facpubs/912>.

⁶ Dietmar Harhoff, Übertangungen von Patentrechten in Europa - eine empirische Analyse, GRUR-Jahrestagung 2015 (Sept. 25, 2015), http://www.grur.org/uploads/tx_meeting/Prof_Harhoff.pdf (publication forthcoming).

⁷ Darts-IP, The Rise of Non-Practicing Entity (NPE) Cases Outside the United States (2017), <http://www.darts-ip.com/the-rise-of-non-practicing-entity-npe-cases-outside-the-united-states/>.

⁸ Id. 153 patent cases brought by NPEs proceeded to either a hearing or a final decision in the German courts during 2011-2016. Three quarters of those occurred 2015-2016. These numbers do not include the large number of cases filed by NPEs that settled before a court hearing or that have not yet reached that stage. Consequently, the total number of lawsuits filed in Germany and throughout Europe is much higher than shown by the available data.

⁹ Brian Love, Christian Helmers, Fabian Gaessler, and Max Ernicke, Patent Assertion Entities in Europe (2015), <http://digitalcommons.law.scu.edu/facpubs/912>.

account for 19% of known patent lawsuits filed in Europe accounted for in the study, it is nonetheless a significant fraction which will undoubtedly come to increase in the next years. This rate corresponds roughly to the same level of PAE activity in the US in the early 2000s to mid-2005. Despite the alarming data and active discussions amongst the legal community, US public authorities nevertheless did not seriously tackle this problem which has led patent lawsuits to skyrocket in the US since then.

B. Increased judicial discretion can minimize abusive patent practices

PAEs are increasingly targeting certain features of Europe's patent legal system to gain unintended and unfair advantage over productive companies. Increased judicial discretion in the management of patent cases and the exercise of that discretion in the crafting of appropriate remedies can counter abusive practices.

1. Considering equity and proportionality in the granting of injunctions

The challenges facing Europe's patent ecosystem are particularly acute when it comes to injunctive relief. When courts permit even the most trivial patents to block complex products from the market, they give the patent owner tremendous business leverage over a defendant, especially an SME. A patent may contribute only insignificantly to the entire value of a product — consider, for example, a patent covering a sun visor on an automobile or a headphone jack on a smartphone — yet the threat of an injunction on such a trivial patent can be used by an unprincipled plaintiff to extract settlements or royalties that far surpass the actual value contributed to the product by the patented invention. That is especially true for threatened SMEs, whose entire revenues may be derived from a single accused product.

The problem is compounded in the case of multi-component products covered by a thicket of patents, where royalty stacking demands can exceed the value of the product. Indeed, the ability to threaten automatic injunctions is a powerful tool wielded by PAEs even though their goal is to receive payment, not block products from the market. By fuelling PAE litigation and excessive settlement payments, automatic injunctions undermine the patent system's goals of promoting innovation and economic growth.

The legal structure for preliminary injunctions in patent cases allows for judicial discretion and the consideration of equity and proportionality. This approach is in stark contrast to practice in many EU Member states for permanent injunctions, which are for the most part issued automatically upon findings of infringement without considerations of equity or proportionality. The result is different standards for patent protections, different approaches to remedies, and ultimately forum shopping by PAEs, which will undermine the EU's digital single market ambitions.

a) Damages in lieu of an injunction

Injunctions remain a necessary tool for IP judges, and in many cases, are appropriate upon a finding of infringement. But the law and its application must be flexible enough to recognize those cases in which an award of damages in lieu of an injunction will better serve the patent system's goals. The decision of whether to award damages rather than an injunction should involve balancing the patent holder's rights against the harm to consumers caused by removing the product from the market, the value of the invention relative to the product, and whether monetary damages would provide a more proportional

remedy. Removal of the entire product from the market may constitute a disproportionate remedy, for example, when the patented invention is a minor feature of a product that contains many additional components and thousands of other features unrelated to the asserted technology. In such cases, an award of damages that fairly compensates for the use of the invention based on the economic value of the actual invention may be the better remedy, especially when the patent holder is a PAE whose sole goal is to receive payments or when the PAE acquired the rights to the patent and began asserting it after its target has developed and/or marketed the product.

b) Judicial management in enforcement of injunctions

Even when an injunction is appropriate, the ability to take a more balanced approach to its enforcement may better serve consumers and promote investment in EU innovation. For example, at times a reasonable delay in the enforcement of an injunction or a grace period could permit a defendant to design around the patent, offer consumers a non-infringing alternative and ensure a continuous offer of requested products. Such an approach can respect a patent holder's rights while minimizing the damages and disruption to consumers and businesses.

