

# Growth Companies and Procedural Safeguards in European Patent Litigation

**Krista Rantasaari**

## **Abstract**

The unitary patent system with the establishment of the Unified Patent Court (UPC) will lead to unitary patent protection covering most EU countries. Moreover, it will lead to litigation with the same geographical reach. One potential concern related to increasing litigation is the so-called patent trolls (non-practicing entities) that purchase patents for the purpose of portfolio building or company financing. One of the key expressed justifications of the unitary patent system was to support small- and medium sized companies (SMEs) by securing them easier and wider access to patents. The aim of this article is to examine procedural safeguards from the perspective of the start-up and growth companies. These safeguards protect start-up and growth companies when acting as defendants. As a corollary, they weaken the enforcement mechanisms from the perspective of the plaintiff. The safeguards addressed in this article are fee shifting, preliminary injunctions, and bifurcation. As the UPC system is still evolving, the current state of European patent litigation in key jurisdiction countries is analyzed; the countries analyzed are Germany, the UK, and the Netherlands. This article explores how these safeguards evolve in the unitary patent regime and their potential to reduce uncertainty for start-up and growth companies when acting as defendants.

## **Keywords**

Unitary patent, patent enforcement, litigation, SME, start-up, and growth companies

## **Corresponding author:**

Krista rantasaari, University of Turku, Faculty of Law  
Email: krista.rantasaari@utu.fi

## 1. Introduction

Small, innovative growth companies can easily adjust to the rapid changes of modern society. They are often recognized as the drivers of economic growth in new, innovative, and merging areas.<sup>1</sup> The protection of SMEs has been one of the key expressed justifications of the unitary patent system.<sup>2</sup> The Unitary Patent will provide broad patent protection covering most EU countries with a single application.<sup>3</sup> Patent trolls, also known as non-practising entities (NPEs) exploit wider protection.<sup>4</sup> They are patent monetizing entities, which purchase patents from others. Their operation might eventually lead to aggressive patent litigation. Small companies might also be targets of patent suits as they may pay nuisance settlements regardless of the merits of the case in fear of costly litigation. The patent industry and legal scholars are concerned about the possibility of an increase in patent trolling.<sup>5</sup> However, the Vice President of the European Digital Single Market, Anrup Ansip, claims that the unitary

---

<sup>1</sup> OECD, 'OECD Innovation Strategy 2015: An agenda policy for Action', *Meeting of the OECD Council at Ministerial Level Paris (2015)*, <http://www.oecd.org/sti/OECD-Innovation-Strategy-2015-CMIN2015-7.pdf>, p. 8.

<sup>2</sup> I. B. Sterjna, *The Parliamentary History of the European "Unitary Patent". Verbatim protocol of selected meetings in the European Parliament and its Legal Affairs Committee* (Tredition GmbH, 2016). Besides start-up and growth companies the term SME (Small and Medium Size Company) will also be used. SMEs are defined in the Recommendation (EU) No 2003/361/EC of the Commission, [2003] OJ L 124. The term start-up and growth companies is used as this research has focus on companies that are relatively small and highly intensive in their innovation activities.

<sup>3</sup> The new unitary patent system will be evaluated as it forms one of the core recent European developments in this area. The unitary patent system consist of the Regulation (EU) No. 1257/2012 of the EP and of the Council of 17 December 2012 implementing enhanced cooperation in the area of the creation of unitary patent protection, [2012] OJ L361/1, Regulation (EU) No. 1260/2012 of 17 December 2012 implementing enhanced cooperation in the area of creation unitary patent protection with regard to the applicable translation arrangements, OJ L361/89 [2012] and the Agreement on a Unified Patent Court, OJ C175/1 [2013] (AUPC Agreement). Of further relevance are the Rules of Procedure for the UPC (the RoP) the latest 18<sup>th</sup> version has been adopted by the Preparatory Committee in March 2017 and the Rules on Court Fees and Recoverable Costs final draft has been adopted by the Preparatory Committee in February 2016. The Unified Patent Court (UPC) will be a court common to the contracting Member States and thus, part of their judicial system.

<sup>4</sup> It is extremely difficult to define an NPE. The body of literature on the definition is rich and varied. For some brief overviews on the matter, see, inter alia, T. Ewing and R. Feldman, 'Giants Among Us', 1 *Stan. Tech. L. Rev* 1 (2012); C. Helmers and L. McDonagh, *Law, 'Trolls at the High Court', Society and Economy Working Papers* (2012); S. Fusco, 'Markets and Patent Enforcement: A Comparative Investigation of Non-Practicing Entities in the United States and Europe', 20 *Michigan Telecommunications and Technology Review* (2014).

<sup>5</sup> IP2I is a coalition of innovative companies, who have directly experienced NPEs in the European environment. See <http://www.ip2innovate.eu>. For legal scholars see for example D. Harhoff, 'Economic Cost-Benefit Analysis of a Unified and Integrated European Patent Litigation System', *Final Report in Ludwig Maximilian University München* (2009), Tender No. MARKT/2008/06/D, p. 50; L. McDonagh, 'Exploring Perspectives of the Unified Patent Court and Unitary Patent Within the Business and Legal Communities', *UK Intellectual Property Office* (2014), <http://openaccess.city.ac.uk/12605/>, p. 26; Heide et al., 'Study on the Changing Role of Intellectual Property in the Semiconductor industry – including non-practicing entities', *European Commission* (2014), <https://ec.europa.eu/digital-single-market/en/news/study-changing-role-intellectual-property-semiconductor-industry-including-non-practicing-0>, p. 25; Thumm et al., 'Patent Assertion Entities in Europe. Their Impact on Innovation and Knowledge Transfer in ICT Markets', *JRC Science Policy Report* (2016), p. 55-56.

patent system, more exactly the UPC Agreement, provides safeguards against patent trolls.<sup>6</sup> NPEs exist in Europe, and are active, for example, in Germany and in the UK. NPEs account for approximately ten per cent of patent suits litigated in Germany and in the UK.<sup>7</sup>

The main research question in this article is: Do the substantive patent norms of the unitary patent system provide safeguards for start-up and growth companies when acting as defendants? If not, then the European patent litigation resembles a Hobbesian state of war where the strongest with the deepest pockets win. In order to answer the research question, this article evaluates the procedural safeguards available for start-up and growth companies when accused of infringing the patent owner's rights. The safeguards evaluated are fee shifting, preliminary injunctions, and bifurcation. Here safeguards are understood as mechanisms that protect defendants against plaintiffs and make the enforcement mechanisms for the plaintiff weaker. Fee shifting, preliminary injunctions, and bifurcation have been presented in the legal literature as either preventing or increasing NPE litigation.<sup>8</sup>

Fee shifting refers to a situation where the losing party has to pay the entire costs of the successful party, thereby deterring frivolous lawsuits. Thus, this is a pure safeguard. Preliminary injunctions and bifurcation, in contrast, increase frivolous lawsuits. Therefore, the main rule that initially allows preliminary injunctions and bifurcation needs exceptions. These exceptions to the main rule have the function of a procedural safeguard. Preliminary injunctions imply an order to withdraw the potentially infringing technology from the marketplace. The threat of an extensive EU-wide injunction could attract abusive litigation and furthermore, promote unjustified settlements for start-up and growth companies. Bifurcation refers to the procedural separation of validity, and infringement claims potentially increase the cost and length of the dispute. This article advances two arguments. Firstly, fee shifting can act as a safeguard for defendants. Secondly, preliminary injunctions and

---

<sup>6</sup> Intellectual Property 2 Innovate (IP2I) has recently called for the European Commission to take concrete action to prevent abuses from patent trolls. See <http://www.ip2innovate.eu>. For the correspondence see A. Ward, 'European Patent Troll Boom Spurs Google, Adidas, Intel & Daimler Backed IP2Innovate to Demand Commission Get Tough with US Patent Trolls', *IP Watchdog* (2017), <http://www.ipwatch.com>.

<sup>7</sup> Helmers et al., Patent Assertion Entities in Europe', *Santa Clara Law Digital Commons* (2015), p. 2. See also for example T. Ewing and R. Feldman, 1 *Stan. Tech. L. Rev* 1 (2012); Helmers and L. McDonagh, *Law, Society and Economy Working Papers* (2012); S. Fusco, 20 *Michigan Telecommunications and Technology Review* (2014).

<sup>8</sup> For overview on the matter, see, inter alia, D. Harhoff, *Final Report in Ludwig Maximilian University München* (2009); 'The Evolving IP Marketplace: Aligning Patent Notices and Remedies with Competition', *Report of the Federal Trade Commission* (2011), <http://www.ftc.gov/os/2011/03/110307patentreport.pdf>; C. Helmers and L. McDonagh, *Law, Society and Economy Working Papers* (2012); S. Fusco, 20 *Michigan Telecommunications and Technology Review* (2014).

bifurcation need efficient exceptions to act as safeguards for defendants. As the first sub-question, the article asks what kind of exceptions the unitary patent system will provide for preliminary injunctions and bifurcation. As the second sub-question, the article asks do these safeguards reduce uncertainty from the start-up and growth companies point of view.<sup>9</sup>

These studied arguments seem to be valid as Fee shifting does act as a safeguard and preliminary injunctions and bifurcation do provide exceptions to the main rule. The studied safeguards reduce uncertainty from the start-up and growth companies' point of view. All the studied safeguards had elements of an issue-based approach. Furthermore, legal principles, such as proportionality, equity, fairness to the parties, play an important role.

