HOW THE UNITARY PATENT WILL FRAGMENT EUROPEAN PATENT LAW

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I. Introduction

Innovation in the European Union ("E.U.") has been lagging behind innovation in the United States for many years. Many European business leaders have cited the cost of obtaining a patent, the complexity of navigating the patent process, and the lack of uniform patent enforcement as causes of the slow growth of European innovation. The European Patent Office ("EPO")—the E.U.'s governing patent body—recently announced significant changes to make patenting in the E.U. less expensive and less complex.

On December 17, 2012, twenty-five E.U. member states—which counts for most, but not all of the E.U. member states—banded together to enact two regulations for the purposes of creating a unitary patent and agreeing on the languages required to obtain a unitary patent.⁴ Approximately two months

content/EN/TXT/PDF/?uri=CELEX: 32012R1260&qid=1416578333853&from=EN~[hereinafter~Regulation~1260/2012].

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^{1.} See European Comm'n, Directorate Gen. for Enter. & Indus., European Innovation Scoreboard 2007, at 15 (Feb. 2008).

^{2.} See Gail Edmonson, European Patent Office Enters New Era: Managing the EU Unitary Patent, SCIENCE|BUSINESS (March 6, 2013), http://www.sciencebusiness.net/news/76068/European-Patent-Office-enters-new-era-managing-the-EU-Unitary-Patent; see also Alexandra Dominique Danielle Theben, Unitary Patent Protection Under Enhanced Cooperation: Is an EU patent feasible in the future? 7 (Jan. 2014) (unpublished M.S. thesis, University of Twente), available at http://essay.utwente.nl/64408/.

^{3.} See European Patent Office Welcomes Historic Agreement on Unitary Patent, EUROPEAN PATENT OFFICE, http://www.epo.org/news-issues/news/2012/20121211.html (last updated Dec. 11, 2012).

^{4.} See id.; Regulation 1257/2012, of the European Parliament and of the Council of 17 December 2012 on Implementing Enhanced Cooperation in the Area of the Creation of Unitary Patent Protection, 2012 O.J. (L 361) 1 (EU), available at http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:361:0001:0008:EN:PDF [hereinafter Regulation 1257/2012]; Council Regulation 1260/2012, 2012 O.J. (L 361) 89 (EU), available at http://eur-lex.europa.eu/legal-

later, most of the same countries adopted a third provision establishing a Unified Patent Court.⁵ This paper discusses specific provisions within the three agreements, and some of the broader effects these agreements will likely have throughout the E.U.

This paper begins in Part II by providing background for how a subset of E.U. countries used the "Enhanced Cooperation" procedure to create a unitary patent. Part III compares the processes for obtaining and enforcing patents in the current system with those processes in the proposed unitary patent and Unified Patent Court systems. Part IV explains why the proposed Unified Patent Court will not fix the E.U.'s uneven patent enforcement, even though the Unified Patent Court appears to be changing the E.U. patent enforcement system similarly to how the Court of Appeals for the Federal Circuit successfully unified the U.S. patent appeals system. Part V concludes by noting that although the unitary patent and Unified Patent Court may spur innovation in the E.U., a number of problems implementing the changes will likely weaken the positive effects of those changes.

II. BACKGROUND FOR UNITARY PATENT AND UNIFIED PATENT COURT

Since the EPO's inception in 1973, it has vocalized a desire to create a single European patent that would be valid across all of Europe.⁶ More recently, business leaders in the E.U. have complained that their patent system is too complicated and costly to efficiently promote innovation.⁷ Responding to the EPO's and E.U. business leaders' concerns, the E.U. council responsible for regulating patents proposed to allow the EPO to issue a single patent with patent rights that would be valid in every E.U. member state.⁸ This single patent would be known as a European patent with unitary effect—also known as the unitary patent.⁹

^{5.} European Patent Office Welcomes Historic Agreement on Unitary Patent, supra note 3; Agreement on a Unified Patent Court, Feb. 19, 2013, 2013 O.J. (C 175) 1 [hereinafter UPC Agreement].

^{6.} See Mission and Vision, EUROPEAN PATENT OFFICE, http://www.epo.org/about-us/office/mission.html (last updated Sept. 2, 2008).

^{7.} See Edmonson supra note 2.

^{8.} The idea of creating a unitary patent system is actually quite old, and dates back to the beginnings of the E.U. *See* Theben, *supra* note 2, at 4.

^{9.} See Regulation 1257/2012, supra note 4.

Even though the E.U. council had been actively working to implement the unitary patent, until recently the council appeared to be gridlocked. Despite lengthy negotiations, one thorny issue continued to hold back any chance of progress. The E.U. council members could not agree on which languages should be considered the official ones. Despite 12

Under the current European patent system, a patent owner must translate her patent into whatever language the country she was entering required. That requirement has historically made owning a patent in many different countries quite expensive. To combat the high costs associated with translating patents into many languages, the E.U. council recognized that the proposed unitary patent needed to require only a very small number of languages. Is

Although every delegate on the E.U. council knew that the proposed unitary patent must be limited to only a few languages, council members from some of the most influential countries were not willing to exclude their national language from the requirements. ¹⁶ Italy wanted Italian to be required; Spain wanted Spanish; Germany, German; France, French; and the UK wanted English to be a required language. ¹⁷ Alternatively, council members from Spain and Italy were content with English being the sole required language for the proposed patent system, but council members from Germany and France did not like that idea. ¹⁸ Since the council members could not agree on the official languages, many pundits doubted whether a single European patent would ever be created. ¹⁹

Breaking the gridlock, Germany and France used their clout to convince a majority of council members to use the E.U. "Enhanced Cooperation"

^{10.} See Italy and Spain Block EU-Wide Patent Talks, EURACTIVE.COM, http://www.euractiv.com/innovation-enterprise/italy-spain-block-eu-wide-patent-news-499638 (last updated Nov. 12, 2010); see also Theben, supra note 2, at 4.

^{11.} See Italy and Spain Block EU-Wide Patent Talks, supra note 10.

