

European multiple patent defendants rule as a legal constraint for growth companies

1. Introduction

‘Lost paradise’, ‘Complexity’, ‘Chaos’, are all words that have been used to describe the multiple defendants rule in Europe. The reason for these descriptions is the current controversy over the judgments of the Court of Justice of the European Union (the CJEU).¹ Even though European patent enforcement is currently predominantly a national matter, EU law and the CJEU case law have an impact on multinational patent infringement proceedings in Europe. In a European patent infringement context, this means the application of Brussels I Regulation, as inherently patent cases are civil and commercial cases, and therefore fall within the scope of Brussels I Regulation.² After the unitary patent regime possibly enters into force, it will provide broad patent protection covering most EU countries with a single application and with a common enforcement mechanism.³ This also includes the multiple defendants rule. New technologies, computer-implemented solutions, artificial intelligence, and biotechnology, for example, make the cross-border use of patented inventions a common practice.⁴ Hence, European courts have an increasing number of cross-border cases. As a corollary, there is a need for clarification of the multiple defendant rule.

¹ For the controversy of these cases, see, inter alia, A Kur, ‘A Farewell to Cross-Border Injunctions? The ECJ Decisions *GAT v. LuK* and *Roche Nederland v. Primus and Goldenberg*’, [2006] 37 IIR 844-855; S Luginbuehl, *European Patent Law. Towards Uniform Interpretation* (Edward Elgar Publishing 2011); M Trimble, *Global Patents. Limits of Transnational Enforcement* (Oxford University Press 2012); P Torremans, ‘Intellectual Property Puts Article 6 Brussels I Regulation to the Test’ [2013] *CREATe Working Paper*, <https://zenodo.org/record/8378/files/CREATe-Working-Paper-2013-08.pdf>; J Pila and P Torremans, *European Intellectual Property Law* (Oxford University Press 2016); E Min and JC Wichard, ‘Cross-Border Intellectual Property Enforcement’, in R Dreyfuss and J Pila (eds), *The Oxford Handbook of Intellectual Property Law* (Oxford University Press 2017).

² Brussels I Regulation means the Council Regulation (EC) No. 22/2001 of the European Parliament and of the Council of 22 December 2000 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters, OJ L 12/1, replaced by the recast version Regulation (EU) No 1215/2012 of the EP and of the Council of 12 December 2012 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters, [2012] OJ L351/1 (Brussels I Regulation).

³ The unitary patent regime consist of the Regulation (EU) No 1257/2012 of the European Parliament and of the Council of 17 December 2012 implementing enhanced cooperation in the area of creation of unitary patent protection, [2012] OJ L361/1 (Regulation 1257/2012), 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).

⁴ In the field of information and communication technologies, for example, innovations are typically implemented in a network of computers. See, for example Commission Guidance on certain aspects of Directive 2004/48/EC of the European Parliament and of the Council on the enforcement of intellectual property rights COM (2017) 708 final, 28; R Romandini and A Klicznik, ‘The territoriality Principle and Transnational Use of Patented Inventions – The Wider Reach of a Unitary Patent and the Role of the CJEU’, [2013] 44 IIC 527.

This article compares the multiple defendants rule under the unitary patent regime to Brussels I Regulation. The main research question is: How does the multiple defendants rule work under the unitary patent regime for start-up and growth companies? The multiple defendants rule in general means that patent infringement performed in a uniform manner in multiple countries is pursued as a single case in a single court. This paper focuses on the issues involved from the perspective of start-up and growth companies.⁵ In order to answer the research question, the article evaluates Brussels I Regulation, the relevant case law of the CJEU, and the unitary patent regime. In addition to the European-level developments, case law from Germany, the Netherlands and the UK will be utilised.⁶

The article advances three arguments. First, the multiple defendants rule in general is cost-efficient for start-up and growth companies. Second, the multiple defendants rule under the unitary patent regime clarifies the complexity in comparison with the Brussels I Regulation rule. Third, the multiple defendants rule **has elements that** prevent abusive behaviour by NPEs. Patent funds, sometimes also known as non-practising entities (NPEs), acquire patents, and litigation is then used as a threat to obtain financial compensation.⁷ The use of the multiple defendants rule might also be abusive as it will allow multiple defendants to join claims and this may grant NPEs the opportunity to sue multiple defendants at the same time due to cost-efficiency. This abuse might increase as a result of the unitary patent regime as it offers wider patent protection and, therefore, NPEs consider the European market more attractive. NPEs exist in Europe, and are active, for example, in Germany, in the Netherlands and in the UK.⁸ Contrary to what has been asserted by research earlier, start-up and growth companies are targets of European NPE litigation.⁹

⁵ Besides start-up and growth companies the term SME (Small and Medium Size Company) is used. The term SME is defined in the Commission Recommendation No. 2003/361/EC of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises, [2003] OJ L 124/36. The term start-up and growth companies is used as this research is focused on companies that are relatively small, young and highly intensive in their innovation activities.

⁶ 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, 'Global Intellectual Property Index Report (GIPI)', *Taylor Wessing* (2018), <http://www.taylorwessing.com/ipindex>. In the UK, there is no unified legal system.

⁷ It is difficult to give an exact definition of a NPE. The body of literature on the definition is varied. For some overview on the matter, see, inter alia, T Ewing and R Feldman, 'Giants Among Us', [2012] 1 *Stan. Tech. L. Rev.*; C Helmers and L McDonagh, 'Trolls at the High Court', [2012] *Law, Society and Economy Working Papers*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2154958; S Fusco, 'Markets and Patent Enforcement: A Comparative Investigation of Non-Practicing Entities in the United States and Europe', [2014] 20 *Michigan Telecommunications and Technology Review*. For a brief comparison of patent funds to venture funds see K Rantasaari, 'Growth companies and procedural safeguards in European patent litigation' [2018] 25 *MJ* 173,174.

⁸ C Helmers et al., 'Patent Assertion Entities in Europe' [2015] *Santa Clara Law Digital Commons* 2; Darts-IP, 'NPE Litigation in the European Union. Facts and Figures' [2018], <https://www.darts-ip.com/npe-litigation-in-the-european-union-facts-and-figures-2/>. See also, for example, T Ewing and R Feldman, 'Giants Among Us'; C Helmers and L McDonagh 'Trolls at the High Court'; S Fusco, 'Markets and Patent Enforcement: A Comparative Investigation of Non-Practicing Entities in the United States and Europe'. A good example of an active European NPE is the Marathon

The studied arguments seem to be valid. The multiple defendants rule provides cost-efficiency for start-ups and growth companies when acting as a defendant or as a plaintiff. From the defendant's perspective it might increase complexity, but it is also cost-efficient in terms of cost-sharing. Furthermore, under the unitary patent regime, the definition of the multiple defendant rule clarifies the complexity and prevents abusive behaviour by NPEs. In conclusion, under the unitary patent regime the application of the multiple defendants rule is an accessible enforcement mechanism for start-up and growth companies.