New Institutional Economics (NIE) will form the theoretical basis of this article. The article thus evaluates the studied safeguards as institutions. Their interaction with certain organisational arrangements, namely start-up and growth companies and NPEs will form the focus of the article.<sup>10</sup> In addition to European-level development, case law from Germany, the UK and the Netherlands will be utilised.<sup>11</sup> The impact of NPE lawsuits on start-up and growth companies in particular is still a relatively novel research area.<sup>12</sup>

In the following chapters, Chapter 2, analyzes the European patent enforcement system, the unitary patent system, and the increased litigation from the point of view of start-up and growth companies, and discusses the role of patent funds, which function as NPEs. Chapter 3,

---

<sup>9</sup> Law and economics emphasise normative analysis and point to desirable legal rules and institutions to achieve certain goals. For example according to D. C. North the major role of institutions is to reduce uncertainty. Hence, the major role of the institutions is not to increase efficiency as traditionally in law and economics. See, on this point, D. C. North, *Institutions, Institutional Change and Economic Performance*, (Cambridge University Press, 1990), p. 6-7.

<sup>10</sup> The Organizations and institutions term is adopted from the NIE. The NIE studies institutions and how these interact with organizational arrangements. See D. C. North, *Institutions, Institutional Change and Economic Performance*; C. Ménard C. and M. M. Shirley, 'Introduction', in C. Ménard C. and M. M. Shirley: (eds.), *Handbook of New Institutional Economics* (Springer-Verlag, 2008); E. G. Furubotn and R. Richter, *Institutions & Economic Theory*, (University of Michigan Press, 2005).

<sup>11</sup> These countries handle the majority of European patent cases and, therefore, are the most relevant ones for this research. For the relevance of these jurisdictions in litigation see Taylor Wessing 2016, 'Global Intellectual Property Index Report (GIPI)', <http://www.taylorwessing.com/ipindex>. In the UK there is no unified legal system.

<sup>12</sup> An exception to this is a relatively recent study by C. Chien, 'Start-ups and Patent Trolls', *Santa Clara Law Digital Commons, Faculty Publications* (2012). Also J. Bessen and M. Meurer claim that SMEs are often defendants for NPE litigation. See, on this point, J. Bessen and M. Meurer 'The Direct Costs from NPE Disputes', 99 *Cornell Law Review* (2014), p. 387-424.

evaluates how institutions facilitate transactions and how fee shifting, preliminary injunctions, and bifurcation work as safeguards. This article concludes with final remarks.

## 2. Unitary patent and Infringement

The unitary patent will provide extensive patent protection covering all the EU Member States that ratify the AUPC. Thus, it will not cover the full area of the Internal Market. Currently, 14 Contracting Member States have completed the ratification process.<sup>13</sup> Article 89(1) of the AUPC requires that the AUPC is ratified by 13 states, including France, Germany and the UK. France has ratified the Agreement. The UK is struggling with post-Brexit uncertainties and the Constitutional Court of the Germany has put the ratification process on hold. Due to these reasons, there is no date for the entry into force of the AUPC and for the UPC to become operational.<sup>14</sup>

Currently, there are national patents and European patents granted by the EPO (European Patent Organisation). The unitary patent will provide an additional option for patent protection. A unitary patent is a European patent to which, at the request of its proprietor, a unitary effect is given.<sup>15</sup> The registration of a unitary effect thus requires a European patent to be granted under the rules of the EPC. This makes it a unique construct under EU law, as the EU title is granted on the basis of a right conferred under an international convention.<sup>16</sup> A unitary patent will be subject to the same legal rules in all Member States. The UPC will have

---

<sup>13</sup> For an updated overview of the ratification process, see European Council, 'Agreement on a Unified Patent Court', *Consilium* 2017, <http://www.consilium.europa.eu/en/documents-publications/agreements-conventions/agreement/?aid=2013001>

<sup>14</sup> For analysis of the ratification process, see J. Alberti, 'New Developments in the EU system of judicial protection: the creation of the Unified Patent Court and its future relation with the CJEU', 24 *Maastricht Journal of European and Comparative law* (2017), p. 10-11; T. Müller-Stoy, 'Unitary Patent and Unitary Patent Court stopped just before the Finish Line', *Bardehle Pagenberg* (2017), <https://www.bardehle.com/ip-news-knowledge/ip-news/news-detail/unitary-patent-and-unified-patent-court-stopped-just-before-the-finish-line-perspectives-after-the.html>. For the analysis of the post-Brexit in UK, see T. Jaeger, 'Reset and Go: The Unitary Patent System Post-Brexit', *SSRN Discussion Paper* (2016). For the entry into force, see above all, the official UPC website, <https://www.unified-patent-court.org>.

<sup>15</sup> Article 3 and 4 of the Regulation No. 1257/2012. Unitary patent is also called the EPUE (the European patent with unitary effect). See A. Kaisi, 'Finally a Single European Right for the EU? An analysis of the substantive provisions of the European patent with unitary effect', 36 *European Intellectual Property Review* (2014), p. 170.

<sup>16</sup> S. Luginbuehl, *European Patent Law. Towards Uniform Interpretation* (Edward Elgar Publishing, 2011), p. 47.

exclusive jurisdiction with respect to unitary patents as well as after a transitional period when European Patents will be designated by one or more member states.<sup>17</sup>

A unitary patent gives the right of exclusivity.<sup>18</sup> Exclusivity protects patent owners against infringers. For the unitary patent the AUPC provides a broad set of rules on infringements and their exceptions.<sup>19</sup> For the practical implementation of the AUPC the relevant element is the work of the Preparatory Committee. The Preparatory Committee of the AUPC was set up in March 2013 by the 25 Member States that have signed the AUPC. The Preparatory Committee will exist until the UPC is established.<sup>20</sup> The procedural details of the AUPC have been developed in the Rules of Procedure (RoP).<sup>21</sup> Furthermore, the Rules on Fees and Recoverable Costs are important. The Preparatory Committee has agreed on the draft Rules of Procedure and on the Rules of Fees and Recoverable Costs. Therefore, these rules are final and accepted by the Preparatory Committee, but they lack formal adoption.<sup>22</sup>

In addition to protection against infringers, exclusivity also stipulates that a patent serves as an asset. The unitary patent is regarded as an object of property, but in this matter the unitary patent regulation specifies the exclusive application of national law. Therefore, as an object of property for a given unitary patent only one national law would apply throughout the territories of enhanced cooperation.<sup>23</sup> Therefore, in this respect different national laws apply to different unitary patents. This applies for example to the transfer of rights and erga omnes effects of contractual licensing.<sup>24</sup>

The current European patent system under the European Patent Convention (EPC) is fragmented. The post-grant phase takes place at a national level.<sup>25</sup> Therefore, the unitary

---

<sup>17</sup> Article 3 and 4 of the Regulation No. 1257/2012.

<sup>18</sup> Article 5 of the Regulation No. 1257/2012.

<sup>19</sup> Articles 5 to 8 of the Regulation No. 1257/2012

<sup>20</sup> For more information, see the official UPC website <https://www.unified-patent-court.org>.

<sup>21</sup> Article 41 of the AUPC.

<sup>22</sup> At the time of writing, the latest 18<sup>th</sup> draft of the RoP will be under scrutiny by the European Commission on the compatibility of the Rules of Procedure with Union law and will be later be subject to formal adoption by the UPC Administrative Committee. Furthermore, the Preparatory Committee agreed on the Rules on Fees and Recoverable Costs on the 25<sup>th</sup> of February 2016. More information: [www.unified-patent-court.org](http://www.unified-patent-court.org).

<sup>23</sup> Article 7 of the Regulation 1257/2012.

<sup>24</sup> R. Hilty and J. Drexler, 'The Unitary Package: Twelve Reasons for Concern', *Max Planck Institute for Intellectual Property and Competition Law (2012)*, p. 2.

<sup>25</sup> Before the era of the UPC system, patents were territorial rights pursuant to Article 64(3) of the Convention on the grant of European Patents, signed in Munich on 5 October 1973 as revised on 17 December 1991 and on 29 November 2000. Hence, any infringement of a European patent is dealt with in national law. This could lead to a

patent system seems to be a new beginning for the European patent system covering most European countries. This also makes the infringements proceedings more attracting as, for example, the threat of injunctions applies to all EU Members States that will ratify the AUPC.

### 3. Patent Funds and Monetization of Patents

For future growth, the effective use of patents is significant. Patent funds in general help to monetize patents by creating a secondary market for patents. Therefore, they have the role of an intermediary.<sup>26</sup> This is essential for start-ups and growth companies as they often lack the resources to monetize patents. As a corollary, patent funds might create a threat of litigation and cause costs. Some patent funds have a litigation-oriented business model, also referred to as NPE.