¹² Id

^{13.} *National Validation*, EUROPEAN PATENT OFFICE, http://www.epo.org/applying/european/validation.html (last updated Jan. 4, 2013).

^{14.} See Cost Comparison: "Classic" European Patent Versus New Unitary Patent, EC.EUROPA.EU, http://ec.europa.eu/internal_market/indprop/docs/patent/faqs/cost-comparison_en.pdf (last visited Apr. 6, 2015).

^{15.} *Unitary Patent*, EUROPEAN PATENT OFFICE, http://www.epo.org/law-practice/unitary/unitary-patent.html (last updated Dec. 17, 2014).

^{16.} See Italy and Spain Block EU-Wide Patent Talks, supra note 10.

^{17.} Theben, supra note 2, at 90.

^{18.} *Id*.

^{19.} See generally Academics confirm flaws in the unitary patent, UNITARY-PATENT.EU (Nov. 6, 2012, 9:13 PM), https://www.unitary-patent.eu/content/academics-confirm-flaws-unitary-patent.

procedure to set German, French, and English as the official languages.²⁰ The "Enhanced Cooperation" procedure allowed a subset of E.U. countries to adopt a regulation that would bind only those countries. By choosing to move forward on the unitary patent without the support of Italy or Spain, the remaining majority of the E.U. member states circumvented the gridlock and passed the unitary patent.²¹

Starting in December 2012, E.U. member nations adopted a series of regulations that would radically change their patent landscape. On December 17, 2012, twenty-five countries signed a regulation "implementing enhanced cooperation in the area of the creation of unitary patent protection"²² ("enhanced cooperation regulations"). At the same time, the same group of countries signed a second regulation "implementing enhanced cooperation in the area of the creation of unitary patent protection with regard to the applicable translation arrangements"²³ ("unitary patent regulations"). About two months later, a substantially similar group of twenty-five countries signed a related agreement that established a Unified Patent Court.²⁴

These unitary patent regulations and the Unified Patent Court agreement will go into effect as soon as France, Germany, the U.K., and ten other countries ratify them.²⁵ Although the individual E.U. countries still need to ratify the regulations, many people believe that the unitary patent and Unified Patent Court will be successfully implemented.²⁶

III. UNDERSTANDING THE PATENTING INFRASTRUCTURE IN EUROPE

This section discusses Europe's patent system both before and after the introduction of the Unitary Patent. The process can be broken down into two phases: obtaining a patent, and enforcing patent rights. The Enhanced Cooperation regulations and the Unified Patent Court agreement each affect different aspects of patenting in Europe. The Enhanced Cooperation regulations affect how a patent holder obtains a patent as well as some

^{20.} See Theben, supra note 2, at 90.

^{21.} See id.

^{22.} Regulation 1257/2012, *supra* note 4, at 361/1.

^{23.} Regulation 1260/2012, *supra* note 4, at 361/89.

^{24.} *Unified Patent Court*, EUROPEAN PATENT OFFICE, http://www.epo.org/law-practice/unitary/patent-court.html (last updated Sept. 18, 2014).

^{25.} Id.

^{26.} See Unitary Patent in the Spotlight in Talks with German Justice Minister, EUROPEAN PATENT OFFICE, http://www.epo.org/news-issues/press/releases/archive/2013/20130618.html (last updated June 18, 2013).

substantive patent law.²⁷ The Unified Patent Court agreement significantly affects substantive patent law and how patents are enforced.²⁸

A. Obtaining Patent Rights

Because Europe is a collection of independent nations, obtaining a patent can be done in multiple ways.²⁹ Generally speaking, an inventor can choose to apply for a national patent³⁰ or a European patent.³¹ The European patent has two different versions: the current European patent, and the proposed unitary patent.³² This section describes the national patent, the European patent, and the unitary patent in detail.

1. Obtaining a National Patent

To respect the sovereignty of its countries, the E.U. allows countries to proscribe their own patent laws and issue national patents.³³ As a result, every country in Europe has its own patent laws, and a patent applicant can apply for a patent in any given country under that country's national patent law.³⁴ Patents obtained this way are only valid in the country in which the patent applicant applies, and are not valid in any other country.³⁵ If a patent applicant wishes to obtain patent protection in numerous countries, she must apply for patents individually on a per country basis.³⁶ As one can imagine, the national patent process does not scale well, and can become quite costly and inefficient if a patent applicant wishes to obtain patents in many countries.³⁷

- 27. See Unitary Patent, supra note 15.
- 28. See Unified Patent Court, supra note 24.
- 29. See The History of the EPO: A Look Back at the History of the European Patent Convention, the Organisation and the Office, EUROPEAN PATENT OFFICE, http://www.epo.org/about-us/office/timeline.html (last updated Nov. 27, 2014).
- 30. *National Applications*, EUROPEAN PATENT OFFICE, http://www.epo.org/applying/national.html (last updated Mar. 14, 2011).
- 31. European Route, EUROPEAN PATENT OFFICE, http://www.epo.org/applying/european.html (last updated Feb. 22, 2011).
 - 32. See Unitary Patent, supra note 15.
 - 33. National Applications, supra note 30.
 - 34. Id.
- 35. See id. ("[T]he national route generally leads to national rights which confer protection of differing extent.").
 - 36. *Id*.
- 37. See id. ("If you intend to apply for a patent in just a few European countries, it may be better to choose the national route ").

To be clear, neither the Enhanced Cooperation regulation nor the Unified Patent Court regulation will change the current national patent system.³⁸

2. Obtaining a European Patent: Pre-unitary Patent

Because the national patent system was too expensive and inefficient for an inventor seeking patent protection in many countries, the EPO created the European patent.³⁹ To obtain a European patent, an inventor must apply for a patent at the EPO.⁴⁰ Once an inventor files a patent application at the EPO, the patent undergoes a typical patent examination process. After completing the patent examination process, the EPO issues a European patent.⁴¹ An inventor must then take that issued European patent and "nationalize" it to obtain national patent rights in any country the inventor desires. 42 The process of nationalizing a European patent requires that the inventor pay a fee and translate the European patent into whatever language the desired country requires.⁴³ For every country in which an inventor desires patent protection, she must nationalize the European patent for that country. 44 The benefit of the European patent is that it allows a patent applicant to pay for the patent examination once, thus saving money overall.⁴⁵ Despite reducing the cost of patenting in the pre-grant phase, the current European patent is still very expensive because the translation fees are quite costly.⁴⁶

Currently, thirty-eight countries in Europe have signed on to allow a European patent to be nationalized within their borders.⁴⁷ An inventor who

^{38.} See Unitary Patent, supra note 15.