New Institutional Economics (NIE) will form the theoretical basis of the article. Therefore, the central focus of this article is on the interaction between institutions and organisational arrangements.¹⁰ Under the conditions of limited information and computational ability, institutions, that are inherently constraints, are a prerequisite.¹¹ Institutions evaluated here, the AUPC and Brussels I Regulation, impose legal constraints for start-ups and growth companies and this article evaluates the characteristics of those constraints. Hence, institutions should be understood as constraints that give a structure to the society and organizations' relations with others. Constraints can also limit companies' growth, for example the ability to defend their rights, when not functioning effectively and achieving intended goals such as legal certainty.¹²

Patent Group purchasing hundreds of patents from the German based Siemens. See J Ellis, 'Siemens Marathon deal highlights the growing importance of ex-US assets for monetization-focused business models', [2018] IAM Market, <http://iam-market.com>.

⁹ Start-ups not currently targets of NPE litigation in Europe see for example, M de Heide et al., 'Study on the Changing Role of Intellectual Property in the Semiconductor Industry – Including Non-practicing Entities', [2014] European Commission, https://ec.europa.eu/internal_market/indrop/docs/patent/studies/litigation_system_en.pdf, 50; N Thumm and G Gabison, 'Patent Assertion Entities in Europe. Their Impact on Innovation and Knowledge Transfer in ICT Markets', [2016] JRC Science for Policy Report, European Commission 32. However, the report states that the unitary patent regime offers wider patent protection making European SMEs more interesting targets for NPEs in the future. For start-ups litigation in Europe, see, inter alia, a recent study Darts-IP, 'NPE Litigation in the European Union. Facts and Figures' [2018], <https://www.darts-ip.com/npe-litigation-in-the-european-union-facts-and-figures-2/> 10.

¹⁰ Institutions are rules and norms that humans devise to reduce uncertainty, transaction costs and control the environment. Organizational arrangements are the different modes of governance that agents implement to support production and exchange. For an overview on the matter see, inter alia, DC North, *Institutions, Institutional Change and Economic Performance*; C Ménard and MM Shirley, 'Introduction', in C Ménard and MM Shirley (eds), *Handbook of New Institutional Economics* (Springer-Verlag 2008); EG Furubotn and R Richter, *Institutions & Economic Theory*, (2nd edn University of Michigan Press 2005).

¹¹ DC North, *Institutions, Institutional Change and Economic Performance* 6; EG Furubotn and R Richter, *Institutions & Economic Theory* 7; C North, *Institutions, Institutional Change and Economic Performance* 36.

¹² The constraints term is adopted from the Douglas C North. See C North, *Institutions, Institutional Change and Economic Performance* (Cambridge University Press 1990) 45. Economic literature classifies constraints broadly to internal, financial and legal. See, for example, T Beck et al., 'Financial and Legal Constraints for Growth: Does Firm Size Matter?', [2005] 1 *Journal of Finance*. One of the major roles of institutions is to reduce uncertainty in institutions DC North, *Institutions, Institutional Change and Economic Performance* 6.

The present article is structured as follows. Chapter 2 analyses territoriality of cross-border patent enforcement, different patents in Europe, and their jurisdiction, and discusses the relation of multiple defendant rule and transaction-costs. Chapter 3 evaluates how the multiple defendants rule is applied under Brussels I Regulation and the AUPC. The final Chapter 4 draws conclusions, explains how the multiple defendants rule is regulated from start-up and growth companies' point of view and considers whether the unitary patent regime promotes cost-efficiency, solves complexity and prevents abusive litigation threat by NPEs.

2. European Patent Enforcement Complexity

A. Territoriality and Cross-Border Patent Enforcement

National patent regimes and territoriality have dominated the patent enforcement. Any reflection on cross-border patent enforcement initiates from the territoriality principle, which is an outcome of territory, sovereignty, and property rights.¹³ Territoriality means that patent protection relies on national or regional legislation.¹⁴ In Europe, once the European Patent Office (EPO) has granted and validated a patent, each patent is subject to the laws and procedures of the state where it applies.¹⁵

The patent system is unsuitable for the cross-border exploitation of patents because it functions on a territorial basis. Hence, laws and their application are partly unfit due to the growing interdependence among different actors in different countries within the patent field. As the actors become more numerous, also disputes involving multiple defendants in different states become more frequent.¹⁶ The cross-border exploitation of patents accelerates by technological development and due to the high degree of connectivity in numerous fields of technology. For example, client-

¹³ P Drahos, *The Universality of Intellectual Property Rights: Origins and Development* (WIPO 1999), http://www.wipo.int/edocs/mdocs/tk/en/wipo_unhchr_ip_pnl_98/wipo_unhchr_ip_pnl_98_1.pdf.

¹⁴ E Min and JC Wichard in R Dreyfuss and J Pila (eds), *The Oxford Handbook of Intellectual Property Law* (Oxford University Press 2017) 688.

¹⁵ M Trimble, *Global Patents. Limits of Transnational Enforcement* 12; G Dinwoodie, 'Developing a Private Intellectual Property Law. The Demise of Territoriality', [2009] Oxford Legal Research Studies Research Paper 52, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1502228, 716-717; R Romandini and A Klicznik, 'The territoriality Principle and Transnational Use of Patented Inventions – The Wider Reach of a Unitary Patent and the Role of the CJEU', 530; P Torremans, 'Intellectual Property and Private International Law' (Elgar Research Reviews in Law 2015); J Pila and P Torremans, *European Intellectual Property Law* 556.