Patent funds can be seen as organisational arrangements. Organisational arrangements are the different modes of governance that market actors implement to facilitate transactions and contractual agreements.<sup>27</sup> In order to generate a better understanding about patent funds, comparison to venture capital is useful. Patent funds have similar elements to venture capitalists in their fund structures, fund raising, and sources of inventions.<sup>28</sup>

---

duplication of court cases and contradictory patent enforcement decisions across jurisdictions within Europe. The post-grant phase refers to infringement litigation and revocation actions. For a broader overview on this topic, see D. Harhoff, *Final Report in Maximilian University München* (2009), p. 38-40; Cremers et al., 'Patent Litigation in Europe', *Discussion Paper No. 13-072, Centre for European Economic Research* (2013), p. 1; F. Baldan and E. Van Zimmeren, 'The future of the Unified Patent Court in Safeguarding Coherence in the European Patent System', *Common Market Law Review* 52 (2015), p. 12; D. Kitchin, 'Introductory Remarks: A Judicial Perspective', in J. Pila and C. Wadlow (eds.), *The Unitary EU Patent System* (Hart Publishing, Oxford and Portland, 2016), p. 1-2.

<sup>26</sup> Japan Patent Office, 'New Intellectual Property Policy for Pro-Innovation. Intellectual Property System as Global Infrastructure', *Report of Policy Committee on Innovation and Intellectual Property*, 2008, [https://www.jpo.go.jp/iken\\_e/pdf/iken\\_e\\_innovation/draf\\_report.pdf](https://www.jpo.go.jp/iken_e/pdf/iken_e_innovation/draf_report.pdf), p. 148; T. Yanagisawa and D. Guellec, 'The Emerging Patent Marketplace', *OECD Science, Technology and Industry Working Papers, No. 2009/09* (2009), p. 8. The most prominent intermediaries have been patent auctions and patent funds. See, in particular, Bader et al., 'Creating a Financial Market for IPR', *Final Report for EU Tender No 3/PP/ENT/CIP/10/A/NO2S003* (2011), p. 101.

<sup>27</sup> C. Ménard C. and M. M. Shirley: (eds.), *Handbook of New Institutional Economics*, p. 1.

<sup>28</sup> Venture capital (VC) is a broad subcategory of private equity and refers to investments typically made in innovative companies in the early stages of their development that have potential for high growth and are typically driven by technological innovation. For some overviews on venture capital and private equity, see, inter alia, E. Talmor and F. Vasvari, *International Private Equity* (John Wiley & Sons Ltd, 2011); K. P. Jarboe and R.

Patent funds are issued to finance major investment projects. Similar to venture capital funds, patent funds are generally structured as a limited partnership.<sup>29</sup> Investors can subscribe only for a specific period. The fund is dissolved or liquidated after the expiry of a predefined period and the shares are distributed among members. Thus, investors cannot withdraw their capital until the fund is terminated. Therefore, they are called closed funds.<sup>30</sup> The largest entities collect funds in order to finance activities. Funding sources of patent funds come from investors such as larger companies, hedge funds, venture capital funds, academic institutions, and other even state-controlled bodies.<sup>31</sup> As with venture capital funds, patent funds are often blind pools of capital. An investor does not typically know which patents will be invested in, whereas an asset pool has its investment targets defined in advance. Sources for investments are, for example, universities, research institutes, and start-up and growth companies.<sup>32</sup>

The business model and revenue strategy of patent funds vary. In the figure below, funds are divided into portfolio building and company financing. Figure 1. summarizes the different business models of patent funds.

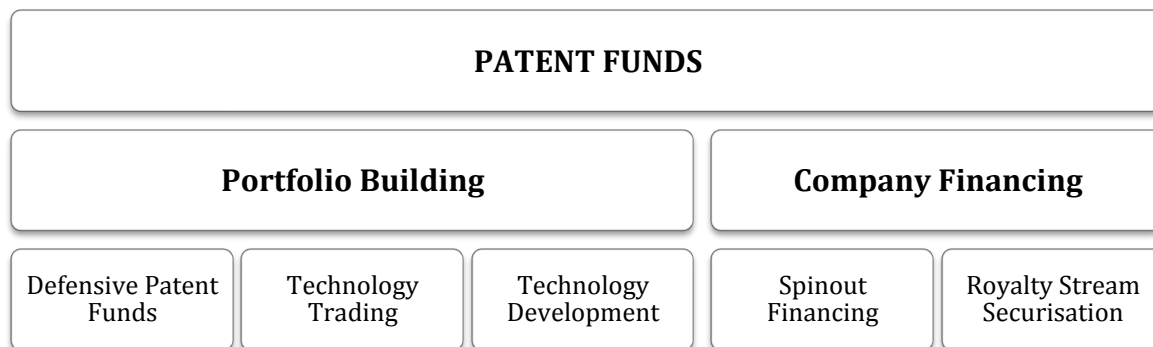


Fig. 1. Overview of the business methods of different patent funds

Furrow, 'Intangible Asset Monetization. The Promise and the Reality', *Athena Alliance* (2008); T. Meyer and P. Mathonet, *Beyond the J-curve* (John Wiley & Sons Ltd, 2005).

<sup>29</sup> T. Meyer and P. Mathonet, *Beyond the J-curve*, p. 10; G. Buchtela et al., 'See.IP Fund Feasibility Study', *South-East European Co-operation of Innovation & Finance Agencies* (2010), p. 13.

<sup>30</sup> The fund can also be open (also called mutual fund), which allows investors to join at any time. Furthermore, the fund is obliged to return investments. Purchase and sales prices are identified in the market on a daily basis as well. Most of venture capital funds have a contractually limited 10-year lifetime, with potential extensions of 2-3 years. During that time the investor's capital is often unavailable. See G. Buchtela et al., *South-East European Co-operation of Innovation & Finance Agencies* (2010), p. 14; Talmor and F. Vasvari, *International Private Equity*, p. 27-28; Thumm et al., *JRC Science Policy Report* (2016), p. 5.

<sup>31</sup> Other entities are for example nations such as China, France, South Korea and Taiwan. See T. Ewing and R. Feldman, *1 Stan. Tech. L. Rev* 1 (2012), p. 1-2.

<sup>32</sup> B. G. Buchtela et al., *South-East European Co-operation of Innovation & Finance Agencies* (2010), p. 14.



The entities in the first group of patent funds focus on building the IP Portfolio. They build their patent portfolios based on patents generated through the strategic acquisition of other parties' patents. The acquisition strategies vary. In some acquisition activities, the entities purchase the majority of an operating company's patents and patent applications. Patent funds have also engaged in unusual acquisition approaches, including purportedly purchasing the rights to all future inventions by researchers at universities.<sup>33</sup> IP portfolio building funds attempt to establish licensing programmes based on their patent portfolios, and generate revenues from such licensing activities. Technology development funds have their own research and development in order to develop products further, but do not generally produce any products or services. Technology trading funds trade technology without further development of the IP. Defensive Patent Funds function as strategic protection to maintain the owners' freedom to operate.<sup>34</sup>

The second group of patent funds fosters patent transfer through financing companies. The business model can be IP spinout financing. These funds provide capital for their counterparty against its IP. They might also provide traditional venture capital. Furthermore, there are also royalty stream securitisation companies, which are Special Purpose Vehicles (SPV). The patent owner transfers patents to the SPV and receives money and, optionally, a share of the SPV. Consumers buy products protected by the IP asset, and payments and royalties flow into the SPV.<sup>35</sup>

Start-up and growth companies might be the targets of patent troll litigation. Patent funds that are litigation-oriented and accused of patent troll litigation are NPEs. NPEs can be, for example, a defensive patent fund or a technology development fund. In general, smaller companies have less capital, therefore NPEs do not necessarily generate revenues through damage claims. NPEs mean a threat of impending costly litigation and offers for a settlement with an escalating royalty or a licensing fee. Furthermore, an NPE might demand a company's

---

<sup>33</sup> T. Ewing and R. Feldman, 1 *Stan. Tech. L. Rev* 1 (2012), p. 1-2.

<sup>34</sup> Bader et al., 'Creating a Financial Market for IPR', *Final Report for EU Tender No 3/PP/ENT/CIP/10/A/NO2S003* (2011), p. 101-104; Yanagisawa, T. and D. Guellec, 'The Emerging Patent Marketplace', *OECD Science, Technology and Industry Working Papers, No. 2009/09* (2009), p. 22-25.