^{39.} See Legal Foundations, EUROPEAN PATENT OFFICE, http://www.epo.org/about-us/organisation/foundation.html (last updated Apr. 22, 2013).

^{40.} European Route, supra note 31.

^{41.} *Guide for Applicants, Part 1: How to Get a European Patent*, EUROPEAN PATENT OFFICE, http://www.epo.org/applying/european/Guide-for-applicants/html/e/ga_d_i.html (last updated Dec. 5, 2013).

^{42.} National Validation, supra note 13.

^{43.} *Id*.

^{44.} *Id*.

^{45.} Id.

^{46.} Interactive Fee Schedule for Obtaining a European Patent, EPO.ORG, http://www.epoline.org/portal/portal/default/epoline.Scheduleoffees.

^{47.} See Member states of the European Patent Organisation, EUROPEAN PATENT OFFICE, http://www.epo.org/about-us/organisation/member-states.html (last updated Apr. 22, 2013) (Albania, Austria, Belgium, Bulgaria, Switzerland, Cyprus, Czech Republic, Germany, Denmark, Estonia, Spain, Finland, France, United Kingdom, Greece, Croatia, Hungary, Ireland, Iceland, Italy, Lietchtenstein, Lithuania, Luxembourg, Latvia, Monaco, Former Yugoslav Republic of Macedonia, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Sweden, Slovenia, Slovakia, San Marino, and Turkey). A variation on the EPO route exists for two countries,

successfully navigates the European patent examination process can take the granted European patent and nationalize it in any of the 38 countries.⁴⁸ To be sure, the inventor has to nationalize her patents within a statutorily required three month window, but that is not a bad trade-off to save money.⁴⁹

Thus, the benefit of the European patent is that it allows an inventor to save money by completing the pre-grant procedures only once.⁵⁰ Regardless of whether an inventor applies for national patents one by one, or nationalizes a European patent, the end result from either route is that an inventor will have a group of independent national patents.⁵¹

3. Obtaining Patent Rights with the Unitary Patent

Because the European patent process was still too expensive, a group of twenty-five countries created the unitary patent.⁵² In creating the unitary patent, the E.U. council sought to change the second part of the patent process by making it more like the pre-grant phase.⁵³ As mentioned previously, the current European patent system requires an inventor to obtain national patents from every country that is part of the EPO.⁵⁴ In contrast, the unitary patent system seeks to provide an alternative to that procedure.⁵⁵

To be clear, the unitary patent will be derived from the European patent,⁵⁶ and the unitary patent will use the same pre-grant procedures as the European

Montenegro and Bosnia and Hergezovina, who want to take advantage of the EPC infrastructure, but do not want to become official signatories of the EPC for other reasons. *See EPO-Extension States*, EUROPEAN PATENT OFFICE, http://www.epo.org/about-us/organisation/member-states/extension-states.html (last updated Aug. 19. 2010). In these two countries, an inventor can take an EPC granted patent application and apply for nationalization, even though patents granted this way technically were not done so through the EPC route. *See Guidelines for Examination: Extension to States not party to EPC*, EUROPEAN PATENT OFFICE, http://www.epo.org/law-practice/legal-texts/html/guidelines/e/foreword_7.htm (last updated Sept. 26, 2014). This variation has essentially the same effect as nationalizing a patent through a signatory country, but is expressly not performed within that framework. *See id.*

- 48. European Patent Convention, Oct. 5, 1973, http://www.epo.org/law-practice/legal-texts/html/epc/1973/e/contents.html.
 - 49. See id.
 - 50. See Guide for Applicants, Part 1: How to Get a European Patent, supra note 41.
 - 51. Andrew Rudge, Guide to European Patents §1.2 (2013).
 - 52. See Theben, supra note 2.
 - 53. See Unitary Patent, supra note 15.
 - 54. See RUDGE, supra note 51.
 - 55. See Regulation 1257/2012, supra note 4.
- 56. *Unitary Patent*, *supra* note 15 ("The European patent with unitary effect ("unitary patent") will be an [sic] another option for users besides already-existing national patents and classical European patents. A unitary patent will be a European patent granted by the EPO under

patent.⁵⁷ The unitary patent differs from the current process only after an inventor obtains a European patent.⁵⁸ The inventor will now have an option to obtain a unitary patent that will provide the inventor with a single patent that is valid and enforceable in all signatory countries.⁵⁹ As part of choosing a unitary patent, an inventor must provide two language translations of her patent, one in English, German, or French, and the other in any language used by a signatory country.⁶⁰ Further, the unitary patent must be listed in a registry as defined in the Enhanced Cooperation regulation implementing the unitary patent.⁶¹ Thus, to obtain patent protection in every member state, an inventor only needs to follow the European patent process, provide two translations, and list her patent in the registry.⁶²

The unitary patent does, however, have a requirement that a national patent or European patent does not.⁶³ A unitary patent must have the same set of claims in all countries to be valid.⁶⁴ This means that a unitary patent must essentially be the same in all signatory countries.⁶⁵ This requirement indirectly holds a unitary patent to the lowest common denominator for patentable subject matter in all of European patent law.⁶⁶ As an example, if Germany allows patents on genetic mutations, but France does not, then a patent with a claim for a genetic mutation will not be eligible for unitary patent protection because it would fail this requirement. Therefore, a patent applicant interested in obtaining a unitary patent will have to keep this regulation in mind.