2. Bridging the injunction gap

Some patent systems use different tribunals to decide the issues of infringement and validity, creating the potential for an "injunction gap" in which one tribunal decides infringement of an asserted patent and awards injunctive relief before the other decides invalidity.¹⁰ This outcome, if not managed appropriately, can produce unjustified disruptions of legitimate business and harm consumers. In cases where infringement is decided separate from validity, unscrupulous patent holders can assert overly broad and invalid patent claims that exceed the true scope of their inventive contribution, unjustifiably blocking products from the market and denying consumers access to preferred or lower-cost products.

An unprincipled plaintiff can also leverage the injunction gap to force defendants to make excessively high settlement payments, even on low quality patents that are likely invalid. SMEs, in particular, often cannot afford to have their product — sometimes their only revenue source — removed from the market for months while they litigate a patent's validity. The injunction gap thus allows plaintiffs without real industrial interest or risk to exert unjustified litigation pressure and to extract unwarranted settlement payments that can divert resources from R&D and other beneficial uses or drive up prices.

a) Coordinating infringement and validity decisions

Judicial management of the interconnected issues of infringement and validity can confer fairness and efficiency to all parties in litigation and help mitigate the harm arising from an injunction gap. One approach would be to decide the infringement and validity simultaneously. When that is not practical but a defendant raises serious questions about the validity of an asserted patent, a court should consider staying or delaying the infringement proceeding pending a ruling on the patent's validity.

¹⁰ See Cremers et al., Invalid but infringed? An analysis of the bifurcated patent litigation system, in: 131 J. Econ. Behav. Organ. 218-242 (2016), <http://www.sciencedirect.com/science/article/pii/S0167268116301640> (reporting an average gap between an infringement decision and a validity decision of 14 months).

b) Staying or delaying enforcement of an injunction

Alternatively, upon a finding of infringement, a court should consider delaying the enforcement of an injunction, if any, pending resolution of a legitimate challenge to the patent's validity. Courts should have the ability and discretion to implement such measures to take due account of the validity of a patent when adjudging infringement.

3. Enhancing fee shifting

Fee shifting can be an effective means of deterring abusive litigation, but only if appropriately implemented with this goal in mind. Fee-shifting provisions however often do not impact PAEs effectively, either because the fees are too inconsequential or because the PAE is underfunded.

The PAEs driving the marked increase in the number of abusive patent infringement actions in the United States often are underfunded entities created solely to hold and assert patents.¹¹ If such PAEs lose litigation and a court orders them to pay the defendant's fees, they claim they are unable. This can be a particular hardship for SMEs who have paid high filing fees to bring a nullity action in order to defend themselves and then cannot recoup those fees after winning. This potential outcome could force defendants (particularly SMEs who cannot afford the costs of fees) to settle with a PAE even if there is a good defence that the patent is invalid.

a) Requiring additional assurances from PAEs

To obtain the deterrent and equitable benefits of fee-shifting, European courts should consider requiring additional assurances from PAEs. The posting of bonds, for example, has traditionally been used to protect defendants against damages stemming from the enforcement of an injunction that is overturned on appeal. Requiring a PAE to post a bond at the outset of litigation to cover potential post-judgment fees could provide analogous protections to defendants while serving as a deterrent to frivolous patent infringement lawsuits.

b) Reasonable limits to the amount recoverable

For fee-shifting to be meaningful, statutory caps, ceilings, or similar flat-rate schemes limiting the amount recoverable have to be reasonable and proportionate compared to a successful party's actual expenses. While this has been expressly recognized in legislation¹² and by courts¹³, successful parties usually are only able to recoup a fraction of their actual expenditures. European IP judges should have a greater opportunity to consider such issues and fashion fee structures appropriate to the particular litigation issue.

¹¹ Federal Trade Commission, "Patent Assertion Entity Activity" (October 2016), https://www.ftc.gov/system/files/documents/reports/patent-assertion-entity-activity-ftc-study/p131203_patent_assertion_entity_activity_an_ftc_study.pdf.

¹² See Art. 14 of the Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights.

¹³ See CJEU, Judgment of 28 Jul 2016, C-57/15 (United Video Properties).

