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The Impact of the Unitary Patent and the Unified Patent Court on the Prevalence of Patent Trolls in the European Union

By Sofia Kopelevich

I. Introduction

Patent protection in Europe has evolved over the years. Each patent system had its faults and was revised to the next system in hopes of overcoming the faults of its predecessor. Nowadays, an individual seeking to obtain patent protection in Europe has to select between two options: (1) a national patent, or (2) a European patent. Regardless of the option selected - obtaining and enforcing patent protection in several European countries results in significant procedural complexities and monetary investment. Thus, in an effort to simplify the process, cut the costs involved, unify patent enforcement, and promote innovation in the European Union (EU), regulations establishing a Unitary Patent (UP) and a Unified Patent Court (UPC) system were proposed.

The proposed UP and UPC enhanced cooperation regulations present significant changes to the EU's current patent system and are accompanied with concerns. Concerns regarding the upcoming system involve, *inter alia*, the costs of obtaining and keeping a UP; the experience of the judges that will be appointed to the UPC; and the applicable substantive and procedural law involved in enforcing the UP, such as the threshold for warranting preliminary injunctions and the discretion in bifurcating litigations to separate patent invalidity and patent infringement proceedings. The last concern mentioned is further supplemented with a fear that the UPC will fragment the EU and create "patentee friendly" divisions, thereby bolstering the effect of Non Practicing Entities (NPEs) in Europe.

NPEs are controversial participants in the global patent system. Although, NPEs may be characterized differently, this paper regards NPEs as intellectual property asset management firms whose exclusive business model is asserting patent claims to collect significant fees from companies operating in certain industries. Such firms are also known in the industry as “patent trolls”, “patent thickets”, “patent assertion entities,” and these terms may be used throughout the paper interchangeably.

Many professionals and scholars believe that the “patent troll” problem is exclusive to the United States (US). This assertion, however, is mistaken as NPEs do attack companies and inventors in the EU, although far less frequently. The EU’s future UP and UPC system is very similar to the existing US patent system. The changes accompanying this future EU patent system may encourage more “patent trolls” to try their luck in the EU. Therefore, it is detrimental that all stakeholders propose and incorporate anti “patent trolls” clauses in the corresponding agreements and regulations.

This paper will begin in part II by describing the European patent system as it is known today. Part III will discuss the challenges with the current system. Part IV will introduce the newly proposed supplemental patent system comprising of the UP and UPC. Subsequently, in part V, I will define NPEs, their business model, as well as their impact in the EU pre and post implementation of the UP and UPC system. Lastly, I will propose prophylactic legislative safeguards to minimize the presence of “patent trolls” and their harm in the UP and UPC system.

II. The Current Patent System

An individual seeking patent protection in the EU and in its member states (MSs) may pursue a few routes. Such individuals consider several factors when selecting the route that best fits their needs. The factors include: the type of invention claimed, the target market, the financial

investment, the return on investment and so forth. The routes that are currently available for future patent holders include pursuing national patent protection and/or pursuing a European patent described in part II(2). An additional option that is anticipated to become effective as of the end of 2016 or beginning of 2017 is the UP described in part IV(1).¹

1. National Patent Protection

Obtaining national patent protection in a plurality of EU MSs can swiftly become a very expensive endeavor. Therefore, patent applicants often balance various factors and come up with a strategic solution that will best achieve their business goals. When such a strategic solution requires the invention to be patented in a small number of independent states, the patent applicant may find it more cost effective to file individual patent applications in each state of interest.² This approach exists because each state, regardless of whether it is a MS of the EU, maintains some of its sovereignty in the area of national patent law.³

Acquiring national patent protection requires that the patent applicant file a separate patent application in each state of interest.⁴ No shortcuts are available and if the applicant is interested in a plurality of states, this route can become very time consuming, costly, and administratively complex.⁵

A national patent gives the patent owner regional patent rights that are only valid in the state in which the patent was acquired.⁶ These rights cannot be asserted in any other country.⁷

¹ 12th meeting of the Preparatory Committee, (Oct. 19, 2015), available at <http://unified-patent-court.org/news/97-95-12th-meeting-of-the-preparatory-committee-19-october-2015>.

² *National Applications*, EUROPEAN PATENT OFFICE, <http://www.epo.org/applying/national.html> (last updated Jun. 22, 2015).

³ *Id.*

⁴ David Medina, *How The Unitary Patent Will Fragment European Patent Law*, 47 Ariz. St. L. J. 319, 323 (2015) [hereinafter Medina].

⁵ *Id.*

⁶ *National Applications*, *supra* note 2.

⁷ *Id.*

National patent protection rights vary among the states and are governed by national laws which could be beneficial in some instances but harmful in others.⁸

To address some of the challenges that patent applicants are confronted with when they wish to obtain patent protection in a plurality of states, the European Patent route was established.

2. *The Classical European Patent*

Many European MSs wanted to strengthen co-operation and to simplify the process of obtaining a patent by creating a single procedure that applied among all participating states.⁹ These MSs became part of the European Patent Convention (EPC) in 1973.¹⁰ The EPC established a European Patent Organization comprising of a European Patent Office (EPO) and an Administrative Council.¹¹ The Administrative Council oversees the EPO.¹² The EPO is located in Munich and it is responsible for granting European Patents.¹³ The official languages of the EPO are English, French, and German, and all patent applications filed with the EPO have to be in one of the official languages or translated into one of the official languages to avoid its withdrawal.¹⁴ Granting a European patent to a patent applicant involves several inquiries such as whether the subject matter is patentable, novel, inventive and industrially applicable.¹⁵

Filing a patent application with the EPO automatically designates all EPC participating states (occasionally subject to the payment of a designation fee) as a potential state in which the

⁸ *National Applications*, *supra* note 2.

⁹ *Member states of the European Patent Organisation*, EUROPEAN PATENT OFFICE, <http://www.epo.org/about-us/organisation/member-states.html> (last updated Jul. 9, 2015) (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR).

¹⁰ European Patent Convention, art. PREAMBLE, Oct. 5, 1973, EUROPEAN PATENT OFFICE, <http://www.epo.org/law-practice/legal-texts/epc.html> [hereinafter EPC].

¹¹ *Id.*, at art. 4.