Obtaining a unitary patent that has force in many countries will be much easier and less costly than obtaining national patents or European patents.⁶⁷ By following the European patent pre-grant application process and

the provisions of the European Patent Convention to which unitary effect for the territory of the 25 participating states is given after grant, at the patentee's request.").

 $courses.epo.org/pluginfile.php/6740/mod_resource/content/2/Speech_virtual_classroom_13-07-09.pdf (last visited Apr. 6, 2015).$

- 58. Unitary Patent, supra note 15.
- 59. *Id*.
- 60. *Id*.
- 61. Regulation 1257/2012, *supra* note 4, at art. 3(1), 4.
- 62. Unitary Patent, supra note 15.
- 63. See Regulation 1257/2012, supra note 4.
- 64. *Id.* at ch. 1, art. 3(1), 4.
- 65. See Luginbuehl, supra note 57, at 7.
- 66. See id
- 67. See Cost Comparison: "Classic" European Patent Versus New Unitary Patent, supra note 14.

^{57.} See Stefan Luginbuehl, Unitary Patent Protection and Unified Patent Court, EPO.ORG, https://e-

providing two translations, an inventor can obtain patent protection in numerous countries for much less than she would otherwise.⁶⁸

B. What Laws Apply to Patents in Europe, and Where to Enforce Those Laws

Because the unitary patent regulations and the Unified Patent Court agreement can be ratified independently of each other, the substantive patent law applicable to a patent will fall into one of four categories:

- 1. European patents in countries that do not adopt either regulations (Quadrant I);
- 2. European patents in countries that adopt the unitary patent regulations, but not the Unified Patent Court agreement (Quadrant II);
- 3. European patents in countries that adopt the Unified Patent Court agreement, but not the unitary patent regulations (Quadrant III); and
- 4. European patents in countries that adopt both the unitary patent regulations, and the Unified Patent Court agreement (Quadrant IV).

The applicable laws in each situation will be some combination of the substantive law from the unitary patent regulations and the Unified Patent Court agreement. Table I below illustrates the most relevant substantive law provided by each regulation. Table II below illustrates what laws apply to countries based on their acceptance of the Enhanced Cooperation regulations and the Unified Patent Court agreement.

Table I		
Unitary Patent regulations	Unified Patent Court agreement	
 Definition of Unitary Effect 	Direct Infringement	
 Patent Exhaustion⁶⁹ 	 Indirect Infringement 	
 Scope of Licensing Agreements 	 Exceptions to Infringement 	
	 Patent Exhaustion 	
	 Revocation of a Patent 	
	 Injunctions 	

^{69.} 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.*

Table II		
Patent Enforcement in Europe	Do not Ratify Unitary Patent regulations	Ratify Unitary Patent regulations
Do not Ratify UPC Agreement	 QUADRANT I This is the status quo National patent laws govern No Unitary Patent or Unified Patent Court Patent Disputes brought in National courts Ex: Spain⁷⁰ 	National patent laws govern AND unitary patent agreement sets out some substantive laws (See Table I) No Unified Patent Court Patent Suits brought in Court System where infringement occurs (i.e., National Court if infringement in non-UPC country, UPC if anywhere else) Ex: Poland ⁷¹
Ratify UPC Agreement	 QUADRANT III UPC gets exclusive patent jurisdiction over European patents UPC law governs (Table I) No Unitary patent Patent Disputes brought in UPC Ex: Italy⁷² 	 QUADRANT IV UPC gets exclusive patent jurisdiction over European patents UPC law governs (Table I) Unitary patent available Patent Disputes brought in UPC Ex: Every member state that ratifies UPC and Enhanced Coop.

1. Laws Applicable to Patents in QUADRANT I Countries

Countries in Quadrant I are those that have chosen not to ratify either the unitary patent regulations or the Unified Patent Court agreement. As such,

^{70.} See Unitary Patent, supra note 15 ("With the exception of Italy and Spain, 25 EU member states have embarked on enhanced co-operation with a view to creating unitary patent protection for their territories.").

^{71.} Poland Will Not Sign the New Legislation on the Unified Patent Court, EUROPEAN IPR HELPDESK, https://www.iprhelpdesk.eu/node/1551 (last updated Dec. 16, 2014).

^{72.} See Unitary Patent, supra note 15.

these countries will maintain the patent law status quo. The status quo includes both a national patent system and the current version of the European patent system.

National patents are patents that are granted individually by countries, and the scopes of those patents are limited to the countries that granted them. For example, a German national patent would be subject to German law, a French national patent would be subject to French law, and so forth.⁷³ Although E.U. treaties have required member countries to design their national patent laws similarly,⁷⁴ each country enacted its own national patent law independently.⁷⁵ Therefore, each country's national patent law is unique, and governs its own national patents.⁷⁶

As discussed above, the current European patent system uses a common patent examination process that results in individual national patents. Nationalized European patents in countries that do not adopt either regulations will continue to be treated as national patents of that country. Thus, patent disputes in any quadrant I countries will be adjudicated in the national court system of that country. Spain is an example of a country that refused to adopt both of the enhanced cooperation regulations and the Unified Patent Court agreement, and therefore national patents and European patents nationalized in Spain will only be subject to Spanish patent law.

2. Laws Applicable to Patents in QUADRANT II Countries

Countries that decide not to ratify the Unified Patent Court agreement but enact the unitary patent regulations are in the most unexpected situation, because the E.U. council members who created the enhanced cooperation regulations and the Unified Patent Court agreement expected countries to at a minimum enact the Unified Patent Court. Thus, a country in this situation really will venture into uncharted territory.

^{73.} See id.

^{74.} See National Applications, supra note 30 ("Patent law in the EPO member states has been extensively harmonised with the European Patent Convention (EPC) in terms of patentability requirements.").

^{75.} *Id.* ("However, the national route generally leads to national rights which confer protection of differing extent.").

^{76.} *Id*.

^{77.} See id.

^{78.} See National Validation, supra note 13.

^{79.} See Unitary Patent, supra note 15.