<sup>35</sup> Yanagisawa, T. and D. Guellec, 'OECD Science, Technology and Industry Working Papers, No. 2009/09' (2009), p. 29; M. A. Gollin, *Driving Innovation. Intellectual Property Strategies for a Dynamic World* (Cambridge University Press, 2008), p. 323-324.

equity.<sup>36</sup> Small companies might also be targets of patent suits as users of technology, for example in the US Project Paperless, the LCC sued small businesses due to their use of digital scanners.<sup>37</sup> Furthermore, smaller companies suffer most from the economic uncertainty that NPE suits bring. This is due to the reason that they typically lack financial resources to fight extended litigation battles.<sup>38</sup>

In research made in the US, start-up and growth companies constitute the majority of defendants in NPE suits.<sup>39</sup> At present, it seems that NPEs have not widely asserted patent suits against European SMEs. However, as US-based NPEs explore more opportunities in Europe and the unitary system offers wider patent protection, European SMEs might be more interesting targets in the future.<sup>40</sup>

## 4. Procedural Safeguards for Defendants

### A. Procedural Safeguards as Legal Institutions

The legal institution sets the general environment where institutional arrangements take place. The unitary patent system can be recognized as a legal institution. Institutions determine the costs of transactions and thus effective institutions can lower transaction costs.<sup>41</sup> One of the main reasons to create the unitary patent system was to lower transaction costs for SMEs. Further reasons were the existence of parallel enforcement decisions, and the existence of judicial incoherence. Overall, the new unitary patent system can be praised as

---

<sup>36</sup> C. Chien, *Santa Clara Law Digital Commons, Faculty Publications* (2012), p. 11; Thumm et al., 'Patent Assertion Entities in Europe. Their Impact on Innovation and Knowledge Transfer in ICT Markets', *JRC Science Policy Report* (2016), p. 5.

<sup>37</sup> C. Chien, *Santa Clara Law Digital Commons, Faculty Publications* (2012), p. 4.

<sup>38</sup> D. Harhoff, *Final Report in Ludwig Maximilian University München* (2009), p. 51.

<sup>39</sup> Companies with less than \$ 10 M in revenue accounted for 55 % of unique defendants. Based on the RPX Database. C. Chien, *Santa Clara Law Digital Commons, Faculty Publications* (2012), p. 1. See also J. O. Lanjouw and M. Schankerman, 'Characteristic of Patent Litigation: a Window on Competition', *Rand Journal of Economics Vol. 32 No 1.* (2001); M. Meurer and J. Bessen, 'The Patent Litigation Explosion', *Boston University School of Law, Working Paper 05-18* (2005).

<sup>40</sup> Thumm et al., 'Patent Assertion Entities in Europe. Their Impact on Innovation and Knowledge Transfer in ICT Markets', *JRC Science Policy Report* (2016), p. 32.

<sup>41</sup> Transaction cost is a central concept for NIE. See D. C. North, *Institutions, Institutional Change and Economic Performance*; E. G. Furubotn and R. Richter, *Institutions & Economic Theory*, p. 7.

well also criticised. On the one hand, the wider patent protection and the common post-grant phase may foster innovation and help companies in their patenting activities. On the other hand, additional litigation and the threat of litigation may impose more costs and complexity that attract NPE litigation. In the research literature, the threat of increasing NPE litigation has also been one of the key concerns as regards the unitary patent system.<sup>42</sup> Patent suits in general are considered complex and thus, associated with high transaction costs. This is naturally more evident in NPE oriented frivolous lawsuits.<sup>43</sup>

The centralised patent system of unitary patents and the new business models might lead to the filing of damage claims for infringement.<sup>44</sup> Furthermore, the uncertainty inherent in any new court system will itself attract NPEs.<sup>45</sup> This will cause harm particularly for start-up and growth companies as they have fewer resources for defending their case in court. Therefore, it is important to have safeguards when start-up and growth companies are involved in litigation as defendants. These safeguards should be effective, so that transaction costs are kept low. The safeguards are seen as institutions that provide a framework for the interaction between institutions and organisations. The major role of institutions is to reduce uncertainty by establishing a stable structure for the interaction.<sup>46</sup> The studied institutions are the substantive patent norms that provide safeguards: the AUPC, the draft rules of the RoP, and the draft rules of the Rules of Fees and Recoverable Costs. The relevant aspects of these norms are detailed in the following sections.

As the UPC system is still evolving, it is necessary to analyze the current state of European patent litigation in key jurisdictions. These are Germany, the UK and the Netherlands.<sup>47</sup>

---

<sup>42</sup> See for example L. McDonagh, *European Patent Litigation in the Shadow of the Unified Patent Court* (Edward Elgar, 2016), p. 14; Thumm et al., *JRC Science Policy Report* (2016), p. 9; Helmers et al. 'Patent Assertion Entities in Europe', *Santa Clara Law Digital Commons* (2015), p. 18-19.

<sup>43</sup> See D. Harhoff, *Final Report in Ludwig Maximilian University München* (2009) p. 51; G. Ball and J. Kesan, 'Transaction Costs and Trolls: Strategic Behaviour by Individual Inventors, Small Firms and Entrepreneurs in Patent Litigation', *Illinois Law and Economics Paper Series No. LE09-005* (2009), p. 5.

<sup>44</sup> See D. Harhoff, *Final Report in Ludwig Maximilian University München* (2009), p. 29-50; D. Xenos, 'The European Unified Patent Court: Assessment and Implications of the Federalisation of the Patent System in Europe', *10 Scripted* (2013), p. 252; S. Fusco, *20 Michigan Telecommunications and Technology Review* (2014) p. 463.

<sup>45</sup> L. McDonagh, *European Patent Litigation in the Shadow of the Unified Patent Court*, p. 142.

<sup>46</sup> See on this point D. C. North, *Institutions, Institutional Change and Economic Performance*, p. 6. The role to reduce uncertainty is not necessarily efficient.

<sup>47</sup> For the relevance of these jurisdictions in litigation see Taylor Wessing 2017, 'Global Intellectual Property Index Report (GIPI)', *Taylor Wessing* (2016), <http://www.united-kingdom.taylorwessing.com>. In the UK there is no unified legal system. England and Wales, Scotland, and Northern Ireland have separate legal systems and

Furthermore, the organisational and procedural provisions of the AUPC are inspired to a large extent by national judicial systems.<sup>48</sup> The AUPC and the RoP are analyzed in the following sections. In addition, the Rules of Fees and Recoverable Costs are analyzed in the section dealing with fee shifting.

## **B. Fee Shifting**

In this article it is argued that fee shifting is a pure safeguard. It has a positive impact as it makes the loser pay and therefore, deters frivolous suits by NPEs.

In the US, the rise of frivolous lawsuits by NPEs has been partly explained by the fact that costs are not recoverable. Therefore, each party is generally responsible for paying its own attorney's fee. Fee shifting rules have been proposed as one way to deter patents suits that are brought for their nuisance value and has led to several proposed legislation bills.<sup>49</sup> The current legislation already permits a district court to award reasonable attorneys' fees and costs to the prevailing party in exceptional cases. District courts may determine whether a case is exceptional in a case-by-case exercise considering the totality of the circumstances.<sup>50</sup>

In general, the identification of the impact of frivolous suits is difficult.<sup>51</sup> Fee shifting could also be done selectively to sanction parties who litigate objectively weak patents.<sup>52</sup> The empirical research conducted by Helmers and McDonagh regarding the UK and Wales shows that the combination of a high likelihood of losing a case and the liability for paying the

---

courts. The enforcement system in England and Wales is the most important jurisdiction with respect to patent litigation. See L. McDonagh, *European Patent Litigation in the Shadow of the Unified Patent Court*, p. 18-19.

<sup>48</sup> See for example A. Ilardi, *The New European Patent*, (Bloomsbury Publishing, 2015), p. 55.

<sup>49</sup> For example the proposed bill Saving High-Tech Innovators from Egregious Legal Disputes Act (SHIELD Act, H.R. 845). See C. Chien, *Santa Clara Law Digital Commons, Faculty Publications* (2012), p. 22.

<sup>50</sup> See 35 U.S.C. § 285 (2012). This was clarified for example in *Octane Fitness LLC v. ICON Health & Fitness Inc.*, 134 S. Ct. 1749, Syllabus, 7-8 (April 29, 2014). In this case it was claimed that an exceptional case is simply one that stands out from the others with respect to the substantive strength of a party's litigation position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated.

<sup>51</sup> The body of literature on frivolous lawsuits and their impact is extremely rich. For some overviews, see, inter alia, T. Rowe, 'Predicting the Effects of Attorney Fee Shifting. Law and Contemporary Problems', 47 *Duke* (1984), p. 139-171; T. Eisenberg and G. Miller, 'The English vs. the American Rule on Attorneys Fees. An Empirical Study of Attorney Fee Clauses in Publicly-Held Companies Contract', 98 *Cornell Law Review* (2013).