¹⁶ E Min and JC Wichard in R Dreyfuss and J Pila (eds): *The Oxford Handbook of Intellectual Property Law* 688.

server systems, peer-to-peer systems, cloud computing and artificial intelligence might be synchronised in a number of countries. There are multiple parties interacting with the multiple components of a system in a distributed environment.¹⁷ As a corollary, there are more situations where the alleged infringement or the location of the parties is geographically distributed in more than one European jurisdiction. Multiple parties for example can infringe the patent in different countries by acting in a similar way and selling the same part of the patent or by selling different parts of the patent. Cloud computing claims illustrate this well and might be formulated in a number of ways and have several aspects or elements.¹⁸

Cross-border patent enforcement can be identified via four elements: the location of the infringing act, the location of the parties to the case, the location of the infringed IPR, and the location of the damage. Most of the cases address more than one cross-border element.¹⁹ All European courts have a rising number of cross-border cases. In Germany, for example, the patent suit was based on a client-server system which was located in Ireland. The Düsseldorf Court of Appeal ruled that a patent would be infringed if at least one of the infringing activities took place in Germany, and the actions outside of Germany are intended to have a direct impact on Germany.²⁰ Similarly, in another case the server was located in Canada and the reception of the message took place in England. The High Court of England and Wales ruled that there was no infringement as the method claim was drafted from the point of the server which was located in Canada. However, the Düsseldorf Court of Appeal examined also economic effects as the infringement might happen if there is a direct impact on the market in Germany.²¹

¹⁷ For example, in client-server systems the communication between the server and the client is established via a computer network, like the internet. Hence, the computer server can be located at any desired place. See ND Galli and E Gevovich, 'Cloud Computing and the Doctrine of Joint Infringement: Current Impact and Future Possibilities', [2012] 11 *The John Marshall Review of Intellectual Property Law* 675, E Min and JC Wichard in R Dreyfuss and J Pila (eds), *The Oxford Handbook of Intellectual Property Law* 687-688.

¹⁸ ND Galli and E Gevovich, 'Cloud Computing and the Doctrine of Joint Infringement: Current Impact and Future Possibilities' 679-680.

¹⁹ AF Christie, 'Private International Law Principles for Ubiquitous Intellectual Property Infringement – a Solution in Search of a Problem?', [2017] 13 *Journal of Private International Law* 161.

²⁰ The relevant patent was a method of processing prepaid telephone calls. For the case referred see the Düsseldorf Court of Appeal, Urteil vom. 10 March 2010 Xa ZR 8/10. For comments of the case see, for example R Romandini and A Klicznik, 'The territoriality Principle and Transnational Use of Patented Inventions – The Wider Reach of a Unitary Patent and the Role of the CJEU', 532-533; E Min and JC Wichard in R Dreyfuss and J Pila (eds), *The Oxford Handbook of Intellectual Property Law* 709.

²¹ The relevant patent was a method of operating a messaging gateway system. For the case referred see the High Court of England and Wales in the matter of High Court [2010] EWHC 118 (Pat). For comments of the case see, for example R Romandini and A Klicznik, 'The territoriality Principle and Transnational Use of Patented Inventions – The Wider Reach of a Unitary Patent and the Role of the CJEU' 532-533.

The rising number of cross-border IP disputes and the interest to hear those cases jointly has led to the discussion of whether there are any alternatives to territoriality. Therefore, academics and industry practitioners have developed principles such as the CLIP Principles (European Max-Planck Group on Conflict of Laws in Intellectual Property).²² The CLIP principles maintain the principle of territoriality of IP rights but include the need to facilitate efficient cross-border litigation. The purpose of the CLIP Principles is to interpret or supplement international and domestic law and the law of regional organizations for economic integration where applicable. Furthermore, they may serve as a model for national, regional, and international legislators.²³ The Principles are not suitable as an instrument that binds countries legally.

In a European private international law context, the Brussels I Regulation and the Lugano Convention 2007 are applied to intellectual property law cases.²⁴ The CLIP Principles can act merely as a model for legislators or supplement laws. The European patent system will step further when the Unitary Patent Court (UPC) starts its operation.²⁵ The unitary character of the territory of protection means the possibility to combine all acts committed by the same actor or actors in the contracting Member States under one court proceedings, even if these acts are distributed over the territory of several contracting Member States. The UPC has not yet started its operation, as the ratification process is still not completed.²⁶ In the *Prepaid* case, the UPC could have aggregated acts committed in Ireland and in Germany, and based on this aggregation, find the unitary patent

²² T Kono, 'Intellectual Property and Private International Law: Comparative Perspectives' (Hart Publishing 2012) 18-19; G Dinwoodie, [2009] *Oxford Legal Research Studies Research Paper* 52 711, 721; E Min and JC Wichard in R Dreyfuss and J Pila (eds): *The Oxford Handbook of Intellectual Property Law* 690. The Max Planck European Group on Conflicts of Law in Intellectual Property has commenced work on this field. As a corollary, the Principles of Conflict of Intellectual Property (the CLIP Principles) was finalized in 2011. See A Kur, 'Applicable Law: An Alternative Proposal for International Regulation – The Max Planck Project on International Jurisdiction and Choice of law', [2005] 30 *Brooklyn Journal of International Law* 951-981.

²³ Part 1: Purpose and Scope of the CLIP Principles; T Kono, *Intellectual Property and Private International Law: Comparative Perspectives* 43.

²⁴ The Lugano Convention of 16 September 1988 on jurisdiction and the enforcement of judgments in civil and commercial matters, OJ L 339. See for example J Pila and P Torremans, *European Intellectual Property Law* 557.

²⁵ Before the era of the UPC system, patents were solely territorial rights pursuant to Article 64(3) of the Convention on the grant of European Patents (the EPC), 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 was dealt with in national law. This also applies to European Patents outside the scope of the UPC after the entry into force of the AUPC and the UPC.

²⁶ Article 89(1) of the AUPC requires that 13 Member States ratify the AUPC, including Germany, France and the UK. For the time being, 16 Contracting States have completed the ratification process, including France and recently the UK. Germany has put the ratification process on hold. A case is currently pending before the German Federal Constitutional Court (FCC) concerning the law passed by the German Parliament on the implementation of the AUPC. A complaint (2 BvR 739/17) made to the German Constitutional Court will apparently be decided in 2019. See the Court's list of cases:

https://www.bundesverfassungsgericht.de/EN/Verfahren/Jahresvorausschau/vs_2019/vorausschau_2019.html. Last accessed 13 August 2019. For the analysis of the post-Brexit in UK, see T Jaeger, 'Reset and Go: The Unitary Patent System Post-Brexit' [2016] *SSRN Discussion Paper*. For the entry into force, see above all, the official UPC website, <https://www.unified-patent-court.org>.

infringement and issue an injunction through the territory of the unitary patent regime.²⁷ However, with the introduction of wider protection, Europe becomes more attractive jurisdiction for NPEs and their patent enforcement activities.