Although the unitary patent regulations included some substantive patent law,⁸⁰ the regulations based their definitions for the rights of patent holders on other sources of law.⁸¹ The unitary patent regulations conferred on a unitary patent holder the right to prevent a third party from acts "[from] which that patent provides protection throughout the territories of the participating Member States in which it has unitary effect."⁸² As one can see, that section does not itself list the rights to which a patent holder is entitled.⁸³ Despite failing to articulate a list of rights to which a patent holder would be entitled, the unitary patent regulations contained provisions that will likely force a country that does not adopt the Unified Patent Court agreement to indirectly adhere to the rights listed within it.⁸⁴

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. Because most of the countries ratifying the enhanced cooperation regulations have also agreed to ratify the Unified Patent Court agreement, 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. Be

Regarding where patent suits will be resolved, patent disputes in these countries will be adjudicated based on the type of patent at issue. Patent disputes incorporating national patents will be adjudicated in the national court system. ⁸⁹ Patent disputes involving a European or unitary patent will also be adjudicated in the national court system, but the national court system will most likely have to apply Unified Patent Court law for the reasons mentioned above. ⁹⁰ This leaves open the possibility for alternative

^{80.} See Regulation 1257/2012, supra note 4, at art. 6.

^{81.} Id. at art. 5.

^{82.} Id.

^{83.} See id.

^{84.} Id. at art. 5(2).

^{85.} Id.

^{86.} See id.

^{87.} See UPC Agreement, supra note 5.

^{88.} See id.

^{89.} See National Applications, supra note 30.

^{90.} See Regulation 1257/2012, supra note 4, at art. 5(3) ("The acts against which the patent provides protection referred to in paragraph 1 and the applicable limitations shall be those defined by the law applied to European patents with unitary effect in the participating Member State

interpretations of Unified Patent Court law, thus providing an alternative venue for patent holders who would rather try their suit outside the Unified Patent Court system.⁹¹

3. Laws Applicable to Patents in QUADRANT III Countries

In countries that adopt the Unified Patent Court agreement, but not the unitary patent regulations, patent holders with a nationalized European patent will be subject to the substantive law established in the Unified Patent Court agreement. Patent Court agreement above, the Unified Patent Court agreement includes substantive law for direct infringement, indirect infringement, exceptions to infringement, and numerous other patent issues. Patent Court agreement, and numerous other patent issues.

Countries that have chosen not to adopt the unitary patent regulations refuse to consider the unitary patent valid and binding within their borders. Patent disputes in these countries can be tried in one of two venues. Patent disputes involving national patents will be adjudicated in national courts. Patent disputes involving nationalized European patents will be adjudicated in the Unified Patent Court. Italy is an example of a country that has agreed to ratify the Unified Patent Court agreement, but not the unitary patent regulations.

4. Laws Applicable to Patents in QUADRANT IV Countries

Countries adopting both the unitary patent regulations and the Unified Patent Court agreement will incorporate the substantive law from both of those regulations. This section describes the substantive patent laws deriving from both regulations in more detail. For a general breakdown of which regulation provides which substantive law, please refer to Table I.

whose national law is applicable to the European patent with unitary effect as an object of property in accordance with Article 7.").

^{91.} See id.

^{92.} See UPC Agreement, supra note 5, at art. 1.

^{93.} *Id.* at arts. 25–29.

^{94.} See Hogan Lovells, Unitary Patent—the Situation in Italy, UNITARY PATENT, http://www.theunitarypatent.com/unitary-patent-the-situation-in-italy (last visited Apr. 6, 2015).

^{95.} Id.

^{96.} *Id*.

^{97.} *Id*.

a. Substantive laws promulgated by the unitary patent regulations

The unitary patent regulations defined the unitary patent and included provisions defining substantive rights unitary patent owners would enjoy. Specifically, the agreement defined what a unitary patent was and promulgated some substantive patent laws to which the unitary patent would be subject. The regulations set forth three key attributes of the unitary patent. Article 3 articulated the "rise and fall as one" nature of the unitary patent. Second, Article 5 defined the scope of the unitary patent's rights. Article 6 set forth an equivalent to the American "Patent Exhaustion" doctrine. Date of the unitary patent and included provisions are patent as a patent patent and included provisions and included provisions are patent and included provisions and included provisions are patent as a patent patent and included provisions are pat

Article 3 set forth the unitary patent's "unitary" characteristics. 104 Section 2 of the Article defined the foundation of the unitary patent by requiring that, "[a unitary patent] may only be limited, transferred or revoked, or lapse, *in respect of all the participating Member States*. This clause within Article 3 was the most important aspect of the unitary patent because it conveyed the "rise and fall as one" characteristic that has defined the unitary nature of a unitary patent. 106

One can see why Article 3 is so important when contrasting it with the characteristics of a European patent. As described above, when an inventor completes the European patent process, she acquires a right to nationalize her patent in any number of countries. Nationalizing the patent results in the inventor holding a number of national patents. Those national patents are treated independently of one another. 107

On the other hand, an inventor with a European patent who instead opts to make it a unity patent will have a single patent enforceable in a number of jurisdictions. The difference between having numerous individual national patents and a single unitary patent is quite large.

As an example, imagine an inventor has a patent in Germany and France. If the German patent was invalidated in Germany, the inventor's French patent would still be valid in France. Compare that hypothetical with one

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98. See Regulation 1257/2012, supra note 4.
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^{99.} *Id*.

^{100.} Id. at arts. 3, 5.

^{101.} *Id.* at art. 3.

^{102.} Id. at art. 5.

^{103.} Id. at art. 6.

^{104.} Id. at art. 3.

^{105.} Id. (emphasis added).

^{106.} See id.

^{107.} See European Route, supra note 31.

^{108.} See id.

where the inventor has a single unitary patent. In this case, a single patent will work in both Germany and France. Article 3 section 2 would require that if the unitary patent was invalidated in Germany, the unitary patent would be invalidated in France as well. ¹⁰⁹ This difference can be quite important.