¹² *Id.*

¹³ *Id.*, at art. 6.

¹⁴ *Id.*, at art. 14.

¹⁵ *Id.*, at arts. 52-9.

European patent may be validated once it is granted.¹⁶ In addition to the preliminary designation, once a European patent is granted, the applicant may choose to validate the patent in any one of the EPC designated participating states.¹⁷ To validate a patent in any particular state, the applicant has to fulfill certain national requirements.¹⁸ Some exemplary national requirements include translating the patent (or parts of it, e.g. the claims) into the national language and paying renewal or annuity fees.¹⁹ Upon validation, the national law of each state will govern the patent's enforceability in that state.²⁰

A granted European patent has a term of 20 years from the filing date of the application, thereby granting its owners the right to exclude others from engaging in infringing activities during the patent's lifetime.²¹ Infringing activities are dealt with in national courts,²² which may choose to request the EPO's technical opinion on the subject matter at issue.²³ The same standard of review applies when a national court reviews an infringement of a European patent or an infringement of a national patent.²⁴

III. Challenges with the Existing System

The existing European patent system withstood the test of time and has proven its success decades after the implementation of the EPC.²⁵ Nevertheless, stakeholders continue to face challenges with the current system; particularly after the European patent gets granted, also

¹⁶ EPC, *supra* note 10, at art. 79.

¹⁷ *Id.*, at art. 74.

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.*, at art. 63.

²² *Id.*, at art. 64.

²³ *Id.*, at art. 25.

²⁴ *Id.*, at art. 66.

²⁵ Stefan Luginbuehl, *Unitary Patent Protection and Unified Patent Court*, EPO.ORG, <https://e-courses.epo.org/mod/streaming/view.php?id=7188> (last visited Oct. 24, 2015) [hereinafter Luginbuehl].

referred to as the “post grant” stage.²⁶ Once the European patent gets granted, the applicant has to select in which of the previously designated states it wishes to validate the European patent, and follow each state’s national validation requirements.²⁷ The validation requirements are not harmonized among all the states, creating an additional level of complexity.²⁸ Additionally, the applicant has to file a translation of the granted European patent to each official language of the EPC participating states and pay separate renewal fees in each state they wish to validate in, thereby exacerbating the costs associated with the post grant procedure.²⁹

The cost, administrative burden, and complexity are further increased if the granted and validated patents get challenged in court. Validity and infringement proceedings occur independently in each national court pursuant to the governing national laws since there is no current harmonized patent court system, nor is there a harmonized patent law on the EU level.³⁰ While many national courts may rely on the EPC for guidance, they may also rely on judicially created laws in their particular nation which differ between states.³¹ Accordingly, patent owners have to contemplate various litigation strategies depending on which state the patent is being challenged or asserted in.³² Occasionally patent litigation may occur in multiple states simultaneously, thereby requiring the implementation of multiple strategies simultaneously in a plurality of jurisdictions while ensuring that the various strategies do not contradict or harm each other.³³ One can envisage the undue burden such a scenario may pose on an applicant attempting to assert or defend their patent rights in today’s EU patent system.

²⁶ Luginbuehl, *supra* note 25.

²⁷ EPC, *supra* note 10, at art. 74.

²⁸ *Id.*

²⁹ *Id.*

³⁰ Luginbuehl, *supra* note 25.

³¹ *Id.*

³² *Id.*

³³ *Id.*

IV. The Newly Proposed Patent System

To cope with the various challenges presented by the existing system, a new EU unitary package comprising of a UP and a UPC were proposed.³⁴ The EU's unitary package is meant to strengthen the European patent even further,³⁵ and make the access to the patent system easier, less costly, and legally secure.³⁶

1. The Unitary Patent

On December 17, 2012, twenty-five EU MSs joined to enact two enhanced cooperation regulations, namely regulation 1257/2012 and 1260/2012, to establish a UP and agree on the official languages for the UP, respectively.³⁷ The UP regulations provide substantive law as to the definition of the unitary effect, patent exhaustion,³⁸ and the scope of licensing agreements.³⁹

The UP will have a unitary character in all participating states.⁴⁰ It will be jointly granted in all participating states at once, but can also be jointly invalidated in all participating states at once.⁴¹ The UP will be a European patent granted by the EPO pursuant to the EPC and will have a uniform protection and equal effect in all twenty-five states that ratify the UP regulation.⁴² This

³⁴ Luginbuehl, *supra* note 25.

³⁵ PREFACE BY THE PRESIDENT, EPC, *supra* note 10.

³⁶ Regulation 1257/2012 of the European Parliament and of the Council of 17 December 2012 on Implementing Enhanced Cooperation in the Area of Creation of Unitary Patent Protection, 2012 O.J. (L 361) 4 (EU) <http://eur-lex.europa.eu/legal-content/AUTO/?uri=CELEX:32012R1257&qid=1442588116640&rid=1> [hereinafter Regulation 1257/2012].

³⁷ Medina, *supra* note 4, at 319.

³⁸ "Patent Exhaustion is a concept in patent law that limits a patentee's monopoly over controlling when one can use or sell a patented technology. *See generally* Quanta Computer, Inc. v. LG Electronics, Inc., 553 U.S. 617, 625-26 (2008). Once a patentee sells a patented technology to a consumer, the patentee can no longer sue to prevent that consumer from selling the patented technology to another consumer. *Id.*" Medina, *supra* note 4, at 328.

³⁹ *Id.*

⁴⁰ Participating states in the unitary patent agreement include Belgium, Bulgaria, the Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, France, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, and the United Kingdom. Regulation 1257/ 2012, *supra* note 36, at art. 3.

⁴¹ Medina, *supra* note 4, at 328; *also* Regulation 1257/ 2012, *supra* note 36, at art. 7.

⁴² Regulation 1257/ 2012, *supra* note 36, at (7).