B. Diversity of European Patents and Jurisdiction

Currently, there are national patents granted by national patent offices in Europe and European patents (EPs) granted by the EPO under the provisions of the European Patent Convention (EPC). However, EPs are enforced at national level. After the unitary patent regime becomes operational, there are four different ways of protecting a patent: national patents, European patents (EP) outside the scope of the UPC, EPs within the UPC and the EPO-granted European Patents with unitary effect (UP).²⁸ An EP granted under the EPC benefits from the unitary effect in the participating Member States provided that the owner of the EP has requested and registered the unitary patent protection.²⁹ The UP has a unitary character, meaning that the effect of the unitary patent will include all the participating Member States as a single and indivisible entity to which the territorial boundaries of each contracting state do not apply.³⁰

Brussels I Regulation applies to national patent and EPs. After the UPC has entered into force, it will apply to the EPs outside the scope of the UPC. Brussels I Regulation continues to be applicable and establish rules on jurisdiction, which have been amended in order to ensure a combined and coherent coordination between the Brussels I Regulation and the UPCA.³¹ The Brussels I Regulation clarifies that there are two common courts to several Member States: the Unified Patent Court (UPC) and the Benelux Court of Justice.³² In relation to the international jurisdiction, Article 31 of the AUPC refers to the Brussels I Regulation. The AUPC applies to the EP within the UPC and to the EPO-granted EP with a unitary effect (UP). The UPC will hear disputes regarding the

²⁷ See, for example R Romandini and A Klicznik, 'The territoriality Principle and Transnational Use of Patented Inventions – The Wider Reach of a Unitary Patent and the Role of the CJEU' 535.

²⁸ Therefore, any infringement of a European patent is addressed by national law with the EPO having no legal competence to address and to decide on patent infringements in the Member States of the EPC Article 64.1 of the EPC

²⁹ Article 3.1. of the AUPC

³⁰ Article 2 of the AUPC; R Romandini and A Klicznik, 'The territoriality Principle and Transnational Use of Patented Inventions – The Wider Reach of a Unitary Patent and the Role of the CJEU', 535.

³¹ See, inter alia, A Ilardi, 'The New European Patent' (Bloomsbury, 2015) 61-63; S Luginbuehl and D Stauder, 'Application for Revised Rules on Jurisdiction under Brussels I Regulation to Patent lawsuits', [2015] 10 JIPLP; P Torremans, 'International Perspective II', in J Pila and C Wadlow (eds), *The Unitary EU Patent System* (Hart Publishing 2015).

³² Article 71b of the Brussels I Regulation. The Benelux Court of Justice is for Belgium, the Netherlands and Luxembourg. See the Lugano Convention of 16 September 1988 on jurisdiction and the enforcement of judgments in civil and commercial matters, OJ L 339.

infringement of UPs and the EPs within the UPC. EPs are also subject to a transitional period. As a corollary, there is a potential inconsistency during the transitional period for the EPs that have opted-out. The problem confronted here is the fact that the relevant national laws are not fully nor formally harmonised.³³

C. Multiple Defendant Rule Lowers Transaction Costs

The present European patent enforcement denotes that patents need to be enforced or challenged in proceedings in the national courts of different Member States. Fragmented enforcement is complex and increases transaction costs. Litigation in a number of countries may lead to case duplication and divergent outcomes.³⁴

In general, a plaintiff might choose to file against a number of defendants in the same case for a variety of reasons. The intention of the plaintiff might be to reduce its enforcement costs, or to increase the pressure for settlements. This latter relates to a situation where one of the defendants has settled, and there is increasing request for the others to settle.³⁵ From the defendant's perspective, participating in a lawsuit involving multiple defendants leads to cost-sharing and makes the case more complex, simply because there are more parties involved. Furthermore, defendants might be competitors of one another and therefore, there is a need to control the

³³ Article 82.1 of the AUPC. See also L McDonagh, *European Patent Litigation in the Shadow of the Unified Patent Court* (Edward Elgar 2016) 110; S Luginbuehl and D Stauder, 'Application for Revised Rules on Jurisdiction under Brussels I Regulation to Patent lawsuits' 149-150.

³⁴ Duplication here refers to cases that involve the same patent and same litigating parties in multiple jurisdictions. A relatively recent data reveals that the share of duplicated cases is low in Germany (2%), however, for the UK and the Netherlands, the percentage is higher, the UK (26%) and the Netherlands (15%). See Cremers et al., 'Patent Litigation in Europe' [2013] Discussion Paper No. 13-072, Centre for European Economic Research 60. In addition, national courts' interpretations of the EPC might vary. For instance, the London High Court of Justice has ruled that Nokia has not infringed ICom's patents. However, the German Regional Court LG Mannheim has ruled the opposite even though the patents belong to the same family. Both cases concerned the European Patent EP1186189.

³⁵ J Bessen et al., 'The Private and Social Costs of Patent Trolls', [2011] 34 *Regulation EBSCOhost*, <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=71523142&site=ehost-live>, 31; M Eckstein and B Buroker, 'Multiple Defendant Patent Infringement Cases: Complexities, Complications and Advantage', *Hunton Williams LLP* (2018), <http://www.hunton.com/images/content/3/1/v3/3157/Multiple-Defendant-Paper-AIPLA.pdf>. See also John R Allison et al., 'Patent Quality and Settlement among Repeat Patent Litigants', [2010] Stanford Law and Economics Olin Working Paper No. 398, <https://ssrn.com/abstract=1677785>, 22-23.

disclosure and use of companies' confidential information.³⁶ In the CJEU case *Painer*, for example, the defendant consisted of five different competing companies in two separate countries.³⁷

For start-ups and growth companies as plaintiffs, the intention to file against a number of defendants is to reduce enforcement costs. The costs of litigating in multiple countries can overwhelm small companies.³⁸ Cost-efficiency is crucial as small companies often have less capital than large companies. Besides small companies, the cost-efficiency attracts other plaintiffs such as non-practising entities (NPEs).³⁹ Start-ups and growth companies are more vulnerable targets of NPE litigation as they have less capital and patent litigation is prohibitive. This increases pressure for settlements. Furthermore, start-ups and growth companies might be targets of patents suits as users of technology.⁴⁰ NPEs have been causing abusive litigation for years in the US. For example, NPEs sue multiple defendants in the same industry at the same time, settling with each of them in exchange for a nonexclusive license.⁴¹ There have been several legislative initiatives to prevent this. A good illustration of this is the Leahy-Smith America Invents Act (AIA) which was passed by the US Congress in 2011. The AIA implemented limitations to NPEs' aggressive patent infringement suits strategically directed to multiple unrelated defendants.⁴²

Transaction costs associated with patent enforcement have a major impact on the ability to start-ups and growth companies to defend their patents. When institution such as the multiple defendant rule

³⁶ M Eckstein and B Buroker, 'Multiple Defendant Patent Infringement Cases: Complexities, Complications and Advantage', [2018] Hunton Williams LLP, <http://www.hunton.com/images/content/3/1/v3/3157/Multiple-Defendant-Paper-AIPLA.pdf>.