Article 5 defined the scope of rights for a unitary patent. Article 5 stated that a unitary patent's rights are "the right to prevent any third party from committing acts against which that patent provides protection throughout the territories of the participating Member States in which it has unitary effect, subject to applicable limitations." As one can see, there is no direct reference to what a patent holder can or cannot do. It Instead, the rights are based on whatever acts are granted by other sources of law throughout the participating Member States. By referencing to rights defined elsewhere, Article 5 left the door open for multiple definitions of unitary patent rights.

Lastly, Article 6 defined the exhaustion of the rights conferred "unitary effect." This section set out that unless there are "legitimate grounds for the patent proprietor to oppose further commercialisation of the product," once a patented device had been put on the market, a subsequent resale of that device would not infringe. This idea is known in the United States as the patent exhaustion doctrine. Surprisingly, Article 6 did not define what constituted "legitimate grounds" with respect to this section. Nevertheless, the unitary patent regulations made sure to explicitly authorize the patent exhaustion doctrine. It?

b. Substantive laws promulgated by the agreement establishing the Unified Patent Court

In addition to the laws promulgated by the unitary patent regulations, unitary patent law will be greatly affected by the Unified Patent Court agreement. The Unified Patent Court agreement will shape the scope of the unitary patent in two ways. First, the Unified Patent Court agreement defined the breadth of legal sources judges on the Unified Patent Court would be able

^{109.} See Regulation 1257/2012, supra note 4, at art. 3(2).

^{110.} *Id.* at art. 5(1) (emphasis added).

^{111.} Id.

^{112.} Id.

^{113.} Id. at art. 6.

^{114.} Id.

^{115.} *See generally* Quanta Computer, Inc. v. LG Electronics, Inc., 553 U.S. 617, 625–26 (2008) (defining the patent exhaustion doctrine).

^{116.} Id.

^{117.} Id.

to use when deciding a case. 118 Second, the Unified Patent Court agreement articulated most of the substantive patent law that would be used to decide patent disputes. 119

The Unified Patent Court's choice of law is simple to articulate, but likely more nuanced than it appears. To start, Article 20 requires that the Unified Patent Court apply European Union law, stating simply, "[t]he Court shall apply Union law in its entirety and shall respect its primacy." This simple proclamation is further modified, however, by Article 24, which set forth the specific laws to be used to resolve cases. 121 Article 24 states:

- (1) In full compliance with Article 20, when hearing a case brought before it under this Agreement, the Court shall base its decisions on:
 - (a) Union law, including Regulation (EU) No 1257/2012 and Regulation (EU) No 1260/2012:
 - (b) this Agreement;
 - (c) the EPC;
 - (d) other international agreements applicable to patents and binding on all the Contracting Member States; and
 - (e) national law. 122

Thus, judges sitting at the Unified Patent court will have a multitude of patent law sources at their disposal. Despite having numerous sources, the Unified Patent Court agreement itself defined most of the substantive patent rights judges will use to resolve patent disputes. 124

The Unified Patent Court agreement included several articles that established substantive patent law. 125 Articles 25 and 26 defined direct and indirect infringement. 126 Article 25 defined a patent owner's right to prevent direct use of the invention, stating that the patent owner has the right to prevent others from making, offering, placing on the market, or using a

^{118.} UPC Agreement, supra note 5, at art. 20.

^{119.} See id. at arts. 24-29.

^{120.} Id. at art. 20.

^{121.} Id. at art. 24.

^{122.} *Id*.

^{123.} Id.

^{124.} Id. at arts. 24-29.

^{125.} Id.

^{126.} Id. at arts. 25-26.

product covered by the patent.¹²⁷ Article 26 prevents a third party from supplying, or offering to supply, the means relating to an essential element of the invention.¹²⁸

Articles 27, 28, and 29 set out exceptions to infringement, including a reiteration of the patent exhaustion doctrine. Article 27 set out the exceptions to patent infringement, which were quite numerous. Among the acts Article 27 exempted were private, non-commercial acts, acts performed as experiments, acts creating drugs made by a pharmacy of medicine for individual use, and acts performed in accordance with international treaties. Article 28 added another exception, providing immunity from suit to any person who had used the technology prior to the inventor patenting it. Article 29 was a mirror of the Enhanced Cooperation regulation Article 6, stipulating that a form of the patent exhaustion doctrine was in effect.

Countries adopting both the unitary patent regulations and the Unified Patent Court agreement will resolve patent disputes in two different courts. Patent disputes dealing with national patents will be resolved in the national courts, whereas patent disputes dealing with European patents will be resolved in the Unified Patent Court.

IV. WHY THE NEW REGULATIONS WILL FRAGMENT THE EUROPEAN PATENT SYSTEM, DESPITE THE UNIFIED PATENT COURT'S SIMILARITY TO THE U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT

The unitary patent and the Unified Patent Court will not unify the European patent system as its proponents have hoped. Although some scholars have opined that the Unified Patent Court's similarity to the U. S. Court of Appeals for the Federal Circuit (CAFC) will mean that the Unified Patent Court will unify European patent enforcement, ¹³⁷ I argue that the underlying structure of patents in Europe appears to actually be getting more

^{127.} Id. at art. 25.

^{128.} Id. at art. 26.

^{129.} Id. at arts. 27-29.

^{130.} Id. at art. 27.

^{131.} Id. at art. 27(a).

^{132.} *Id.* at art. 27(b).

^{133.} Id. at art. 27(e).

^{134.} See id. at art. 27(f)-(1).

^{135.} *Id.* at art. 28. To be clear, however, Article 28 only grants this right if the prior-using person would have had the right under national laws to begin with. *See id.*

^{136.} Id. at art. 29.

^{137.} Robert D. Swanson, Implementing the E.U. Unified Patent Court: Lessons from the Federal Circuit, 9 BYU INT'L L. & MGMT. REV. 170, 180 (2013).

complicated. After first explaining why the European patent system appears to be getting more complicated, I show how the analogy to the CAFC is an incomplete one, and how including an analogy to State and Federal trademark law will better represent the situation. Then, I show that despite the analogy to both the CAFC and the evolution of trademark law, European patent law is not likely to progress in the same way U.S. patent law did. Finally, I discuss how the potential for double patenting could undermine any sense of uniformity the enhanced cooperation regulations and Unified Patent Court agreement were designed to create.