“special agreement”⁴³ intends to promote enhanced cooperation in the creation of a UP, allowing some MSs to adopt the UP immediately, and other MSs to opt in at a later stage.⁴⁴ Although the UP regulation entered into force on January 20, 2013, and was signed by twenty-five MSs in Brussels on February 19, 2013, it will not become available until a UPC, tasked with enforcing the UP, becomes effective.⁴⁵

The UP seeks to simplify the administrative and financial burdens of the post grant procedures only.⁴⁶ The process for obtaining a UP will be similar to that of obtaining a classical European patent described in Part II(2). This will include, *inter alia*, translation into two of the official languages,⁴⁷ the same opposition period, the same appeal procedure, as well as the same examination criteria.⁴⁸ Once a European Patent is granted, the applicant will have to explicitly request a UP. The UP will become immediately effective in all twenty-five participating states.⁴⁹ Such requests will also have a somewhat retroactive effect. This option will be available for new European patent applications filed after the UP regulation becomes effective as well as for European patent applications filed before the UP regulation becomes effective but only get granted after the UP regulation becomes effective.⁵⁰ Thus, the UP will broaden the possibilities for applicants who currently have pending patent applications with the EPO.

⁴³ The idea that regulation 1257/2012 “constitutes a special agreement within the meaning of article 142 of the EPC. Regulation 1257/ 2012, *supra* note 36, at (6).

⁴⁴ Luginbuehl, *supra* note 25.

⁴⁵ *Id.*

⁴⁶ Regulation 1257/ 2012, *supra* note 36, at (7).

⁴⁷ The official languages are French, English, and German. Council Regulation 1260/2012, 2012 O.J. (L 361) 89 (EU), at art. 6, available at <http://eur-lex.europa.eu/legal-content/AUTO/?uri=CELEX:32012R1260&qid=1442588116640&rid=4> [hereinafter Regulation 1260/2012].

⁴⁸ Luginbuehl, *supra* note 25.

⁴⁹ Regulation 1257/ 2012, *supra* note 36, at (18).

⁵⁰ *Id.*, at (8).

Furthermore, only MSs of the EU may participate in the UP agreement and not all thirty-eight states who participate in the EPC.⁵¹ Therefore, applicants may request a UP for the twenty-five participating states and a classical European patent for states that are part of the EPC but not part of the UP regulation (such as Italy, Norway, Switzerland).⁵² Applicants may not obtain a classical European patent on top of the UP in EU MSs that ratify the UP.⁵³ However, applicants may have a UP in EU MSs that ratify the UP and a classical European patent in states that do not participate in the UP regulation.⁵⁴ Some states may allow the privilege of obtaining a national patent in addition to a UP.⁵⁵ Such a privilege is governed by national laws and may vary among the states.⁵⁶

Essentially the UP takes the “all or nothing” approach, wherein applicants either obtain patent rights in all participating states or in none of them.⁵⁷ Withdrawing from a single state results in withdrawal of the UP from all states.⁵⁸ However, since obtaining a European patent depends on whether the claimed invention was invented or filed first (depending on whether it is a “first to file” or “first to invent” jurisdiction); what happens if the European UP is the first such invention in twenty-four states, but in the twenty-fifth state, a national patent on a similar invention already exists thereby invalidating the European UP in that particular state? Does the UP as a whole with respect to all 25 states get invalidated? It seems that the answer is uncertain but it could fall under one of the following two options: (1) the entire UP as a whole will get invalidated; or (2) the applicant will be able to opt out of the UP and apply for a classical European patent which may be

⁵¹ Luginbuehl, *supra* note 25.

⁵² Regulation 1257/ 2012, *supra* note 36, at (26).

⁵³ *Id.*, at (8) & (26).

⁵⁴ *Id.*

⁵⁵ *Id.*, at (26).

⁵⁶ *Id.*

⁵⁷ *Id.*, at (26) & art. 3(2).

⁵⁸ *Id.*

validated in individual states pursuant to the applicant's selection.⁵⁹ If option two becomes the rule, will it only apply for a limited time period after the grant of the European patent⁶⁰ or will it apply long after the UP is granted as a mitigation tool in case the UP gets invalidated in litigation? The answer here will likely be the former, limiting the opt out period, since any litigation at a later stage will be addressed at the specialized patent court which should apply a harmonized law and have a harmonized effect across all states.

2. *The Unified Patent Court*

The UPC is an additional vital component of the EU unitary package, which was adopted as a third provision⁶¹ about two months after the enactment of the UP regulations.⁶² The UPC will have exclusive jurisdiction over UP infringement and UP invalidity proceedings, supplementary protection certificate infringement, provisional and protective measures, damages and injunctions remedies, and appeals against the EPO's decisions with respect to the UP.⁶³ The UPC agreement provides guidance to UPC judges as to the substantive law related to direct infringement, indirect infringement, exceptions to infringement, patent exhaustion, revocation of a patent, and injunctions.⁶⁴ The UPC's institutional hierarchy will comprise of courts of first instance, a court of appeals, and the court of justice of the European Union.⁶⁵

⁵⁹ Luginbuehl, *supra* note 25.

⁶⁰ For example, for the opposition time period. The opposition time period extends for nine months after the grant of the European Patent, during which any party who wishes to challenge the validity of the patent may do so with the EPO. After nine months lapse, a party wishing to challenge the validity of the patent may only do so through the court system. Luginbuehl, *supra* note 25.

⁶¹ Agreement on a Unified Patent Court, Feb. 19, 2013, 2013 O.J. (C 175) 1, available at <http://eur-lex.europa.eu/legal-content/AUTO/?uri=CELEX:42013A0620%2801%29&qid=1442588116640&rid=3> [hereinafter UPC Agreement].

⁶² Medina, *supra* note 4, at 320.

⁶³ UPC Agreement, *supra* note 61, art. 32.

⁶⁴ Medina, *supra* note 4, at 328.

⁶⁵ UPC Agreement, *supra* note 61, at art. 6.