³⁷ Case C-145/10 *Painer v Standard Verlags GmbH v OHIM*, EU:C:2011:798. *Painer* concerns the copyright of a photograph. Ms Painer sued the German and Austrian newspapers publishers before the Austrian Court.

³⁸ M Trimble, *Global Patents. Limits of Transnational Enforcement* 40-41.

³⁹ It is difficult to give an exact definition of a NPE. The body of literature on the definition is vast and varied. For some overview on the matter, see, inter alia, T Ewing and R Feldman, 'Giants Among Us', [2012] 1 *Stan. Tech. L. Rev.*; C Helmers and L McDonagh, 'Trolls at the High Court' [2012] *Law, Society and Economy Working Papers*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2154958; S Fusco, 'Markets and Patent Enforcement: A Comparative Investigation of Non-Practicing Entities in the United States and Europe', [2014] 20 *Michigan Telecommunications and Technology Review*.

⁴⁰ In a survey by C Chien, 40 % of the start-ups responded that they were being sued because of their innocent use of another's technology or a widely available technology. C Chien, 'Start-ups and Patent Trolls', [2012] *Santa Clara Law Digital Commons, Faculty Publications* 23-24; Darts-IP, 'NPE Litigation in the European Union. Facts and Figures', [2018] <https://www.darts-ip.com/npe-litigation-in-the-european-union-facts-and-figures-2/> 10.

⁴¹ MA Lemley and R Feldman, [2016] *Stanford Law and Economics Olin Working Paper No. 484*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2738819 15. See also JR Allison et al., 'Extreme Value or Trolls on Top?', [2009] 1 *University of Pennsylvania Law Review*.

⁴² Prior to the AIA, the multiple defendants rule followed was governed by Rule 20 of the Federal Rules of Civil Procedure, and a minority of the jurisdiction had followed an interpretation of Rule 20 that allowed plaintiffs to successfully maintain a multiple defendants rule. Primarily this was allowed in the Eastern District of Texas. See for example D Shen, 'Misjoinder or Mishap? The Consequences of the AIA Joinder Provision', [2014] 4 *Berkeley Technology Law Journal*. According to the AIA parties may be joined as defendants in an action for infringement only if they may be liable jointly, separately, or alternatively with respect to the common transaction or occurrence and questions of fact common to all defendants will arise in the action. See 35 U.S.C, Chapter 29, § 299.

functions effectively, then, institutions reduce uncertainty and lower transaction costs.⁴³ Transaction costs lower with a functional multiple defendants rule. The use of multiple defendants rule might also be abusive and grant NPEs the opportunity to sue multiple defendants at the same time due to cost-efficiency. **This abusive use of the multiple defendant rule** might accelerate, as the unitary regime offers wider patent protection making European SMEs more interesting targets.

3. Multiple Defendants rule in European Patent Enforcement

A. Complex Brussels I Regulation

As cross-border patent enforcement increases, also disputes involving multiple defendants located in different states become more common. Brussels I Regulation deals with this scenario and provides that patent infringement performed in a uniform manner in a number of countries at the same time is pursued as a single case in a single court.⁴⁴ This provision has allowed some European courts to apply the multiple defendants rule. The Dutch Courts have consolidated proceeding in one court and granted cross-border injunctions.⁴⁵ In Germany, it was possible to obtain a judgment against a Germany-based defendant with regard to the German patent and the European counterparts of that patent. The UK Courts refused to assume jurisdiction over foreign patents, at least when the defence raises the questions of invalidity. For such issues, the national courts should have jurisdiction only in their own country.⁴⁶

Evidently, there were differences between countries how to apply Brussels I Regulation, and the CJEU was expected to solve these problems. The practise that allowed consolidating proceedings in one court was halted by the CJEU. In *Roche Nederland*, the CJEU ruled for the first time on the

⁴³ EG Furubotn and R Richter, *Institutions & Economic Theory* 7.

⁴⁴ Article 8(1) of the Brussels I Regulation. Article 8(1) of the Brussels I Regulation was earlier Article 6(1) of the Brussels I Regulation. The content of the article remained similar in the recast of the Regulation (EU) no 2015/2012.

⁴⁵ The Dutch Court applied the spider in the web doctrine which means that a central unit based in the Netherlands has conceived the strategy and the local branches merely carried out this strategy. As a corollary, patentees could start infringement proceedings against the defendant in Dutch Court based not only on a Dutch patent or the Dutch part of a European patent, but also on parallel patents in other EU Member States. See Court of Appeal of the Hague, *Expandable Grafts Partnership v. Boston Scientific BV* [1999] FSR 352; P Torremans, 'Intellectual Property Puts Article 6(1) Brussels I Regulation to the Test', [2013] *CREATE Working Paper 2013/8 Create/Zenodo*, <https://zenodo.org/record/8378/files/CREATE-Working-Paper-2013-08.pdf>, 3; J Buehling, 'Cross-Border Injunctions in Patent Infringement cases: Paradise Lost', [2007] *Building and Enforcing Intellectual Property Value*, <http://buildingipvalue.com> 173; M Trimble, *Global Patents. Limits of Transnational Enforcement*.

⁴⁶ J Buehling, *Building and Enforcing Intellectual Property Value* 173. See for example *Fort Dodge Animal Health Ltd v Akzo Nobel NV* [2008] EWCA Civ 3096.

potential application of Article 6(1) in a case hearing European patent cases collectively.⁴⁷ For the multiple defendants rule to apply, the claims must be closely connected, in practise, there must be a substantially identical law and the same factual situation.⁴⁸ For the multiple defendants rule to apply, the risk of irreconcilable judgements is the main criteria. In the assessment of this risk, the claims must be closely connected, in practise, there must be the same legal situation and the same factual situation. These two are evaluated as principal factors.⁴⁹

The CJEU argued in *Roche Nederland* that this case was not even subject to the same law. The CJEU referred to Article 64(3) of the EPC. According to that article, any infringement of a European patent should be addressed by using the national law.⁵⁰ Therefore, as the European patent consists of a number of national patents, each of these patents is subject to national patent law. The infringement of the different parts of a European patent has to be examined in the light of the relevant national law in force in each of the states for which it has been granted.⁵¹ Few years' later *Freeport* and *Painer* introduce some flexibility to identical law requirement. According to *Freeport*, claims brought against multiple defendants with different legal bases are not precluded from the application of Article 6(1).⁵² In *Painer*, the identical law is only one relevant factor among others

⁴⁷ Case C-539/03 *Roche Nederland BV et al. v Frederick Primus and Milton Goldenberg*, EU:C:2006:458. In *Roche Nederland* two joint owners of a European patent domiciled in the United States filed an infringement suit against a Dutch company Roche Nederland BV and other members of Roche group based in a different Contracting state. In practice, the infringement was performed in each country, every time by the local branch of the Roche group, but the case was handled and coordinated by the group's central unit.