<sup>52</sup> M. Liang and B. Berliner, 18 *Virginia Journal of Law & Technology* (2013), p. 136.

winner's costs of engaging in the legal action may prevent the NPE action.<sup>53</sup> Therefore, it seems that the fee shifting rule alone would not be efficient as a safeguard, but combined with the likelihood of losing a case it could prevent frivolous lawsuits. Thus, under such conditions, NPEs would not litigate weaker patents.<sup>54</sup>

In European jurisdictions, the IP Enforcement Directive<sup>55</sup> has harmonised some parts of the remedies, even though they are mainly governed by national law. According to the IP Enforcement Directive, the unsuccessful party should pay reasonable and proportionate legal costs and other expenses.<sup>56</sup> Furthermore, measures should be fair, equitable, not unnecessarily complicated or costly, or entail unreasonable time limits or unwarranted delays.<sup>57</sup> In the Netherlands, for example, this rule shifted the cost to the losing party. Before the implementation of the IP Enforcement Directive, the Dutch Courts typically shifted only a small amount of the fees.<sup>58</sup> The Netherlands, the UK and Germany have fee shifting rules, which all have similar elements. The court can for example, use discretion and consider proportionality. However, there are also differences in how costs are allocated between the parties.<sup>59</sup>

The UK applies a fee shifting rule. Typically, in the UK, costs are allocated via an issue-based approach on a proportionate basis.<sup>60</sup> The Patents High Court (PHC) stated in *Research in Motion UK Ltd v Visto Corp* that the costs ought to be divided on a proportionate basis to the issues won in trial. The PHC also noted that there was a disproportionate burden between both sides and gave guidance to the costs assessment judge. In England and Wales, the substantive legal issues and the costs are dealt with separately. Hence, it seems that in the UK

---

<sup>53</sup> C. Helmers and L. McDonagh, *Law, Society and Economy Working Papers* (2012), p. 20.

<sup>54</sup> There is evidence from the US that shows that NPE's are losing a substantial share of their lawsuits, which is a much larger fraction than that of the producing companies. See M. Risch, 'Patent Troll Myths', *42 Seton Hall Law Review* (2012), p. 461.

<sup>55</sup> Directive 2004/48/EC of the European Parliament and the Council of 29 April 2004 on the enforcement of intellectual property rights, O.J. 2004 L 157 (the IP Enforcement Directive).

<sup>56</sup> Article 3 of the IP Enforcement Directive.

<sup>57</sup> Article 14 of the IP Enforcement Directive.

<sup>58</sup> J. Brinkhof, 'The Enforcement of Patent Rights in the Netherlands', *IIC* (2000), p. 706, 721; Cremers et al., 'Patent Litigation in Europe', *European Journal of Law and Economics* (2016). See *Danisco A/S v. Novozymes A/S*, Court of Appeal The Hague, 26 February 2013, Case no. 200.094.921/01.

<sup>59</sup> For UK, see the Civil Procedure Rules 1998 (CPR) (SI 1998/3132) sec. 44.3, for Germany, see the German Code for Civil Procedures (Zivilprozessordnung, ZPO) sec. 91(1), for the Netherlands, see the Dutch Code of Civil Procedure (Wetboek van Burgerlijke Rechtsvordering, DCC) § 1019h.

<sup>60</sup> The Civil Procedure Rules 1998 (CPR) sec. 44; L. McDonagh, *European Patent Litigation in the Shadow of the Unified Patent Court*, p. 27. See, in particular, *Research in Motion UK Ltd v Visto Corp* [2008] EWHC 819 (Pat); 31(5) I.P.D. 31033.

courts are unwilling to cap costs, even where great disparity between parties exists, although cost assessment guidance can be given.<sup>61</sup>

The Netherlands applies a fee shifting rule as well. In the Netherlands, legal costs have to be reasonable and proportionate.<sup>62</sup> Legal costs are calculated on the basis of the procedure and the financial interests involved. Furthermore, parties can also agree on the amount of costs and inform the court on their agreement about costs.<sup>63</sup>

Germany applies a fee shifting rule, but the costs are not fully shifted. Germany has a value-based fee system where the costs are statutory fees, which depend on the estimated value of the dispute. The estimated value is used as a basis for the court to divide the costs between the loser and the winner. Therefore, costs are not the actual costs, meaning that the winning party is unlikely to recuperate all of its legal costs. As a result, the costs are not fully shifted to the loser. In cases where the plaintiff's request is only partially granted the costs are split in accordance with the degree of success.<sup>64</sup>

Under the unitary patent regime and the AUPC, the losing party must pay the legal costs and other expenses incurred by the successful party, as a general rule. The AUPC leaves room for the discretion of the UPC. There are a number of principles that limit the fee shifting rule in article 69 of the AUPC. Firstly, only reasonable and proportionate legal costs and other expenses may be recovered. Secondly, equity serves as a ground for rendering the general rule inapplicable. Thirdly, in the case of a partial success or in exceptional circumstances, the UPC may order the parties to bear their own costs, or apply a different apportionment of costs, based on equity. Fourthly, unnecessary costs caused to the UPC or the other party have to be borne by the party incurring them.<sup>65</sup>

---

<sup>61</sup> C. Helmers and L. McDonagh, 'Patent Litigation in England and Wales and the Issue-based Approach to Costs', 32 *Civil Justice Quarterly* (2013), p. 377, 382. See also *Research in Motion UK Ltd v Visto Corp* [2008] EWHC 819 (Pat); 31(5) I.P.D. 31033. In England and Wales the substantive legal issues and the costs are dealt with separately.

<sup>62</sup> The Dutch Code of Civil Procedure (DCC) § 1019h; K. Cremers et al., 'Invalid but Infringed? An Analysis of Germany's Bifurcated Patent Litigation System'. *Zew Mannheim, Max Planck Institute for Innovation and Competition Research Paper No. 14-14* (2014); J. Brinkhof, *IIC* (2000), p. 721-722.

<sup>63</sup> The Dutch Civil Code (DCC) § 1019h; J. Brinkhof, *IIC* (2000), p. 721-722.

<sup>64</sup> The German Code for Civil Procedures (ZPO) sec. 92. The German Code for Court Costs (Gerichtskostengesetz, GKG) §39.1. See also the Renumeration Code for Lawyers' Costs (Rechtsanwaltsvergütungsgesetz, RVG). H. Marshall, *IIC*, p. p. 668; L. McDonagh, *European Patent Litigation in the Shadow of the Unified Patent Court*, p. 41-42; Cremers et al., *European Journal of Law and Economics* (2016).

<sup>65</sup> Article 69 of the AUPC

The Preparatory Committee has set out the scales of costs that a successful party may recover from their opponent. However, the ceilings of the recoverable costs can be amended to a certain extent. Therefore, in limited situations the UPC may raise or limit the ceiling. For example, the UPC may raise or limit the ceiling in the light of the principle of fair access to justice if the case is complex, multiple languages are used or the financial capability of parties differs.<sup>66</sup> Furthermore, the UPC may lower the ceiling applicable if the unsuccessful party is for example an SME and the recoverable cost would threaten their economic existence. In its discretion, the UPC considers all available information on the parties. The analyzed information might be the procedural behaviour of the parties, the applicable level of the ceiling for recoverable costs in comparison with the annual turnover of both parties, the type of economic activities of both parties and the impact the lowered ceiling would have on the other party.<sup>67</sup> It is unclear from the current texts if the successful party recovers the court fees from the unsuccessful party. Based on the AUPC this seems to be the case as other expenses are mentioned, but the decision on the scale of ceilings for recoverable costs indicates that these ceilings only apply to representation costs, which suggests that court fees cannot be recovered.<sup>68</sup>

As there is inherent uncertainty regarding a patent's value, patent cases feature a high degree of complexity. Thus, these fee shifting limitations in Article 69 of the AUPC and the discretion of UPC are important. According to Helmers and McDonagh, in an issue-based approach, where judges use their discretion, a fairer outcome is more likely, as it is rare to find an overall winner in patent cases. For example, if a company wins the case overall, it may still have to pay costs for the issues that they did not win.<sup>69</sup> Similar to the UK and in Germany, the AUPC states that in a case of partial success the UPC may order the parties to bear their own costs.<sup>70</sup>

It is important that the type of economic activity could also lead to the lowering or raising of the ceiling of the recoverable costs that a successful party may recover from their opponent. For example, the US Supreme Court and evidently the UK High Court have used the status of

---

<sup>66</sup> Recitals 1 and 2 of the Preparatory Committee Rules on Fees and Recoverable Costs.

<sup>67</sup> Recital 3 of the Preparatory Committee Rules on Fees and Recoverable Costs.

<sup>68</sup> Article 69 of the AUPC . See also the Preparatory Committee Rules on Fees and Recoverable Costs.

<sup>69</sup> C. Helmers and L. McDonagh, 32 *Civil Justice Quarterly* (2013), p. 382.

<sup>70</sup> Article 69 of the AUPC.

the NPE as part of their analysis. The US Supreme Court rejected both a general rule supporting the granting of a permanent injunction following a finding of patent infringement, and expansive principles supporting the denial of a patentee who did not practice its invention and was willing to licence.<sup>71</sup> Similarly, in the UK in a High Court case it was confirmed that IPRCom must abide by the commitments it made to the European Commission and cannot seek injunctions under standard-essential patents against companies such as Nokia, who are prepared to take a license on fair reasonable and non-discriminatory terms. Furthermore, it was clarified that IPRCom was seen as a non-practicing entity.<sup>72</sup> Even though the exact definition of NPEs is controversial it often includes the idea that they do not manufacture the product based on the technology in question and their main revenue comes from licensing and court judgments.<sup>73</sup> The UPC may lower the ceiling of the recoverable costs if the unsuccessful party is an SME. Further, the UPC may consider the type of economic activity relevant. Hence, it is possible to lower or raise the ceiling of the recoverable costs on the basis of the economic activity when the other party is a NPE.