Courts of first instance will include local and regional divisions in the various contracting states, with a central division for general patent matters in Paris, a pharmaceutical division in London, and an engineering division in Munich.⁶⁶ The specialized divisions in Paris, London, and Munich will be run by several states ensuring a harmonized law.⁶⁷ The number of courts of first instance divisions in each state will depend on the case workload, wherein increased workload in a particular state will render the establishment of additional divisions in that state while ensuring that the number of divisions does not exceed four per state.⁶⁸

The court of appeals will be located in Luxembourg.⁶⁹ As with all national courts, the courts of first instance and the court of appeals may direct questions related to EU law interpretation to the Court of Justice of the EU and request for a preliminary ruling.⁷⁰ The UPC further comprises a patent mediation and arbitration center located in Lisbon and in Ljubljana, and a training center for judges located in Budapest.⁷¹

a. Choice of Law

The UP and the UPC are independent enhanced cooperation regulations, wherein each of the MSs of the EU may choose to adopt one and not the other, not to adopt either, or to adopt both. Thus, four applicable patent laws may result once the UP regulations and UPC agreement become effective, namely: (1) classical European patents that do not adopt either regulation; (2) European UPs in countries that adopt the UP, but do not adopt the UPC; (3) Classical European patents in countries that adopt the UPC, but do not adopt the UP; and (4) European UPs in countries that adopt the UP and UPC.

⁶⁶ UPC Agreement, *supra* note 61, at art. 7.

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ *Id.*, at art. 9.

⁷⁰ Luginbuehl, *supra* note 25.

⁷¹ UPC Agreement, *supra* note 61, at art. 35.

The first applicable law for states that refuse to adopt either the UP regulations or the UPC agreement represents the current situation, the status quo.⁷² Under this category, the governing law will remain national patent law along with the current version of a classical European patent system.⁷³ An exemplary state that falls under this category is Spain.⁷⁴

The governing law in states that ratify the UP regulations but not the UPC will likely be a combination of existing national law and the laws set out in the UP regulations.⁷⁵ This category is unique because the EU Parliament, Commission, and Council did not anticipate any of the states to take this path, and even withheld the application of the UP until a complementary UPC system becomes effective.⁷⁶ Nevertheless, some states fall under this category.⁷⁷ However, the UP regulations are not comprehensive and do not recite the rights to which a patent holder will be entitled, lending themselves to be indirectly governed by the laws of the UPC even if a particular state does not ratify the UPC agreement.⁷⁸ Additionally, patent disputes, such as patent infringement suits, will be either brought in front of a national court (if the infringement occurs in a non-UPC state) or in front of a UPC court (if infringement occurs in a UPC state), and will likely apply UPC law.⁷⁹ An exemplary state that falls under this category is Poland.⁸⁰

⁷² Medina, *supra* note 4, at 329.

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ Regulation 1257/2012, *supra* note 36, at (9).

⁷⁶ *Id.*, at (25).

⁷⁷ Medina, *supra* note 4, at 329.

⁷⁸ *Id.*, at 331, for the idea that “Article 5(2) required that the scope of patent holder rights “shall be uniform in all participating Member States.” For the enhanced cooperation regulations to work, all countries that ratify the regulation must have the same patent holder rights. . . the Unified Patent Court agreement will serve as the de facto source for patent holder rights. Therefore, countries that do not ratify the Unified Patent Court agreement will likely be forced to provide patent holders the rights listed in the Unified Patent Court agreement, or risk violating Article 5(2) of the Enhanced Cooperation Regulation.”

⁷⁹ *Id.*, at 329-31.

⁸⁰ *Id.*, at 329.

The governing law for states that ratify the UPC agreement but not the UP regulations will be the laws set out in the UPC agreement.⁸¹ Patent dispute suits involving national patents⁸² will be raised in a national court, whereas patent disputes involving classical European patents will be reviewed in the UPC which will have exclusive jurisdiction over both classical and UP disputes.⁸³ An exemplary state that falls under this category is Italy.⁸⁴

In states that ratify both the UP regulations and the UPC agreement,⁸⁵ the UPC will have exclusive jurisdiction over both classical European patent disputes and UP disputes while national courts will retain jurisdiction over disputes arising from national patents.⁸⁶ The governing laws will be those set out in the UPC agreement and the UP regulations.⁸⁷ Exemplary states are all twenty-five EU MSs that ratify the UP regulations and the UPC agreement.⁸⁸ Any of the three remaining MSs disclosed above, such as Spain, Poland, and Italy, may opt in at a later stage.⁸⁹

b. Existing Concerns with the Establishment of the Unitary Patent and Unified Patent Court

The EU unitary package raised many concerns among stakeholders in the patent community. How will judges for the UPC be chosen?⁹⁰ Will the judges have proper experience in the patent sphere and in the particular technical areas at issue?⁹¹ How will litigation proceedings run? Will invalidity and infringement proceedings be combined or bifurcated?⁹² What will be the

⁸¹ The UPC agreement provides UPC judges guidance as to the substantive law related to direct infringement, indirect infringement, exceptions to infringement, patent exhaustion, revocation of a patent, and injunctions. UPC Agreement, *supra* note 61, at art. 19.

⁸² National patent are independently applied for in each state. *National Applications*, *supra* note 2.

⁸³ Medina, *supra* note 4, at 329.

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ *Id.*, at 329, 336.

⁸⁷ *Id.*, at 329.

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ James Nurton, *How to make the unitary patent work*, 227 *Managing Intell. Prop.* 4 (2013) [hereinafter Nurton].

⁹¹ *Id.*

⁹² D. Rose & C. Forsyth, *The Unitary Patent and Unified Patent Court: An Overview* (2015), available at <http://www.kwm.com/en/uk/knowledge/insights/the-new-eu-patent-package-20130601#.Vfwo7SYW6Jk.email> [hereinafter Rose].

standard for preliminary injunctions?⁹³ Will the variation in applicable law fragment the European patent system?⁹⁴ Will the new system add complexity and costs?⁹⁵ Will the new system attract NPEs?⁹⁶

Although not a comprehensive list, these questions illustrate the ongoing struggle of everyone involved with adopting the new system and may somewhat explain the delay in its adoption (a shift from the original estimate of 2014 to the current estimate of 2017).⁹⁷ Some of the questions will be addressed briefly below, with a more detailed discussion regarding the impact of the new system on the prevalence of NPEs in the EU.

i. Procedures for Appointing Judges

All divisions of the courts of first instance will have multi-national panels with three judges drawn from at least two different contracting member states.⁹⁸ The judges may be legally qualified and/or technically qualified, with the technically qualified judges being present on the panel primarily to educate the non-technical judges on counterclaims of invalidity in infringement cases to determine the need for a bifurcated trial.⁹⁹ The legally qualified judges will possess the qualifications required to become judges in a national court.¹⁰⁰ The technically qualified judges will have a university degree in a technical field, some technical experience, and familiarity with

⁹³ L.Mueller & M. Modiano, *Patent Trolls: A View from Europe*, (Feb. 24, 2014), available at <https://bricwallblog.wordpress.com/2014/02/24/patent-trolls-a-view-from-europe/> [hereinafter Mueller].