⁴⁸ TB Larsen, 'Multiple Defendants in IP Litigation' [2017] 9 *JIPLP* 750. See also EU:C:2006:458, para 26; Case C-98/06 *Freeport plc v Olle Arnoldsson*, EU:C:2007:595, para 40. The judgment of the CJEU in Case C-539/03 *Roche Nederland BV et al. v Frederick Primus and Milton Goldenberg*, EU:C:2006:458 *Nederland* refers to the Advocate General's opinion stating that when decisions are regarded as contradictory it is not sufficient that there is divergence in the outcome of the dispute, but that the divergence must also arise in the context of the same situation as regards law and fact. Opinion of Advocate General Philippe Léger in Case C-539/03 *Roche Nederland BV et al. v Frederick Primus and Milton Goldenberg*, EU:C:2006:458, para 113.

⁴⁹ P Torremans, Intellectual Property Puts Article 6(1) Brussels I Regulation to the Test, 10; TB Larsen, 'Multiple Defendants in IP Litigation' 750. See also Case C-539/03 *Roche Nederland BV et al. v Frederick Primus and Milton Goldenberg*, EU:C:2006:458, para 26; Case C-98/06 *Freeport plc v Olle Arnoldsson*, EU:C:2007:595, para 40. The judgment of the CJEU in *Roche Nederland* refers to the Advocate General's opinion stating that when decisions are regarded as contradictory it is not sufficient that there is divergence in the outcome of the dispute, but that the divergence must also arise in the context of the same situation as regards law and fact. Opinion of Advocate General Philippe Léger in Case C-539/03 *Roche Nederland BV et al. v Frederick Primus and Milton Goldenberg*, EU:C:2006:458, para 113.

⁵⁰ Article 64(4) of the EPC. See also Case C-539/03 *Roche Nederland BV et al. v Frederick Primus and Milton Goldenberg*, para 29, 30.

⁵¹ Case C-539/03 *Roche Nederland BV et al. v Frederick Primus and Milton Goldenberg*, EU:C:2006:458, para 29, 30. In addition, the Rome II Regulation provides a framework for applicable law in IP infringements. Rome II regulation applies the principle of *lex loci protectionis*. Regulation (EC) No 864/2007 of the European Parliament and of the Council of 11 July 2007 on the law applicable to non-contractual obligations [2007] OJ L199 (Rome II Regulation).

⁵² Case C-98/06 *Freeport plc v Olle Arnoldsson*, EU:C:2007:595, para 40, 47. Even though Advocate General Verica Trstenjak claims that the basis of *Freeport* seems to be somehow unclear regarding the identical law requirement the CJEU referred to in *Roche Nederland*, it can be claimed that *Freeport* adds some flexibility to the requirement. Unclear

when assessing whether there is a connection between different claims. The emphasis is on all the elements of the case.⁵³

In relation to the same factual situation according to the CJEU, in *Roche Nederland* the defendants were different. Furthermore, the accused infringements were committed in different EPC Contracting States. Therefore, the factual situation was not the same.⁵⁴ According to the CJEU even though the defendant companies belong to the same group or have acted in a similar manner in accordance with a common policy elaborated by one of them, the factual situation is not the same.⁵⁵ *Solvay* specifies that Article 6(1) applies to all scenarios where two or more defendants infringe the same national part of the European patent in the same country by acting in an identical way.⁵⁶ In *Solvay* infringement refers to marketing the same patent in different countries.

At present there is no option to consolidate infringement proceedings in one court making European multiple national patent rights de facto unenforceable. In addition, a relevant drawback is the high legal uncertainty for a patent owner due to the complexity of the multiple defendants rule under current Brussels I Regulation.⁵⁷ The CJEU's approach to multiple defendants rule under Brussels I Regulation has been criticised for being confusing and inflexible.⁵⁸ However, it is still possible for European courts to continue to grant cross-border injunctions as provisional measures, for example, *kort geding* proceedings in the Netherlands.⁵⁹ The evaluation of the same legal and the same factual

approach of the CJEU is claimed by the Advocate General Opinion of Advocate General Verica Trstenjak Case C-145/10 *Painer v Standard Verlags GmbH v OHIM*, EU:C:2011:239, para 85.

⁵³ Case C-145/10 *Painer v Standard Verlags GmbH v OHIM*, EU:C:2011:798 Case C-145/10, para 80, 81, 83.

⁵⁴ Case C-539/03 *Roche Nederland BV et al. v Frederick Primus and Milton Goldenberg*, EU:C:2006:458, para 27, 33. See also Opinion of Advocate General Philippe Léger in Case C-539/03 *Roche Nederland BV et al. v Frederick Primus and Milton Goldenberg*, EU:C:2006:458, para 130.

⁵⁵ Case C-539/03 *Roche Nederland BV et al. v Frederick Primus and Milton Goldenberg*, EU:C:2006:458, para 41. See also Opinion of Advocate General Philippe Léger in Case C-539/03 *Roche Nederland BV et al. v Frederick Primus and Milton Goldenberg*, EU:C:2006:458, para 68, 128. Advocate General Philippe Léger also states that this solution is rather unsatisfactory and reveals limitations of the present system. See para 69.

⁵⁶ *Solvay* sued companies of the Honeywell group for the infringement of a European patent. Case C-616/10 *Solvay SA v Honeywell et al.*, EU:C:2012:445, para 24, 26, 27, 30. See also Case C-98/06 *Freeport plc v Olle Arnoldsson*, EU:C:2007:595, para 26; Case C-539/03 *Roche Nederland BV et al. v Frederick Primus and Milton Goldenberg*, EU:C:2006:458, para 79.

⁵⁷ For a high legal uncertainty see B Van Pottelsberghe *Lost Property: The European Patent System and Why It Doesn't Work* [2009]13-15.

⁵⁸ See for example J Büehling, *Building and Enforcing Intellectual Property Value* (2007); P Torremans, 'Intellectual Property Puts Article 6(1) Brussels I Regulation to the Test'; J Pila and P Torremans, *European Intellectual Property Law*. For example, the CJEU could have referred to a Dutch spider in the web doctrine as *Roche* was a reference for a preliminary ruling from the Dutch Supreme Court.