C. Higher quality patents and greater transparency of patent litigation data support a stronger European patent ecosystem

1. Higher quality patents

Patent quality is essential to a robust, balanced and flexible patent eco-system. Abusive practices often entail PAE's taking advantage of low quality patents to leverage a quick settlement. A recent study conducted in Germany between 2000 and 2013 found that the courts invalidated 43% of the patents challenged before them and partially invalidated another 35%. For software and telecommunications patents the rates were even higher, with the courts invalidating 58% of challenged patents and partially invalidating another 30%.¹⁴ Although only a subset of all issued patents are ever challenged in a nullity proceeding, these high invalidation rates suggest that low quality patents do issue and become the subject of expensive litigation and the potential source of an injunction, at least during the injunction gap.

Ensuring that only high quality patents issue that have clear boundaries and represent a worthy invention is essential to combating the threat of abusive patent litigation. The EPO's initiative to "Raise the bar on patent quality"¹⁵ is an important step toward this goal. The EPO should continue the review of such matters and consider how to improve the patent examination process to support the validity and clarity of issued patents. Such steps should include consideration of ways to improve the patent prosecution record so that the public has clear notice of the scope and meaning of the claims.

2. Greater transparency of patent litigation data

It is presently very difficult to gather information on patent cases across the EU Member States and members of the European Patent Convention. In some states, the filing, progress and decisions rendered in infringement actions are not made public. There is often no repository providing a comprehensive list of cases filed and outcomes. Even when the fact of a lawsuit is made public through press reports, the public has no access to key information such as the patents asserted and the arguments made by the parties. Data is scarce. Because the patent grant represents a bargain between the inventor and the public in which the inventor receives rights in exchange for making the invention public, the public has an interest in understanding how courts are interpreting and enforcing those rights.

Moreover, it is difficult to identify and analyse trends in litigation that could reveal problems and serve as the basis for beneficial policy change. This also means that comparative analysis between EU Member States and between the EU and other legal jurisdictions is very difficult.

Europe needs robust data to analyse trends, inform decision-making and identify adjustments to the patent system that would improve its ability to support innovation and economic growth. Harmonized recording requirements, electronic record keeping and the reporting of patent cases in national or European databases would make the patent ecosystem more transparent and more robust while promoting better decision-making and

¹⁴ Peter Hess, Tilman Muller-Stoy, Martin Wintermeir, "Are Patents merely "Paper Tigers"?, Mitt. 2014, 439, http://www.bardehle.com/uploads/files/Patent_Papiertiger.pdf.

¹⁵ European Patent Office, Annual Report 2007, Raising the bar on patent quality, <https://www.epo.org/about-us/annual-reports-statistics/annual-report/2007/focus.html>.

policies. The Unified Patent Court (UPC) will offer increased transparency, and other jurisdictions should follow this example.¹⁶

D. The establishment of the Unified Patent Court requires Europe to strengthen its patent ecosystem

The EU's new Unitary Patent and the establishment of its Unified Patent Court (UPC) offer the opportunity for European and national policy makers to review the operation of the patent system to ensure that it can meet the challenges of Europe's digital future and its ambitions for a digital economy and single market. Simultaneously, the EU's review of its IPR rules in connection with the digital single market initiative could provide opportunities to consider judicial practice related to patents and ensure that different approaches do not create barriers to the digital single market.

Without change, the UPC potentially creates an open invitation to PAEs. The threat of an injunction that applies across the European Union is a powerful weapon, and the UPC hands PAEs exactly such a weapon, which they are preparing to use. The UPC offers other attractions to PAEs also: they will have more time to prepare for the case than the defendant and they will be able to choose the ideal venue for the hearing.

Although the UPC will operate independent of but parallel to national patent systems, it will certainly grow in influence with time as it shapes Europe's future digital economy, technological standing and competitive position in the world. It is therefore important that the UPC's divisions and its trained, expert judges not be bound by outdated rules and practices designed for more static economies and simpler products. They should be encouraged to exercise their discretion to provide equitable and proportionate decision-making to support Europe's new dynamic digital economy. The UPC's initial case selection, rulings and interactions with national patent systems provide a unique opportunity to dialogue with policy-makers and the larger IP legal community about how the patent ecosystem in Europe can best support innovation and growth and avoid the worst abusive practices endemic in other legal systems.

IP2Innovate calls on EU policymakers to seize this opportunity to strengthen Europe's patent ecosystem.

¹⁶ Unified Patent Court Rules of Procedure (October 2015), <https://www.unified-patent-court.org/sites/default/files/UPC-Rules-of-Procedure.pdf>, (Rule 262, Public Access to the Register).