⁹⁴ Medina, *supra* note 4.

⁹⁵ Rose, *supra* note 92.

⁹⁶ Mueller, *supra* note 93.

⁹⁷ *12th meeting of the Preparatory Committee*, *supra* note 1.

⁹⁸ Rose, *supra* note 92; also UPC Agreement, *supra* note 61, at art. 8.

⁹⁹ UPC Agreement, *supra* note 61, at art. 8.

¹⁰⁰ *Unified Patent Court*, UNIFIED-PATENT-COURT.ORG, available at <http://unified-patent-court.org/about-the-upc/14-category-a> (last visited Oct. 24, 2015) [hereinafter UPC]; also UPC Agreement, *supra* note 61, at art. 15.

the legal and procedural aspects of patent litigation.¹⁰¹ All judges will have to be in “good command” of at least one of the official languages of the EPO.¹⁰²

The judges will be selected from a list of candidates who show interest and are found compatible through a review of the UPC’s Advisory Committee.¹⁰³ Candidates considered compatible by the UPC’s Advisory Committee will include patent judges and practitioners in patent law and patent litigation.¹⁰⁴ Although the judges’ selection process seems promising, stakeholders are concerned that simply providing for a multi-national panel of judges may not be enough because the need is to not only have diversity of views but also experience in the subject matter.¹⁰⁵ To ensure that experienced judges are appointed to the different courts in the UPC, judges from busy courts such as Germany, UK, and the Netherlands would be preferable, but their number is limited and some of them may not even apply.¹⁰⁶ It is particularly important to have experienced judges in the court of appeals.¹⁰⁷ However, as previously stated, the court of appeals is located in Luxembourg, making it somewhat uncertain whether the court’s location will deter experienced patent judges from seeking appointment there.¹⁰⁸

ii. *Litigation Proceedings (Preliminary Injunctions and Bifurcation)*

Whether the UPC divisions will bifurcate litigation proceedings to separate patent validity and infringement claims is an ongoing debate. Should the UPC resolve the entire case in a single proceeding, following the practice of Italy and the UK?¹⁰⁹ Or should the UPC bifurcate each proceeding into two separate trials (one for patent validity determination, and one for infringement

¹⁰¹ UPC, *supra* note 100; also UPC Agreement, *supra* note 61, at art. 15.

¹⁰² *Id.*

¹⁰³ UPC Agreement, *supra* note 61, at art. 16.

¹⁰⁴ *Id.*

¹⁰⁵ Nurton, *supra* note 90.

¹⁰⁶ *Id.*

¹⁰⁷ Kevin Mooney, *An Insider’s View of the UPC*, 228 *Managing Intell. Prop.* 29 (2013) [hereinafter Mooney].

¹⁰⁸ *Id.*

¹⁰⁹ Luginbuehl, *supra* note 25.

determination) following the practice of Austria, Germany, and the Czech Republic?¹¹⁰ Currently there are no clear guidelines giving local and regional divisions discretion to decide on a case by case basis whether to bifurcate.¹¹¹

Local and regional divisions, based on the complexity of each case and on whether a validity counterclaim was made, have three options to choose from: (1) hold a trial on all issues (infringement and validity); (2) bifurcate the trial into a validity and an infringement proceeding, refer the validity proceeding to the central division in Paris, and either suspend the infringement proceeding if there is a high likelihood that the relevant claims of the patent are invalid, or proceed with the infringement proceeding; or (3) refer the case as a whole to the central division in Paris.¹¹² The UPC rules also include a provision for option (2) reciting that when the infringement proceeding is not suspended, the central division will accelerate the date of the validity proceeding so that a validity decision can be made before the infringement proceeding takes place.¹¹³ The feasibility of this provision remains to be seen.

In the meantime, defendants are very concerned about the implications of placing such discretionary power with the UPC.¹¹⁴ Plaintiffs may choose to argue their cases broadly, thereby easily obtaining preliminary injunctions relying on weak patents that may be found to be invalid during a narrow invalidity proceeding.¹¹⁵ The concern is that local and regional divisions in states that used the bifurcation system may continue to bifurcate and become the venue of choice for plaintiffs who seek to take advantage of this system, such as NPEs.¹¹⁶ This can result in undue burden to the defendant that in some instances may be enough to bring the defendant to bankruptcy.

¹¹⁰ Luginbuehl, *supra* note 25.

¹¹¹ *Id.*

¹¹² Rose, *supra* note 98.

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *See infra* Part V.

V. Non Practicing Entities

NPEs, also known as “patent trolls”, “patent thickets”, and “patent assertion entities,” are defined as “IP asset management firms whose exclusive business is asserting patent claims to collect significant fees from companies operating in certain industries.”¹¹⁷ The business model of NPEs consists of a few main steps, namely: acquiring patents in certain industries,¹¹⁸ waiting for a potential infringer to make an irreversible investment in a potentially infringing technology, and asserting the acquired patent against the potential infringer to extract money from them.¹¹⁹ As such, NPEs do not use their patents in the market and do not get involved in any research or development of the technology or products related to their patent portfolio.¹²⁰ Furthermore, NPEs do not help with “technology transfer.”¹²¹ Instead, NPEs form their patent portfolio by purchasing patents from a plurality of sources, including small and large companies, bankrupt companies, start-ups, solo inventors, hospitals, universities, and even the government.¹²² This arrangement allows NPEs to take advantage of their non-practicing status by asserting their patents against potential infringers without being vulnerable to infringement counter-claims¹²³ or bearing research, development and manufacturing costs.

¹¹⁷ Stefania Fusco, *Markets and Patent Enforcement: A Comparative Investigation of Non-Practicing Entities in the United States and Europe*, 20 Mich. Telecomm. & Tech. L. Rev. 439, 439 (2014) [hereinafter Fusco].