⁵⁹ Article 35 of the Brussels I Regime. The Dutch Court asked the CJEU to interpret article 22(4) if a defense of validity is raised in interim proceedings in C-616/10 *Solvay SA v Honeywell et al.*, 2012, EU:C:2012:445, para 51. For an analysis see M Döring and F Van Velsen, 'Is Cross-Border Relief in European Patent Litigation at an End?', [2006] 13 *JIPLP* 858; S Luginbuehl, *European Patent Law. Towards Uniform Interpretation* 66-69; M Trimble, *Global Patents. Limits of Transnational Enforcement*.

situation has softened over the years and for example, the core of the assessment is a balance that has to be decided by the national judge. The idea of balancing activity by national judges, was added in the groundings of the CJEU in *Painer* and *Freeport*. However, the CJEU does not define how the balancing exercise should be done. For example, are the same factual situation and the same legal situation assessed separately or jointly? ⁶⁰ *Solvay* refers to an infringement of the same national part of the European patent and to similar activities in a number of countries. This leaves open a question of multiple parties for example infringing different claims of the same patent by selling them in a multiple countries.

B. Unitary Patent Regime Brings New Rules

Unitary Patent Regime applies when the UPC has jurisdiction over each of the defendants and includes defendants who are domiciled in a Member State. Further, it adds the option to sue persons not domiciled in a Member State where the actual or threatened infringement have occurred, or before the Central Division.⁶¹ A patent proprietor can sue a defendant not domiciled in the European Union for patent infringement before the UPC and claim for a damage caused by the infringement of a European patent outside the borders of the European Union. However, the jurisdiction of the UPC will only arise where there is no jurisdiction under the Brussels I Regulation and where assets belonging to the defendant are situated in one of the Contracting States to the AUPC.⁶² In relation to a legal person co-defendant should have a least a place of business in the area of regional division.⁶³ On the international jurisdiction, Article 31 of the AUPC refers to Article 8(1) of Brussels I Regulation.⁶⁴

⁶⁰ According to the P Torremans the balancing exercise should be done by keeping the two conditions separate and applying them cumulatively. This would prevent the risk of incompatible judgements. *Freeport* provides guidance for the analysis of a single legal situation. As for a single legal situation it is fulfilled with a minimum alignment between the actions of defendant. See P Torremans, *Intellectual Property Put Article 6(1) Brussels I Regulation to the Test*, 10-11.

⁶¹ Article 33(1) of the AUPC and Rule 303 of the RoP. The UPC will be comprised of a Court of First Instance, consisting of central divisions and local and/or regional divisions. The procedural details of the AUPC have been developed in the Rules of Procedure (RoP). At the time of writing, the latest 18th 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 later be subject to formal adoption by the UPC Administrative Committee. More information: www.unified-patent-court.org.

⁶² Article 71b(2), 71 b(3) of the Brussels I Regulation. For a detailed analysis see S Luginbuehl and D Stauder, 'Application for Revised Rules on Jurisdiction under Brussels I Regulation to Patent lawsuits' 138-141. The UPC may also separate proceedings into two or more separate proceedings against different defendants. See Article 33(1) of the AUPC and Rule 303 of the RoP

⁶³ Article 33(1)(b) of the AUPC. Rule 303(1) of the RoP.

⁶⁴ See also P Torremans, 'An international perspective II: A View from Private International Law', in J Pila and C. Wadlow (eds), *The Unitary EU Patent System* (Hart Publishing 2015) 171-172; L McDonagh, *European Patent Litigation in the Shadow of the Unified Patent Court* 83-84.

The division of the UPC which is competent to hear the case is determined where one of the defendants has to have its residence, or principal place of business. If there is no local division, then the regional division in which the Member State participates is competent.⁶⁵ Contrary to the AUPC, Brussels I Regulation uses the term, a person's domicile, in order to define where a defendant is based.⁶⁶ The AUPC refers directly to both natural and legal persons. The term residence is not defined in the AUPC. The CLIP principles, for example, provide an explanation.⁶⁷

The AUPC sets criterion on the joining of multiple defendants. According to the Article 33(1)(b) of the AUPC, defendants have to have a commercial relationship. Furthermore, the action has to relate to the same alleged infringement. Thus, the AUPC prevents multiple parties from various geographic locations joining in a single action unless parties are sufficiently related in terms of a commercial relationship and an infringement activity.

The term commercial relationship is not defined in the AUPC. There is no definition in EU company law either. Article 8(1) of Brussels I Regulation does not mention the commercial relationship, but there are similarities to the requirement of the same factual situation. In the CJEU case law, there was no need for a certain form of coordinated behaviour.⁶⁸ It is evident that the criterion of commercial relationship in the AUPC is not met if the defendants have acted independently and without knowledge of each other. Similarly, in *Painer* the CJEU says it may be relevant whether the defendants have acted independently or not.⁶⁹ Advocate General Trstenjak went further and opined that in order to be able to predict that co-defendants can be sued where the anchor defendant is sued they have to have knowledge of each other.⁷⁰ It seems to be unclear do the defendants actually have to belong to a same group of companies. The concept of commercial relationship seems to indicate that there is no such a requirement. In Germany, multiple parties can be sued jointly. The joint contribution to a patent infringement can result from a commercial

⁶⁵ Article 33(1)(b) of the AUPC. Rule 303(1) of the RoP.

⁶⁶ Article 8(1) of the Brussels I Regulation. For the analysis see TB Larsen, Rules of Jurisdiction in the Agreement on a Unified Patent Court, [2014] 4 NIR 358-361.

⁶⁷ Articles 2:101, 2:601 and 2:206 of the CLIP Principles. See also Article 2:207 of the CLIP Principles.

⁶⁸ There is a reference to the requirement acting in accordance with a common policy elaborated by one of them, but if companies are established in different Member states there is no need to consider this further. See Case C-539/03 *Roche Nederland BV et al. v Frederick Primus and Milton Goldenberg*, EU:C:2006:458, para 34.

⁶⁹ Case C-145/10 *Painer v Standard Verlags GmbH v OHIM*, EU:C:2011:798, para 83.

⁷⁰ Advocate General Opinion of Advocate General Verica Trstenjak in Case C-145/10 *Painer v Standard Verlags GmbH v OHIM*, EU:C:2011:239, para 85. Similarly according to Recital 16 of the Brussels I Regulation the defendant should reasonably foresee where to be sued.

relationship between them, where several parties promoted the sales of the same product.⁷¹ The interpretation of commercial relationship needs flexibility so that for example distributors for same patented product would be included if there is a commercial relationship.