A. The New Regulations are not Solely Analogous to the CAFC

Some scholars have argued that the unitary patent regulations and the Unified Patent Court agreement are analogous to the laws that created the Court of Appeals for the Federal Circuit in the United States. This is an incomplete analogy. Although the creation of the Unified Patent Court may be analogous to the creation of the Federal Circuit, the unitary patent regulations do not fit within that analogy.

Prior to 1982, patent holders in the United States could bring suit in any circuit court that had jurisdiction. Because every circuit court was allowed to hear patent cases, they independently defined the contours of U.S. patent law. Along advantage of the differences, patent holders engaged in gamesmanship by racing to file their suit in the most favorable venue available. In 1982, Congress established the CAFC and consolidated appellate review of patents therein. The Federal Circuit quickly unified patent law in the United States, removing the circuit-specific variations from U.S. patent jurisprudence.

The Unified Patent Court agreement was designed to implement similar changes in the E.U.¹⁴⁴ The Unified Patent Court will provide a single court system for reviewing all patent disputes involving European patents.¹⁴⁵ Although the Unified Patent Court's proposed role of centralizing patent

^{138.} See id.

^{139.} See id. at 178.

^{140.} Id.

^{141.} Id. at 179-80.

^{142.} Id. at 180.

^{143.} See id. at 186.

^{144.} See UPC Agreement, supra note 5, at pmbl. ("CONSIDERING that the fragmented market for patents and the significant variations between national court systems are detrimental for innovation").

^{145.} See id. at art. 32.

litigation in a patent-specific court appears similar to the CAFC's role in the U.S., two differences between the systems prevent them from working similarly.

First, unlike the CAFC's federally mandated authority, countries must choose to ratify the Unified Patent Court agreement. This choice presents the first set of inconsistencies because not every country will sign on to be a part of the Unified Patent Court agreement—thus leaving holes in the court's coverage. Because some countries have already explicitly rejected being a part of the Unified Patent Court, the Unified Patent Court will not make European patent enforcement as uniform as the CAFC did for the United States.

Second, even if every country joined the Unified Patent Court system, the existence of national patent rights will prevent patent enforcement from becoming uniform. As described previously, the current system for patent enforcement in Europe revolves around national courts and national law;¹⁴⁹ litigants must enforce their patents on a country-by-country basis.¹⁵⁰ The Unified Patent Court seeks to remedy this by providing a single venue through which patent owners can enforce their rights,¹⁵¹ but the agreement will not change the independent nature of national patent rights.¹⁵² Regardless of whether a country adopts either the enhanced cooperation regulations or the Unified Patent Court agreement, every country in Europe will maintain the option to issue national patents.¹⁵³ Thus, even if every country joined the Unified Patent Court agreement, Europe's patent environment would still be fragmented because each country would continue to have its own national patent right.

Because countries have to affirmatively ratify the Unified Patent Court agreement, and because countries will continue to maintain their national patent rights, the analogy comparing the Unified Patent Court to the CAFC is misplaced.

^{146.} See Unified Patent Court, supra note 24.

^{147.} See id.

^{148.} See id.

^{149.} See European Route, supra note 31.

^{150.} Id.

^{151.} Unitary Patent, supra note 15.

^{152.} See id.

^{153.} Id.

B. The New Regulations are Analogous to the Changes Promulgated by the CAFC and Federal Trademark Law

As described above, analogizing Europe's proposed changes to the creation of the CAFC fails to include a key component: the unitary patent. The unitary patent regulations' proposed changes create a system more like how state and national trademark laws in the United States function today.

In the United States, common law rights traditionally protected trademarks on a state-by-state basis.¹⁵⁴ Throughout the late 1800's Congress attempted to further regulate trademarks, culminating in the 1943 Lanham Act.¹⁵⁵ The introduction of the Lanham Act officially established a federal trademark, but did not remove a state's right to issue a state trademark.¹⁵⁶ From that time on, trademark owners in the United States had the option to obtain a national trademark through the U.S. Patent and Trademark Office (USPTO), a state trademark through a state office, or both.¹⁵⁷

The unitary patent regulations do for European patent law what the Lanham Act did for U.S. trademark law. The unitary patent regulations establish a new unitary patent that will be valid in every country that ratifies the regulations. Further, similar to how the Lanham Act did not abrogate state trademark rights, the unitary patent regulations will not abrogate an E.U. member state's right to maintain a national patent system. Is In fact, the EPO has already started to address the possibility for double patenting. In the introduction of the unitary patent to the European patent system is similar to the introduction of the federal trademark right to previously existing state trademark rights.

C. Even Though New Regulations are Analogous to the CAFC/Trademark, the New Regulations Will Not Unify E.U. Patent Law

Although the idea behind the creation of the unitary patent and Unified Patent Court was to simplify Europe's patent infrastructure, those

^{154.} MARK P. MCKENNA, TRADEMARK LAW'S FAUX FEDERALISM, INTELLECTUAL PROPERTY AND THE COMMON LAW 290–96 (Shyamkrishna Balganesh ed., 2013).

^{155.} See id.

^{156.} See id.

^{157.} See id.

^{158.} Unitary Patent, supra note 15.

^{159.} See id.

^{160.} See Double Patenting, EPO.ORG, http://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_iv_5_4.htm (last visited Apr. 6, 2015).

^{161.} See Regulation 1257/2012, supra note 4.

regulations may instead complicate patent law in the E.U.¹⁶² Analogizing the introduction of the unitary patent to the introduction of federal trademark laws in the United States suggests that national patent rights may fall to the wayside once the unitary patent has been introduced. Looking back at the progression of trademark rights in the United States, once the federal trademark right became established, many trademark advocates preferred a national unfair competition law related to trademarks rather than state or common law regulations.¹⁶³ Because national patent rights in the E.U. today are significantly more valuable than U.S. state trademark rights were in the 1800's, however, the unitary patent and Unified Patent Court changes will not unify the E.U.'s patent system.