¹¹⁸ For the idea that target industries are those in which claim boundaries are unclear and which are particularly vulnerable to the possibility of various claim interpretations, such as computer software, communication, and business method patents. “Software patents are nearly five times as likely to be in a lawsuit as chemical patents; business method patents are nearly fourteen times as likely.” See President’s Council of Econ. Advisers, The Nat’l Econ. Council, and the Office of Sci. & Tech. Policy, Exec. Office of the President, *PATENT ASSERTION AND U.S. INNOVATION*, at 4-5 (2013), available at https://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf, [hereinafter Whitehouse Report].

¹¹⁹ Fusco, *supra* note 117, at 443; also Whitehouse Report, *supra* note 121, at 4.

¹²⁰ *Id.*

¹²¹ Whitehouse Report, *supra* note 118, at 4, for the definition of Technology Transfer “the process of translating the patent language into a usable product or process.”

¹²² Fusco, *supra* note 117, at 444.

¹²³ Whitehouse Report, *supra* note 118, at 4.

NPE's business model follows this typical sequence of events. After the NPE acquires a patent, it seeks out a potential infringer. Once it identifies such infringer, the NPE will often wait for the potential infringer to make an irreversible investment in the technology and become highly dependent financially on that technology.¹²⁴ The NPE will then send the potential infringer a cease and desist letter accusing the company of infringing one or more of its acquired patents. The potential infringer will have three options of how to respond to the NPE threat: (1) cease infringement and risk bankruptcy because their company is now financially dependent on that particular technology to survive; (2) litigate in court to either show that the patent the NPE is attempting to assert is weak and invalid, or that the company is not infringing on the patent asserted against them; or (3) surrender to the threat, avoid litigation, and pay royalties to the NPE to continue using the technology.¹²⁵ Due to the high stakes involved with options (1) and (2), i.e. bankruptcy and costly litigation with an uncertain outcome, companies often resort to the third option.¹²⁶ In fact, this practice has gotten so prevalent in the United States that companies coined the term – “NPE tax.”¹²⁷

1. The Threat of NPEs

The consequences of NPEs' threats and lawsuits could be devastating not only to the companies under attack, but also to society as a whole. The purpose of patents is to foster innovation. That notion is rooted in our society as can be seen from the language of the United States Constitution, which grants Congress the power “to promote the Progress of Science and useful Arts by securing, for limited times, to . . . inventors, the exclusive right to their . . .

¹²⁴ Fusco, *supra* note 117, at 444; also Whitehouse Report, *supra* note 118, at 4.

¹²⁵ Fusco, *supra* note 117, at 444.

¹²⁶ *Id.*

¹²⁷ *Id.*, at 447.

discoveries.”¹²⁸ This concept is not restricted solely to the United States, as the EPC provides in the preamble:

“the contracting states to the European Patent Convention . . . wishing to promote innovation and economic growth in Europe still more effectively by laying foundations for the further development of the European Patent System . . . have agreed [to adopt the European Patent Convention’s provisions].”¹²⁹

The idea of promoting innovation through patent protection, emphasized both in the United States and in Europe, requires inventors to be motivated and have the right to research, develop, and invent, and then be able to patent the fruits of their labor and recoup their investment without an impeding threat that some immoral practice will preclude them from this right.

The prevalence of NPEs discourages inventors from researching and developing in particular technologies where NPEs are more present and likely to attack.¹³⁰ It further discourages inventors from disclosing their inventions to the public, thereby keeping inventions as trade secrets.¹³¹ As a result, certain trade secrets that could be used by other innovators to develop other inventions, become inaccessible, thereby suppressing and delaying overall innovation.¹³² NPEs have added significant costs to the innovation ecosystem, with very little of that cost actually recirculating back into innovation.¹³³ The social implications of NPEs are real. NPEs currently seem to be a creature of the U.S. economy more than that of Europe’s economy.¹³⁴ Nevertheless, NPEs may play a greater role with Europe’s upcoming unitary package system.¹³⁵

¹²⁸ U.S. Const. art. 1, § 8, cl. 8.

¹²⁹ EPC, *supra* note 10, at preamble.

¹³⁰ Fusco, *supra* note 117, at 448.

¹³¹ *Id.*, at 446.

¹³² *Id.*

¹³³ “James Bessent and Michael Meurer (2012) find that defendants and licencees paid PAE’s \$29 billion in 2011. . . they estimate that less than 25% of this money flowed back to innovation.” Whitehouse Report, *supra* note 118, at 9.

¹³⁴ Fusco, *supra* note 117, at 439.

¹³⁵ *Infra* part V(1)(b).

a. The Threat of NPEs in Pre EU Unitary Package System

Patent troll activity does occur in Europe even with the patent system that is currently in place. The activity is most prevalent in Germany, and less so in France, United Kingdom, Netherlands,¹³⁶ Sweden, Italy, Norway, and Ireland¹³⁷. For example, in Germany between 2000 and 2008, data about the number of infringement cases revealed about 8,800 infringement suits, or slightly less than a 1000 infringement suits a year.¹³⁸ Germany has far more infringement suits filed annually than any other EU MS.¹³⁹ To illustrate the large disparity, similar data was collected in the UK between 2000-2008 and resulted in the finding of about 250 infringement cases, or less than 30 infringement suits a year.¹⁴⁰ In comparison, NPE activity in the United States in 2012 alone accounted for 62% of all patent suits (about 2,500 patent assertion lawsuits by NPEs out of about 4000 patent assertion lawsuits overall).¹⁴¹ NPEs are present in Europe and the number of NPE attacks is on the rise.¹⁴² Even though presently, United States remains in the lead with regard to NPEs, with the future unitary system, NPEs may become a more serious concern in the EU than they have been thus far.¹⁴³

b. The threat of NPEs in post EU unitary package system

As illustrated in Part V.1.a., the disparity between patent troll attacks in the various states of the EU is substantial. Such a great disparity naturally raises the question- “why is there such a great disparity?” The simple answer is that patent trolls seek to assert their patents in jurisdictions

¹³⁶ K. Cremers, M. Ernicke, F. Gaessler, D. Harnoff, C. Helmers, L. McDonagh, P. Schliessler, & N. V. Zeebroeck, *Patent Litigation in Europe*, Discussion Paper No. 13-072, Ctr. for Eur. Econ. Research, 43 (2013), available at <http://ftp.zew.de/pub/zew-docs/dp/dp13072.pdf>, [hereinafter Patent Litigation].