Overall, fee shifting can act as a safeguard. Fee shifting combined to the high likelihood of losing a case seem to efficiently prevent NPE litigation. Therefore, the high quality of unitary patents that cannot be easily revoked is essential. Fee shifting is familiar in the studied European countries and thus, suits European jurisdictions. The scale of costs that the Preparatory Committee has set out resembles the value based-system of Germany. The UPC could lower the ceiling for recoverable costs if the unsuccessful party is an SME. Fee shifting in the unitary patent system has limitations and discretionary elements, for example proportionality, equity, and partial success. Therefore, the UPC could also potentially apply a more issue-based approach, as the UK and the Netherlands have done. For start-up and growth companies it is important to have an issue-based approach where, for example, the type of economic activity or the partial success is considered to be at the discretion of the UPC.

---

<sup>71</sup> See *eBay Inc. v. MercExchange L.L.C.*, 547 U.S. 388 (15 May 2006); *Nokia Oyj (Nokia Corporation) v IPRCom GmbH & Co Kg*, [2012] EWCA Civ 567: For an analysis of the *Nokia Oyj (Nokia Corporation) v IPRCom GmbH & Co Kg*, [2012] case see, F. Mueller, the UK High Court denies a patent injunction against Nokia in light of a FRAND commitment, *Foss Patents (2012)*, <http://www.fosspatents.com>.

<sup>72</sup> *Nokia Oyj. v IPRCom GmbH & Co Kg* (2012). Furthermore, in a hearing, Judge Roth referred to a classic case *Shelfer v City of London Electric Lighting Co*. This case laid out criteria based on which injunctive relief can be denied because monetary compensation is considered sufficient. Since this ruling, it has been applied to a number of patent cases in the UK. See also *Shelfer v City of London Electric Lighting Co (1895)*.

<sup>73</sup> See G. Ball, and J. Kesan, *Illinois Law and Economics Paper Series No. LE09-005* (2009), p. 6.



### C. Lifting the Corporate Veil Prevents Circumvention

Under most circumstances, a corporation is regarded as a separate legal entity and distinct from its shareholders. Therefore, although the company is liable for its actions, holding the owners or investors liable for the activities of the company is far more complicated. NPEs might use shell companies for the specific purpose of shielding their owners or investors from liability and thus circumvent the fee shifting rule. The use of shell companies means the creation of a corporate network that narrowly confines legal claims and provides a firewall to protect the larger company.<sup>74</sup> For example, the German fund IP Com is structured as a Special Purpose Vehicle (SPV) and therefore, as an SPV it is not connected to the assets of the patent fund.<sup>75</sup> When the NPE loses litigation and a court orders it to pay the legal costs, as an SPV it claims that it is unable to do so. This is particularly hard for SMEs who have paid high filing fees to bring a nullity action to defend themselves and then cannot recoup those fees after winning.<sup>76</sup>

The circumvention of fee shifting could be potentially prevented by lifting the corporate veil. Lifting (or piercing) the corporate veil is a metaphor for various ways courts ignore separate corporate personality, and justify granting a remedy where the corporate entity has been misused.<sup>77</sup> Here the interest is in extending the veil so that it imposes the responsibility upon the shareholders or is extended to a bunch of companies. For example by treating the holding company as responsible for the acts of its subsidiary. In the US, the veil piercing principles have been followed for many years. In commercial matters, courts will look through the corporate veil and impose the company's liability on its shareholders after considering two aspects. First, if the company is merely an alter ego for another entity or corporation. Second,

---

<sup>74</sup> T. Ewing and R. Feldman, 1 *Stan. Tech. L. Rev* 1 (2012), p. 37-38.

<sup>75</sup> C. Colleen, 'Santa Clara Law Digital Commons, Faculty Publications (2012), p. 41.

<sup>76</sup> IP2innovate, 'Promoting a Robust, Balanced & Flexible European Patent Ecosystem to Prevent Abusive Patent Practices of Patent Assertion Entities', Intellectual Property 2 Innovate (IP2I) (2017), <https://www.ip2innovate.eu>

<sup>77</sup> S. Ottolenghi, 'From Peeping Behind the Corporate Veil, Ignoring It Completely', 53 *The Modern Law Review*, p. 338-353; K. A. Strasser, 'Piercing the Veil in Corporate Groups', 27 *Connecticut Law Review*, p. 637-665; R. Cowper and M. Dockterman, 'Teasing the Corporate Veil', 32 *International Financial Law Review* (2013), p. 43.

if the corporate facilitates a fraud or inequitable consequences.<sup>78</sup> The carefully crafted legal structures make it particularly difficult to disregard the corporate form.<sup>79</sup>

Misuse of the company form or legal obligations could lead to the piercing of the corporate veil for example in Sweden. The Swedish Supreme Court held shareholders liable for a certain company's obligation to compensate the opposing party's legal expenses that had accrued during a dispute. The shareholders were viewed to have used the company to avoid the statutory obligation to compensate the opposing party's legal expenses.<sup>80</sup> Similarly, the piercing of corporate veil has previously been permitted in the German Federal Supreme Court. A shareholder, who removes the company's assets, leaving it without sufficient funds to fulfil its third party obligations, may be personally liable under the law of tort.<sup>81</sup> In the UK, the UK Supreme Court (formerly the House of Lords) has confirmed that English courts are permitted to pierce the veil if there are no other legal methods for achieving an equivalent result and the piercing of the veil prevents the abuse of corporate legal personality.<sup>82</sup>

For start-up and growth companies, the fee shifting rules are inefficient if the NPE is unable to pay the adjudged legal costs. It seems that lifting the corporate veil in order to avoid the legal costs is compatible with the European legislative environment. Therefore, lifting the corporate veil could potentially prevent the circumvention of fee shifting.

#### **D. European-wide Preliminary Injunction**

Under the unitary patent regime, it will be possible for NPEs to be granted European-wide patent protection, and therefore also the possibility to obtain a European-wide preliminary injunction. The threat of a wide EU-wide injunction could attract abusive litigation by NPEs and further promote unjustified settlements as regards start-up and growth companies. This article claims that preliminary injunctions increase frivolous lawsuits, and therefore, it needs to include exceptions to the main rule that initially allows preliminary injunctions.

---

<sup>78</sup> R. Cowper and M. Dockterman, 32 *International Financial Law Review* (2013), p. 43.

<sup>79</sup> T. Ewing and R. Feldman, 1 *Stan. Tech. L. Rev* 1 (2012), p. 40-41.

<sup>80</sup> Högsta Domstolen, T 2133-14 (11 December 2014), p. 5-6.

<sup>81</sup> Bundesgerichtshof, BGH, Urteil vom. 24 July 2002, II ZR 300/00.

<sup>82</sup> *Prest v Petrodel Resources limited and other*, [2013] EWCA Civ 1395.

Preliminary injunctions are highly effective remedies available to a patent holder in case of an infringement.<sup>83</sup> A preliminary injunction permits patent holders to ban unlicensed products containing the patented technology from the marketplace, which under the Unitary Patent will cover all unitary patent Member States as a single patent jurisdiction.<sup>84</sup> The plaintiff may request preliminary injunctions to avoid irreparable harm, but also in order to impose financial stress on their rivals. This might be a particularly effective threat to use against start-up and growth companies that are often capital-constrained defendants.<sup>85</sup> Preliminary injunctions are used by NPEs to increase their bargaining power by preventing allegedly infringing product sales in order to achieve greater licensing or settlement fees.

In Germany, preliminary injunctions can be granted based exclusively on an assessment of infringement claims. In practice, the granting of preliminary injunctions is relatively rare due to the overall speed of regular patent infringement proceedings. They are used mainly in simple cases, or in situations where it is relatively easy to decide whether there is an infringement. In order to obtain a preliminary injunction, the plaintiff must show the existence of a relevant legal claim and a legal reason. Furthermore, the plaintiff must indicate the necessity for an injunction to prevent considerable disadvantages. The examination process balances the probabilities.<sup>86</sup> In the UK, injunctions are equitable remedies, which in general can be issued where the court considers it to be just and convenient. Moreover, in the UK, preliminary injunctions are rarely granted due mainly to the existence of the doctrine of clearing the way. Clearing the way means that potential infringers are encouraged to file a claim to revoke a competitor's patent, or to obtain a declaration that their product does not infringe the competitor's patent.<sup>87</sup> In the Netherlands a preliminary injunction can be used and may be obtained within two weeks after filing a case. At the preliminary hearing, the

---

<sup>83</sup> J. Leubsdorf, 'The Standard for Preliminary Injunctions', 91 *Harvard Law Review*, p. 525; J. Lanjouw and J. Lerner, 'Tilting the table? The Use of Preliminary Injunctions', 44 *The Journal of Law & Economics*, (2001), p. 574.