One could argue that the unitary patent and Unified Patent Court changes introduce a new, distinct set of property rights for a patent holder that are easier to obtain and enforce than the current set of patent rights. ¹⁶⁴ Obtaining a unitary patent will follow the same pre-grant process that European patents use, ¹⁶⁵ and will use a simple post-grant process as well. ¹⁶⁶ Further, since a verdict rendered in a patent dispute before the Unified Patent Court would apply to every E.U. member state that ratified the Unified Patent Court agreement, patent holders with unitary patent rights could expect more uniform decisions. ¹⁶⁷ Thus, the unitary patent and Unified Patent Court changes would likely make obtaining and enforcing a patent easier than under the current E.U. patent system.

On the other hand, however, the unitary patent and Unified Patent Court changes will not be the only options available to European inventors. ¹⁶⁸ Under the proposed system, an inventor could opt for a national patent, a European patent without unitary effect, or a unitary patent. ¹⁶⁹ Further, depending on the type of patent and the jurisdiction in which a patent dispute is brought, the patent could be adjudicated in either a national court or the Unified Patent Court. ¹⁷⁰ If European inventors had too many options from which to obtain and enforce a patent before, the current changes could be overwhelming.

Finally, national patent law in Europe will not likely go the way of state trademarks in the United States because the validity of a patent is independent

^{162.} See supra Part III.B.

^{163.} See MCKENNA, supra note 154, at 299-305.

^{164.} See Regulation 1257/2012, supra note 4, at art. 7.

^{165.} See Unitary Patent, supra note 15.

^{166.} Id.

^{167.} See UPC Agreement, supra note 5, at art. 20.

^{168.} See Unified Patent Court, supra note 24.

^{169.} See Unitary Patent, supra note 15.

^{170.} See UPC Agreement, supra note 5, at art. 32.

from the location where the patent was obtained. Trademark law is heavily dependent on consumer beliefs, so when the federal trademark created the presumption that alleged infringers were put on notice of a trademark owner's rights across all the states, the federal trademark's broad geographic appeal made it much more desirable than a state trademark.¹⁷¹ In contrast, the validity of a patent does not rely on any geographic scope or territory.¹⁷² A valid patent can be enforced on an alleged infringer regardless of whether the infringer is aware of the patent.¹⁷³ Because of this, national patent laws in the E.U. will continue to be as strong when the unitary patent is adopted as they are today, and will likely provide a strong incentive for inventors to consider obtaining patent protection using both the national patent system and the European patent system.

Because national patent law in Europe will not likely follow the path of state trademark law in the United States, using the trademark law/CAFC analogy will not predict the convergence of patent law in Europe.

D. The Potential for Double-Patenting Could also Greatly Fracture the E.U. Patent System

Although the designers of the unitary patent and the Unified Patent Court hoped their regulations would unify and simplify the European patent environment, the potential for double patenting likely means that the patent environment in Europe could become more complicated.

As an initial matter, it was very likely politically unfeasible to include in the Unified Patent Court agreement a section that forbade countries from issuing their own patents. It is unlikely that many countries would have felt comfortable voting for an agreement that stifled their own national powers. Rather, the more politically palatable option likely was to offer the unitary patent and Unified Patent court alongside the current national infrastructure.

Because the unitary patent will be offered as an additional option for obtaining patent rights, the E.U. patent system will likely become even more fragmented than it currently is. The unitary patent regulations clearly note that once a patent holder opts for a unitary patent, she can no longer

^{171.} See MCKENNA, supra note 154, at 294–95.

^{172.} JOHN GLADSTONE MILLS III ET AL., PATENT BASICS § 13:1 (Sept. 2013) ("A complete application [only] comprises (1) An oath or declaration (see 37 C.F.R. § 1.65); (2) Drawings, when necessary (see 37 C.F.R. §§ 1.81 to 1.88); (3) A specification, including a claim or claims (see 37 C.F.R. §§ 1.71–1.77); (4) The prescribed basic filing fee (see 37 C.F.R. § 1.21).").

^{173.} See 35 U.S.C. § 271 (2010).

simultaneously own a European patent on the same invention.¹⁷⁴ The unitary patent regulations do not, however, comment on whether an inventor can still obtain a national patent alongside a unitary patent.¹⁷⁵ Thus, the chance for double patenting could further fragment Europe's patent environment.

V. CONCLUSION

The unitary patent regulations and the Unified Patent Court agreement are the most significant changes proposed by the European patent community in decades. Although they were proposed with the intent to cut costs, unify patent enforcement, and promote innovation in the E.U., for the foregoing reasons, the provisions are unlikely to achieve their goals.

As described earlier, the numerous sources of patent law, along with the complicated mechanics of enforcing patents, suggest that the provisions will not unify Europe's patent environment. Additionally, because the unitary patent and Unified Patent Court will be implemented alongside the current national patent system, Europe's patent environment will likely become more fragmented.

Further, as discussed in Part III, the current scholarship analogizing the introduction of the Enhanced Cooperation regulation and the Unified Patent Court agreement is inadequate, requiring a more nuanced look. Despite similarity to a better analogy, the latest proposals by the European patent community really are steps into uncharted territories, and do not appear to follow American patent law directly. To make matters more uncertain, the potential for double patenting could undermine the current stability of Europe's patent environment, pushing innovators to spend more time dealing with the legal aspects of patenting an invention, and pushing them away from spending their time innovating.

Although the unitary patent and the Unified Patent Court show significant potential, in their current embodiment they will not fix Europe's patent environment. Inventors will likely be very cautious with such profound changes, and they will more likely stick to what they know and understand rather than embrace these sweeping changes. Thus, the unitary patent and Unified Patent Court in its current form is not likely the final solution the E.U. needs to boost its innovation, unify its patent laws, and cut patenting costs.

^{174.} Regulation 1257/2012, *supra* note 4, at art. 5.

^{175.} See Double Patenting, supra note 160.