¹³⁷ Fusco, *supra* note 117, at 451-2.

¹³⁸ Patent Litigation, *supra* note 136, at 44.

¹³⁹ *Id.*, at 45.

¹⁴⁰ *Id.*, at 44.

¹⁴¹ Whitehouse Report, *supra* note 118, at 5.

¹⁴² Patent Litigation, *supra* note 136, at 43.

¹⁴³ *Infra* part VI.

which have “patentee friendly” laws and procedures. But what makes a jurisdiction “patentee friendly?”

The differences between the German and United Kingdom patent systems are numerous in number, with each factor playing a role in Germany’s “patentee friendly” status. First, Germany uses a bifurcated system whereas the UK does not.¹⁴⁴ Based on the bifurcated system, it is possible for a regional court in Germany to grant an injunction against a potential infringer of a patent that is later found invalid.¹⁴⁵ Additionally, the bifurcated system gives rise to inconsistencies in claim interpretation, since the different courts, resolving separate issues of infringement and validity, construct the claims independently.¹⁴⁶ This creates a problem where a court, reviewing the claims for infringement purposes, will issue an injunction against a defendant on the basis of a broad claim construction, and simultaneously a court, reviewing the claims for validity purpose, will interpret the claims narrowly, finding the patent asserted for injunctions purposes invalid.¹⁴⁷

Second, in Germany, several regional courts are competent to hear patent cases, whereas in the UK, there is a centralized system for patent litigation.¹⁴⁸ Thus, plaintiffs in Germany have several venues to choose from when filing an infringement claim.¹⁴⁹ This enables patent trolls to forum shop to select the venue in which they are most likely to ultimately prevail or at least obtain a preliminary injunction. Such favorable venues are also known as “patentee friendly” courts.¹⁵⁰ Inventors that are faced with an infringement suit in a “patentee friendly” court are encouraged to settle with terms that are more favorable to the patent trolls.¹⁵¹ In contrast, in the UK the venue of

¹⁴⁴ Patent Litigation, *supra* note 136, at 30.

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*, at 31.

¹⁴⁹ *Id.*

¹⁵⁰ Patent Litigation, *supra* note 136, at 31.

¹⁵¹ *Id.*

the lawsuit depends on the size and value of the claim and not on the plaintiff's preference.¹⁵² Furthermore, in the UK there are only two courts dedicated for patent litigation, and both are located in London.¹⁵³ The reduced number of regional courts in the UK not only reduces forum shopping, but also allows for more uniform outcomes.

Third, the duration of the proceeding in Germany is relatively speedy as compared to other EU MSs.¹⁵⁴ This is possible, in large part, due to Germany's bifurcated system, allowing Germany to enter judgments for patent infringement and preliminary injunction proceedings without reviewing the validity of the patent asserted. These differences in proceeding durations provide strategic incentives for patent trolls to file patent infringement suits in faster jurisdictions.¹⁵⁵

When reviewing the UPC agreement, keeping in mind the factors listed above for a "patentee friendly" jurisdiction, several provisions seem to be as problematic. Two of the UPC provisions are particularly controversial.¹⁵⁶ The first provision is contained in Article 62(4) of the UPC agreement, which states:

"The Court **may**, in respect of the measures referred to in paragraphs 1 and 3, require the applicant to provide any reasonable evidence in order to satisfy itself with a sufficient degree of certainty that the applicant is the right holder and that the applicant's right is being infringed, or that such infringement is imminent."¹⁵⁷

According to this provision, a patent troll may bring an infringement suit, requesting the court to grant a preliminary injunction, and the court **may**, at its discretion, require the patent troll plaintiff to provide "reasonable evidence" to show that the asserted patent is being infringed.¹⁵⁸ The inclusion of the terms "may" and "reasonable evidence" provide uncertainty and a great amount

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ *Id.*, at 32.

¹⁵⁵ *Id.*, at 30.

¹⁵⁶ Mueller, *supra* note 93.

¹⁵⁷ UPC Agreement, *supra* note 61, at art. 62.

¹⁵⁸ Mueller, *supra* note 93.

of discretion for regional and local divisions as to whether any evidence, whatsoever, is required to show that the asserted patent is being infringed, and if so, what will be considered as “reasonable evidence.”¹⁵⁹ Some courts may set the standard so low that obtaining a preliminary injunction will be so simple, perhaps even too simple.¹⁶⁰ These divisions will be termed as “patentee friendly” and targeted by patent trolls.¹⁶¹

The other controversial provision is Article 33(3) of the UPCA, which states:

(3) A counterclaim for revocation as referred to in Article 32(1)(e) may be brought in the case of an action for infringement as referred to in Article 32(1)(a). **The local or regional division concerned shall, after having heard the parties, have the discretion either to:**

- (a) proceed with both the action for infringement and with the counterclaim for revocation and request the President of the Court of First Instance to allocate from the Pool of Judges in accordance with Article 18(3) a technically qualified judge with qualifications and experience in the field of technology concerned.
- (b) refer the counterclaim for revocation for decision to the central division and suspend or proceed with the action for infringement; or
- (c) with the agreement of the parties, refer the case for decision to the central division.¹⁶²

Article 33 determines the venue for an infringement proceeding. Specifically, an infringement proceeding may be brought either in the area where the infringer is located or where infringement occurs.¹⁶³ However, if the potential infringer, against whom the patent is asserted, counterclaims with an invalidity claim, the local division has the discretion to choose whether to: (1) handle the entire case as a whole, (2) refer the counterclaim to the central division, or (3) refer the case as a

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ *Id.*

¹⁶² UPC Agreement, *supra* note 61, at art. 33(3).