<sup>84</sup> J. Leubsdorf, 91 *Harvard Law Review*, p. 541.

<sup>85</sup> J. Lanjouw and J. Lerner, 44 *The Journal of Law & Economics*, (2001), p. 573 and 601.

<sup>86</sup> The German Civil Procedure Rules, ZPO sec. 935; J. Klink, 'Cherry Picking Cross-Border Patent Infringement Actions: a Comparative Overview of German and UK Procedure and Practice', 11 *E.I.P.R.*, p. 497; M. Norrgård and A. Nylund, 'The Requirements for Preliminary Injunctions in the Unified Patent Court', in R. M. Ballardini, M. Norrgård and N. Bruun (eds): *Transitions in European Patent Law. Influences of the Unitary Patent Package*, (Kluwer Law International, 2015), p. 202; L. McDonagh, *European Patent Litigation in the Shadow of the Unified Patent Court*, p. 37. See also Oberlandesgericht, OLG Celle, Urteil vom. 17 March 1993 - 14 U 74/93.

<sup>87</sup> L. McDonagh, *European Patent Litigation in the Shadow of the Unified Patent Court*, p. 23. See for example *SmithKline Beecham & Anor v Apotex Europe Ltd & Ors*, [2002] EWHC 2556.

plaintiff and the defendant have to provide oral arguments and the court's decision is made swiftly.<sup>88</sup>

The UPC may order preliminary injunctions according to Article 62 of the AUPC. The word "may", indicates that the AUPC can implement a defendant-favourable position but that preliminary injunctions are not automatic. The AUPC recognises the right to prevent the use of the invention without the consent of the patent proprietor as being the core right of the patentee. This could lead to an interpretation that only under very exceptional circumstances will the AUPC use its discretion and does not implement such an order in most instances. Furthermore, remedies should be used in a fair and equitable manner, so as not to distort competition.<sup>89</sup> This is a case-by-case discretion that allows the UPC to consider elements such as whether the plaintiff actually practices the invention.<sup>90</sup> This empowers the UPC judges to consider the principles of fairness and equity with respect to possible abusive litigation by NPEs.

When, exercising this discretion, the UPC has to evaluate the interests of the parties and in particular take into account the potential damage to either of the parties resulting from the granting or refusal of the injunction.<sup>91</sup> The AUPC refers to the weighing of interests, but there is no reference to how this weighing is to be done. There are some decision-theoretical models, which can help to make the requirements for preliminary injunctions more precise. The use of preliminary injunctions may cause irreparable loss to both sides and the court's task is to minimize this loss. According to Leubsdorf's decision-theoretical model, minimizing the loss can be done by analysing the factors of the likelihood of the victory and the probable loss. Thus, the harms and likelihood of success are determined concurrently. Norrgård and Nylund propose an inverse sequential approach in which the court would start by weighing the interests of the parties, which in turn would define the standard of proof required. Thus,

---

<sup>88</sup> J. Brinkhoff, 'The Enforcement of Patent Rights in the Netherlands', 31 *International Review of Intellectual Property and Competition Law (IIC)* (2000), p. 706, 709-11.

<sup>89</sup> Articles 42 and 62 of the AUPC.

<sup>90</sup> Currently in the US, courts could deny injunctive relief on a case-by-case basis depending on other characteristics that differ by industry, such as whether the plaintiff actually practices the invention. See *eBay Inc. v. MercExchange L.L.C.*, 547 U.S. 388 (15 May 2006), 391. See also 35 U.S.C. § 283. Instead, relying on the express language of the Patent Act, which provides that district courts may issue injunctions in accordance with the principles of equity, the court looked to traditional equitable principles. Traditional equitable principles are: an irreparable injury, the remedies available in law are inadequate, the balance of hardships between parties and the public interest. For an analysis of *eBay Inc. v. MercExchange L.L.C.* see L. D. Burk and M. A. Lemley, *The Patent Crisis and How the Courts Can Solve It* (University of Chicago Press, 2009), p. 160.

<sup>91</sup> Articles 62(1) and 62(2) of the AUPC.

the greater the harm to the defendant compared with the plaintiff, the higher the threshold for a preliminary injunction.<sup>92</sup>

The UPC can also consider the use of alternative measures. According to the RoP, the UPC should take into account whether the patent has been upheld in an opposition procedure before the European Patent Office or any other court, the urgency of the action, whether the applicant has requested provisional measures without hearing the defendant and the reasons therefore, and if any protective letter has been filed by the defendant.<sup>93</sup> The protective letter is intended to give a defendant an opportunity to defend himself in case provisional measures are to be sought ex parte. Provisional measures may include injunctions.<sup>94</sup>

In summary, according to the AUPC, preliminary injunctions may be used. Therefore, the use of preliminary injunctions depends on the interpretation of the word may. The right to prevent the use of the invention without the consent of the patent proprietor is seen as the core right of the patentee. This could lead to an interpretation the UPC would often allow preliminary injunctions. When considering the countries researched, preliminary injunctions are allowed, and are mostly used in the Netherlands, but not in Germany or in the UK. This could lead to the conclusion that preliminary injunctions are not often allowed if the infringement proceedings are fast enough or there are other possibilities, similar to the clearing the way doctrine in the UK. The speed of the unitary patent regime remains to be seen when the UPC starts to operate. The option for bifurcation might accelerate the infringement proceedings similar to those in Germany, but at the same time bifurcation might be disadvantageous to start-up and growth companies mainly due to the costs. Furthermore, the AUPC allows other measures, for example a protective letter filed by the defendant.

There are exceptions to the main rule of preliminary injunctions. The principles of fairness and equity increase the discretionary power of the UPC. Furthermore, the weighting of interests could be beneficial for start-up and growth companies. Weighting of interests and an issue-based approach allows the UPC to consider whether the plaintiff actually practices the invention. Therefore, an issue-based approach prevents NPE litigation.

---

<sup>92</sup> J. Leubsdorf, 91 *Harvard Law Review*, p. 541; M Norrgård and A. Nylund, in R. M. Ballardini, M. Norrgård and N. Bruun (eds): *Transitions in European Patent Law. Influences of the Unitary Patent Package*, p. 203-205.

<sup>93</sup> Rule 209 of the RoP.

<sup>94</sup> Rule 207 of the RoP.

## E. Separating Infringement and Validity with Bifurcation

Bifurcation increases frivolous lawsuits<sup>95</sup>, and therefore, it needs exceptions to the main rule that initially allows bifurcation. In a bifurcated legal system, separate courts decide on infringement and validity independently from one another. Currently, bifurcation is used in a few European countries, including Germany, Austria, and Hungary.<sup>96</sup> Separate patent revocation proceedings increase the cost and the length of disputes and these additional costs are more difficult for SMEs than larger companies.

In Germany, regional courts (Landgerichte, LGs) have the competency to hear patent infringement cases. The LGs have no jurisdiction to decide on the validity of a patent either in the form of a defence against the patentee's claims for patent infringement or in the form of a counterclaim for declaratory judgment of validity. Instead, revocation proceedings are placed before/considered by the EPO (European Patent Organization), the DPMA (Deutsches Patent- und Markenamt) and the BPatG (Bundespatentgericht).<sup>97</sup>

It seems that an alleged infringer will refrain from challenging the validity in a bifurcated system even if the likelihood of seeing the patent invalidated is relatively good. Cremers et al. have analyzed the impact of bifurcation in Germany. They found that smaller firms are less likely to challenge the validity of a patent even when they are accused of infringement.<sup>98</sup> The bifurcated system can also be criticised based on an inconsistent claim construction. In the Court of Appeal for England and Wales, Lord Justice Jacob referred to Professor Mario

---

<sup>95</sup> See for example L. McDonagh, *European Patent Litigation in the Shadow of the Unified Patent Court*, p. 142; C. Helmers and L. McDonagh, 32 *Civil Justice Quarterly* (2013), p. 369; Thumm et al., *JRC Science Policy Report* (2016), p. 41; See also C. Wadlow, 'An Historical Perspective II: The Unified Patent Court', in Justine Pila and Christopher Wadlow (eds.): *The Unitary EU Patent System* (Hart Publishing, 2015), p. 39. C. Wadlow claims that bifurcation increases uncertainty that in turn attract NPEs.

<sup>96</sup> L. McDonagh, *European Patent Litigation in the Shadow of the Unified Patent Court*, p. 99. Here, the main focus is to analyse the rules of bifurcation within Germany. Therefore, the existing procedural rules of EU are not explained further.

<sup>97</sup> Cremers et al., *European Journal of Law and Economics* (2016).

<sup>98</sup> K. Cremers et al., 'Invalid but Infringed? An Analysis of Germany's Bifurcated Patent Litigation System', *Zew Mannheim, Max Planck Institute for Innovation and Competition Research Paper No. 14-14* (2014), p. 22. See also R. Carpenter, and B. Petersen, 'Is the Growth of Small Firms Constrained by Internal Finance?', 84 *The Review of Economics and Statistics* (2002), p. 298-309; B. Hall, 'The Financing of Research and Development', 18 *Oxford Review of Economic Policy*, p. 35-51.