In Article 33(1)(b) of the AUPC and Article 8(1) of Brussels I Regulation a certain form of coordinated action is not needed in order to fulfil the criteria of the commercial relationship. In addition, in Article 33(1)(b) of the AUPC parallel infringements do not have to be imposed by a single directing party and can be consensually agreed by the parties. However, the criterion of the commercial relationship in the AUPC means a linkage between the anchor defendant and the codefendants, for example collaboration in a joint infringement.⁷² The demand for a commercial relationship also makes the NPE lawsuits directed to multiple unrelated defendants inconceivable. This only applies to lawsuits directed to multiple unrelated defendants. Hence, the NPEs have still opportunity to file for patent infringements, but not in cases where defendants are unrelated.

In addition to the demand for a commercial relationship, the action has to relate to the same alleged patent infringement. This requirement is similar to the requirement of the substantially identical law. In *Solvay* same factual situation meant the same national part of the European patent in the same country by acting in an identical way.⁷³ Therefore, the infringement has to relate to the same patent, or the patent family. In the AUPC the same alleged infringement is met due to the unitary character of the UP.⁷⁴ **However, claims have a special importance in infringement proceedings by defining the patented invention and its scope.**

⁷¹ H Holzapfel and M Königs, 'Germany', [2018] McDermott Will & Emery <https://www.mwe.com/~media/files/press-room/2017/04/getting-the-deal-through--patents-germany--10-02-2017.pdf>. See also 59§, 60§ and 61§ of the German Code of Civil Procedure (*Zivilprozessrecht*, ZPO). In Germany, it is possible for several defendants to join in one civil action, provided that the claims are factually and legally related. However, defendants are still treated individually and each part's claim must be examined on its own merits

⁷² TB Larsen, 'Multiple Defendants in IP Litigation' 750; J Fawcett and P Torremans, '*Intellectual Property and Private International Law*' (Oxford Private International Series 2011) 5.143.

⁷³ In *Solvay SA v Honeywell et al.* Solvay sued companies of the Honeywell group for the infringement of a European patent. Case C-616/10 *Solvay SA v Honeywell et al.*, EU:C:2012:445, para 24, 26, 27, 30. See also Case C-98/06 *Freeport plc v Olle Arnoldsson*, EU:C:2007:595, para. 26; Case C-145/10 *Painer v Standard Verlags GmbH v OHIM*, EU:C:2011:798, para 79.

⁷⁴ Once registered, a UP will have a unitary effect in all participating states from the date of publication of it being granted in the European patent Bulletin. See article 4.1 of the Regulation 1257/2012. See also L McDonagh, *European Patent Litigation in the Shadow of the Unified Patent Court* 114. Furthermore, the owner of the European patent is free to decide between article 33(1)(b) of the AUPC and article 8(1) of Brussels I Regulation for a transitional period of seven years after the entry into force of the AUPC. For this see Article 83(1) of the AUPC.

In practise, when the UPC assesses the multiple defendant rule, there is evidently no requirement for a consolidation between Article 33(1)(b) of the AUPC and Article 8(1) of Brussels I Regulation. Due to the reason that the patent norms in the AUPC place these norms beyond the judicial review of the CJEU unless the UPC interprets Union Law and requests preliminary ruling.⁷⁵ There are also significant differences in the rules as under the unitary patent regime there is a requirement of commercial relationship. Furthermore, the demand of identical law is met due to the unitary character of the UP. However, the unitary regime may influence the Brussels I Regulation when the balancing exercise of the same legal situation and the same factual situation is made by national judges.

4. Conclusion

The current multiple defendant rule under Brussels I Regulation seems to be an inefficient legal constraint which gives start-up and growth companies no option to consolidate infringement proceedings in one court. This article evaluated cost-efficiency, complexity, and abusive litigation threat by NPEs from the perspective of the unitary patent regime and smaller companies. The tested arguments seem to be valid.

The first argument claimed that the multiple defendant rule is cost-efficient for start-up and growth companies. Transaction costs are lowered as there is a real option to consolidate infringement proceedings in one court. From the defendant's perspective, the multiple defendant rule increases complexity, but it also leads to cost-sharing and thus, transaction costs are lowered. For plaintiffs, the multiple defendant rule provides cost-efficiency.

The second argument claimed that the multiple defendant rule under the unitary patent regime clarifies the complexity. Therefore, the definition under the AUPC is less ambiguous. The AUPC uses the term residence when defining where a defendant is based and refers directly to both natural

⁷⁵According to the Recital 10 of the AUPC the UPC must in particular cooperate with the CJEU in properly interpreting Union law by relying on the latter's case law, and requesting preliminary rulings in accordance with article 267 of the TFEU. Furthermore, the UPC must respect and apply Union law in collaboration with the CJEU. See A Dimopoulos, 'An Institutional Perspective II: The Role of the CJEU in the Unitary Patent System' in J. Pila and C. Wadlow (eds): *The Unitary EU Patent System* (Hart Publishing 2015) 77; 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' [2017] 24 MJ 16. Even in such cases the UPC might in practise abstain from making references to the CJEU as the UPC is a highly specialised patent court with its own power to interpret patent cases. For this analysis see T. Mylly 'Hovering between Intergovernmentalism and Unionization – The Shape of Unitary Patents', [2017] 5 Common Market Law Review.

and legal persons. In addition, the limitations on the joining of multiple defendants are different when comparing Brussels I Regulation with the AUPC. The same identical law is fulfilled due to the unitary character of the UP. Brussels I Regulation requires acting within a common policy elaborated by either of these organisations. The current CJEU practice has been strict in interpreting what it means to act in accordance with a common policy elaborated by one of these organisations. The AUPC in contrast requires a commercial relationship between the defendants. The scope of the definition that the AUPC provides seems to be broader. However, the definition of the commercial relations mean a linkage between defendants, but also leaves room for judges from different European legal tradition to interpret the multiple defendant rule from their own national perspective.

The third argument claimed that the multiple defendant rule prevents abusive behaviour by NPEs. For the plaintiff perspective, there is potential threat for unrelated start-ups and growth companies to be sued by NPEs. For this particular matter, the AUPC provides a safeguard as the requirement of the commercial relationship makes the NPE lawsuits directed at multiple unrelated defendants inconceivable. However, there are other grounds of jurisdiction which might be abusively used by an NPE. These are interesting topics for further research.

In summary, under the unitary patent regime's multiple defendant rule legal certainty increases and transaction costs lower. When the UPC starts to operate and there will be court cases, differences of the multiple defendant rule between the AUPC and Brussels I Regulation continue to be an interesting research topic. It is in the hope as the UPC starts to operate, the CJEU adopts more flexible interpretation of the Article 8(1) when applied to intellectual property law, and the interpretation of the multiple defendant rule between the AUPC and Brussels I Regulation would resemble each other. Ultimately, the chaos will be abolished.