¹⁶³ UPC Agreement, *supra* note 61, at art. 33(1).

whole to the central division.¹⁶⁴ Defendants who are reluctant to give such discretion to the court, may be hesitant to file a counterclaim due to the uncertainty involved.¹⁶⁵

Furthermore, if a local court decides, at its discretion, to bifurcate the case and refer the counter claim to the central division, they do not have to await the outcome of the counterclaim action, and may proceed with the infringement suit.¹⁶⁶ This action will nullify the defensive effect of the counterclaim, thereby increasing the likelihood that the local division will find a potentially invalid patent infringed.¹⁶⁷ The consequences of frequent use of option (2) may enable patent trolls to obtain favorable infringement judgment decisions on invalid patents resulting in devastating outcomes for innocent defendants and for society through harm to innovation and economic growth.¹⁶⁸

2. *Recommended Safeguards Against NPEs*

Researchers and law scholars have previously looked into the prevalence of patent trolls in the EU. Fusco concluded that patent trolls are active in the EU but to a lesser degree due to the smaller size of the industries prone to patent troll attacks in the EU as compared to the U.S.¹⁶⁹ Helmers, based on an empirical study, concluded that patent trolls are less active in the EU due to the deterrent effect of the fee shifting scheme present in the EU's legal system.¹⁷⁰ Even if Fusco was correct to correlate the size of an industry to the likelihood of attacks by NPEs, with an ever-growing economy and developing technology, it is unlikely that the EU will stay far behind the US for much longer. Accordingly, measures have to be taken from the very start to ensure that

¹⁶⁴ *Id.*, at art. 33(3).

¹⁶⁵ Mueller, *supra* note 93.

¹⁶⁶ UPC Agreement, *supra* note 61, at art. 33.

¹⁶⁷ Mueller, *supra* note 93.

¹⁶⁸ *Id.*

¹⁶⁹ Fusco, *supra* note 117, at 442.

¹⁷⁰ C. Helmers, B. Love, & L. McDonagh, *Is There a Patent Troll Problem in the U.K.?*, 24 Fordham Intell. Prop. Media & Ent. L. J. 509, 546 [hereinafter Helmers].

NPEs do not become more prevalent in the EU. These measures are especially urgent and vital in view of the upcoming changes to the patent system through the new EU unitary package.

The new EU unitary package system greatly resembles the U.S. patent system. Therefore, the EU has the advantage of being able to learn from the history of U.S.'s struggle with patent trolls and adopt some of its strategies. Some of the measures recommended in the U.S. include granting clearer and stronger patents, which are less likely to be interpreted inconsistently among local and regional courts and reducing the disparity of litigation costs between patent owners and technology users.¹⁷¹ The litigation costs can be reduced, for example, by limiting unnecessary discovery of defendant's documents at earlier stages yet requiring more evidence of patent validity and patent infringement by the NPEs before allowing an infringement suit to proceed. These measures have to be backed up with strong and clear rules of procedure that limit and reduce the discretion of the court to almost non-existent levels.¹⁷² Alternatively, the UPC agreement may list factors which the local and regional divisions will account for in making their discretionary decision, and the weight given to each factor, so that defendants are given sufficient notice and clear guidelines as to the best strategic move that will place them on a leveled playing field with the patent trolls.

VI. Conclusion

The current European patent system has proven its success over and over again for decades since at least the adoption of the EPC. Yet, nowadays, with the EU becoming gradually more and more uniform in all aspects, it seems that the EU, with the EU unitary package system, is striving to create uniformity in its patent system. And so, an unbroken patent system must be fixed making it simpler, inexpensive, and uniform. However, if the new patent system ironically simplifies by

¹⁷¹ Whitehouse Report, *supra* note 118, at 1.

¹⁷² *Id.*

complicating, becomes inexpensive with additional fees, and becomes uniform through fragmentation, has the nonexistent problem really been resolved?

The UP system adds a third type of patent protection individuals may seek, the UP enforced in the UPC.¹⁷³ It does not eliminate any of the existing patent options.¹⁷⁴ Before, individuals only had to balance two strategies to determine which is favorable, now they will have to review their options under three potential strategies. To make things more complicated, the UP and UPC regulations are not available for all states who are part of the EPC, but only to MSs of the EU.¹⁷⁵ As a result, individuals will often have to resort to at least two types of patent protections to obtain comprehensive protection in all the jurisdictions they are interested in. Reviewing an additional strategic option as well as pursuing at least two types of patent protections, will naturally result in more expenditure.

Additionally, it is hard enough to enforce uniform laws and uniform implementation of the laws in the U.S., where all states speak the same language. Imagine just how much more difficult it will be for the local and regional divisions of the UPC spread across many countries, run with different languages, accustomed to different laws, to follow UP laws in three official languages and implement them uniformly. With the lack of experience and fragmented institutions, the result is very likely to be a fragmented, not a unified, patent court.

The weaknesses of the unitary system will be further exploited by patent trolls, who just try to leverage and hijack somebody else's idea and see if they can extort money out of them in a "legal" fashion. The only deterrent on patent trolls will be the fee shifting provision under which the losing party in the infringement suit will be responsible for all attorney fees.¹⁷⁶ However, patent

¹⁷³ Regulation 1257/2012, *supra* note 36.

¹⁷⁴ *Id.*

¹⁷⁵ Regulation 1257/2012, *supra* note 36, at (3).

¹⁷⁶ Helmers, *supra* note 170, at 510.

trolls will adapt. They will select patentee friendly jurisdictions in the “fragmented patent court” and obtain speedy preliminary injunctions based on invalid or very weak patents.¹⁷⁷ Defendants, particularly small and medium sized companies whose existence will be threatened through the patent troll infringement suit, will be too concerned that the patent trolls will threaten their entire UP to fall in all twenty-five jurisdictions, and will rush to settle or pay licensing fees to the prevailing patent trolls.¹⁷⁸ Huge amounts of money will be taken away from the realm of innovation and economic growth in direct contrast to the purpose of the EPC.¹⁷⁹

Although this conclusion describes a horrifying scenario, absent proper measures, this may very well be part of our future. It is important for stakeholders to comprehend the potentially harmful consequences of the new system. Only by understanding the new system’s loopholes will future laws, whether through regulations, directives, or case law, depict informed decisions, provide clarity and guidance to defendants, and create deterrence to patent trolls.

¹⁷⁷ Mueller, *supra* note 93.

¹⁷⁸ *Id.*

¹⁷⁹ EPC, *supra* note 10, at preamble; *also* Whitehouse Report, *supra* note 118, at 9.