Franzosi's comparison of an Angora cat: the patentee will try to make a patent's claims look as broad as possible when infringement is determined; whereas when the validity is determined, the patent's claims are presented as narrow as possible. This allows different constructions for claims in different courts.<sup>99</sup> This not just a theoretical question as there are cases relevant to this issue before the national courts in Germany, like *IPCom v HTC* and *Dr. Johannes Heidenhain GmbH v iC-haus GmbH*. The latter case shows this issue is relevant also for smaller companies.<sup>100</sup>

On the other hand, a strong presumption of validity, which puts considerable faith in the pre-grant examination of patent offices, allows a fast assessment of infringement claims because validity is not assessed simultaneously.<sup>101</sup> Moreover bifurcation offers the advantage of specialization. The court, charged with validity cases, can utilize technical judges and therefore, accumulate experience specifically in the assessment of patent validity. This should result in a coherent and well-founded claim construction, thereby increasing legal certainty regarding the validity of patents.<sup>102</sup> It is claimed that the general high quality of European and German patents supports this.<sup>103</sup>

The unitary patent system allows for a choice between bifurcation and an integrated process for hearing infringement and invalidity cases. Therefore, the unitary patent system contemplates discretionary bifurcation. The AUPC gives local or regional courts discretion to refer counterclaims for revocation to the central division and, depending on the circumstances of the case, either suspend or proceed with the infringement action. However, the local division may also decide to hear both actions, or transfer them both to the central division with the agreement of the parties.<sup>104</sup> In making such a decision the division

---

<sup>99</sup> K. Cremers et al., *Zew Mannheim, Max Planck Institute for Innovation and Competition Research Paper No. 14-14* (2014), p.10; D. Kitchin, in J. Pila and C. Wadlow (eds.), *The Unitary EU Patent System*, p. 6; C. Wadlow in Justine Pila and Christopher Wadlow (eds.): *The Unitary EU Patent System*, p. 39. See also *European Central Bank v DSS*, [2008] EWCA Civ 192.

<sup>100</sup> R. Vary, 'Bifurcation: Bad for Business. Our Experience.' *Presentation in the UK IPO Concept House* (2012), p. 2-3; K. Cremers et al., *Zew Mannheim, Max Planck Institute for Innovation and Competition Research Paper No. 14-14* (2014), p. 2-3; *IPCom v HTC* at Germany's Patent Federal Court, *Johannes Heidenhain GmbH and iC-haus GmbH* at the Regional Court Düsseldorf. Patent concerned in the first case was EP 1186189 and patent concerned in the second case was EP1168120.

<sup>101</sup> K. Cremers et al., *Zew Mannheim, Max Planck Institute for Innovation and Competition Research Paper No. 14-14* (2014), p. 10; S. Luginbuehl, *European Patent Law. Towards Uniform Interpretation*, p. 40.

<sup>102</sup> K. Cremers et al., *Zew Mannheim, Max Planck Institute for Innovation and Competition Research Paper No. 14-14* (2014), p. 10.

<sup>103</sup> S. Luginbuehl, *European Patent Law. Towards Uniform Interpretation*, p. 40.

<sup>104</sup> Article 33(3) of the AUPC.

concerned will take into account all the relevant circumstances of the case, including the principles of proportionality, flexibility, fairness, and equity. There should be a fair balance between the legitimate interests of all parties.<sup>105</sup> There is also a possibility for the panel to stay the infringement proceedings when the success of the revocation claim is highly probable.<sup>106</sup> Furthermore, the UPC has strict time limits. The proceedings should be terminated within a year and there is only a three-month period for the revocation of counterclaims.<sup>107</sup>

In practice, bifurcation might lead to a situation where the infringement action is decided and enforced before validity has been determined. Thus, infringement is decided under the presumption that a granted patent is valid, but later the patent might be invalidated.<sup>108</sup> Even though it is empirically difficult to prove the negative effect on the firms concerned, it seems defendant's business will incur costs and lost sales during the period.<sup>109</sup> There are also protective measures that might soften the effect of potential bifurcation. First, it is possible that some form of security could be ordered against the granting of an injunction, in order to reduce the impact on the alleged infringer should the patent subsequently be found to be invalid. Second, the likelihood of proving validity may be taken into account.<sup>110</sup>

In the unitary patent regime of the Member States, bifurcation is not widely used, however, it is used in Germany. It might transpire in practice that some local divisions then favour bifurcation more than others, encouraging forum shopping.<sup>111</sup> In general, bifurcation seems to be particularly harmful for start-up and growth companies. As a corollary, in the unitary patent regime bifurcation is discretionary and has time-limits. There are also protective measures that might soften the effects of bifurcation, but their effect remains to be seen in the practices of the UPC. Furthermore, the UPC must take into account all the relevant circumstances of the case. In addition, a fair balance between the parties is also taken into the

---

<sup>105</sup> Articles 41, 42 and 52(1) of the AUPC.

<sup>106</sup> Rule 37(4) of the RoP.

<sup>107</sup> Article 33(6) of the AUPC. In Germany the plaintiff of the nullity proceedings can prepare his attack without any direct time limits.

<sup>108</sup> Sometimes called as an injunction gap. See for example D. Kitchin, in J. Pila and C. Wadlow (eds.), *The Unitary EU Patent System*, p. 6.

<sup>109</sup> K. Cremers et al., *Zew Mannheim, Max Planck Institute for Innovation and Competition Research Paper No. 14-14* (2014), p. 3.

<sup>110</sup> Article 62(2) and (3) of the AUPC; Rule 211(2) and 211(5) of the RoP.

<sup>111</sup> S. Luginbuehl, *European Patent Law. Towards Uniform Interpretation*, p. 6-7.



consideration. Hence, in the unitary patent regime there are exceptions to bifurcation that could be used as a safeguard for defendants.

## 4. Conclusion

Start-up and growth companies have to face a variety of patent funds that focus their own business on patents-related transactions. Patent funds are involved in patent monetization and as a corollary, in litigation. This article has evaluated fee shifting, preliminary injunctions, and bifurcation as safeguards. It seems that it is not a Hobbesian state of war, as there are safeguards for start-up and growth companies when acting as defendants. The tested arguments seem to be valid. Thus, the studied procedural safeguards provide support for start-up and growth companies and therefore, make the enforcement mechanism for the plaintiff weaker.

The first argument claimed that fee shifting acts as a safeguard. Fee shifting combined with the high likelihood of losing a case prevents NPE litigation. Fee shifting fits well with European jurisprudence. The main rule of fee shifting is clear, but the reality of fee shifting is much more complicated and the allocation of costs is determined by the UPC to a certain extent. Lifting the corporate veil could potentially prevent the circumvention of fee shifting.

The second argument claimed that exceptions are needed to the main rule that allows preliminary injunctions and bifurcation, because previously preliminary injunctions and bifurcation had the function of a procedural safeguard for the defendant. However, the UPCA does offer exceptions. Thus, preliminary injunctions and bifurcation can operate as a safeguard for the defendant. As the UPC may grant preliminary injunctions, preliminary injunctions are optional. Furthermore, the UPC considers equity, fairness and can evaluate the interests of parties. There is also a possibility of alternative measures. Furthermore, bifurcation is optional, has time limits, and discretionary elements. There is also the possibility of protective measures that might soften the effects of bifurcation. Bifurcation and preliminary injunctions are not very common in European jurisprudence. Currently, preliminary injunctions are used in the Netherlands, not in Germany or in the UK. Bifurcation exists in Germany.

These procedural safeguards seem to reduce uncertainty from the start-up and growth companies point of view. In fee shifting there is one rule specific to start-up and growth companies, which is that the UPC can lower the scale of ceiling for recoverable costs if the unsuccessful party is an SME. NPEs might use shell companies in order to shield their investors from liability and therefore, circumvent the fee shifting rule. Lifting the corporate veil could potentially prevent the circumvention. Furthermore, for start-up and growth companies it is important to have an issued-based approach. All the studied safeguards had elements of an issue-based approach. Legal principles, such as proportionality, equity, fairness to the parties, play an important role. However, in general, bifurcation might increase uncertainty, as smaller companies are less likely to challenge the validity of patents. Behind this criticism is the experience from the legal system of Germany. Bifurcation under the AUPC seems to be divergent in comparison with the German system. Hence, there are elements that make it discretionary.

In all the studied safeguards there is a potential inconsistency in the relevant definitions and clarifications that are left open for the discretion of the UPC. Discretion leaves room for judges from different legal traditions to interpret the unitary patent rules from their own national perspective. This might cause difficulties, at least initially, before the Court of Appeal has harmonised the practice of the local and regional divisions. For example, uncertainty might increase forum shopping between the local and regional divisions. When the UPC starts to operate and there will be court cases, it will be fruitful to test these procedural safeguards again. Furthermore, in relation to fee shifting the revocation of Unitary Patents offers an interesting research area in coming years.