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Examining Patent Cases at the Patents Court and Intellectual Property Enterprise Court 2007-2013



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This is an independent report commissioned by the Intellectual Property Office (IPO). Findings and opinions are those of the researchers, not necessarily the views of the IPO or the Government.

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1. Introduction

Over the course of this report¹ we assess the current state of patent litigation in the UK's largest jurisdiction for patents, England and Wales. This is in light of the fact that the Unified Patent Court (UPC) – a new, unique patent court for 25 participating European jurisdictions, including the UK – due to come into being during 2016.² Providing this assessment at this time is important because UK businesses, lawyers and policy-makers are currently making their preparations for the UPC.

At present England and Wales is home to one of the major patent courts in Europe - the Patents Court (PHC) – as well as an accessible venue for smaller-value patent disputes – the Intellectual Property Enterprise Court (IPEC).³ Importantly, both courts currently have the jurisdiction to decide matters relating to UK-granted patents (GBs) as well as European patents validated in the UK (EPs). However, the advent of the UPC and the European Patent with unitary effect (the Unitary Patent, or UP) is likely to impact upon the patent litigation strategies of UK businesses, particularly with respect to choice of litigation venue.⁴

In this regard, UK businesses face a difficult decision: should they or should they not seek to obtain UP protection? Finding the right answer to this question is important because if UK businesses and inventors choose to obtain UPs – rather than GBs or the traditional EPs – then they will not be able to undertake litigation at national venues such as the PHC or IPEC; instead, they will have to take cases to the UPC, which will have sole jurisdiction to hear crucial UP matters such as infringement and validity.

For UK patentees holding EPs there is another crucial decision to make: whether or not to opt-out their existing EP portfolios from the UPC's jurisdiction. This opt-out may occur during the transition period -currently expected to last for at least 7, and potentially extendable to 14, years. If an EP is opted-out of the UPC during the transition period, the national courts will remain the sole litigation venue, a situation which lasts for the lifetime of that patent. Separately, during the transition period, national courts such as the PHC and IPEC will share jurisdiction with the UPC with respect to EPs that have not been opted-out. In addition, it is worth noting that the UPC will not have jurisdiction over nationally granted patents i.e. GBs, which will remain within the sole jurisdiction of national courts. UK businesses, therefore, will soon face a choice between three different ways of protecting their patents - GB, EP or UP - with the choice they make affecting potential litigation venues.

As explored below, until recently there has been a distinct lack of accurate quantitative data concerning patent cases filed at the PHC and IPEC. In fact, until the publication of this report it was not even possible to say with accuracy how many patent cases were filed in any given year at the PHC and IPEC, a significant gap in our knowledge. Following an exhaustive data-gathering and analysis process which took place, mainly at the Rolls Building in London, from May 2013-October 2014 this report represents the first authoritative account of patent litigation undertaken at the PHC and IPEC, covering all cases filed during the period 2007-2013. In this report, we provide detailed data on the overall volume of patent litigation undertaken at the PHC and IPEC, as well as on the types of litigants and the litigated patents (including the proportion of EPs and GBs that are litigated

1 We acknowledge financial support from the UK Intellectual Property Office. The authors thank Shane burke, Francesco Dionisio, Leslie Lansman, Manuel Rey-Alvite Villar and Paula Westenberger for outstanding research assistance.

2 Agreement on a Unified Patent Court 2013/C 175/01 (<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2013:175:0001:0040:EN:PDF>)

3 See Cremers et al. (2013).

4 Regulation (EU) No 1257/2012 of the European Parliament and of the Council of 17 December 2012 implementing enhanced cooperation in the area of the creation of unitary patent protection; Council regulation (EU) No 1260/2012 of 17 December 2012 implementing enhanced cooperation in the area of the creation of Unitary patent protection with regard to the applicable translation arrangements -- both documents accessible at the http://ec.europa.eu/internal_market/indprop/patent/documents/index_en.htm. For a further explanation of the changes see the EPO website (<http://www.epo.org/law-practice/unitary.html>). See also Romandini and Klicznik (2013) and Brandi-Dohrn (2012).

at each court each year).⁵ The provision of these data is useful for businesses, policy-makers and lawyers because it is likely that the coming into being of the UPC will have an impact on the amount and types of cases taken at the PHC and IPEC; as such, having an accurate picture of the current situation makes it easier for businesses, policy-makers and law firms to align themselves with the new patent environment. This will include a London-based UPC Central Division with the jurisdiction to hear cases concerning pharmaceutical and chemical patents.

The remainder of this report is organized as follows. Section 2 describes the data collection and Section 3 provides the statistics and analysis. Section 4 offers some concluding remarks concerning the overall significance of the data viz. the coming into being of the UPC.

⁵ Our data and analysis refer solely to the jurisdiction of England and Wales, the UK's largest patent jurisdiction. We do not include case data from Scotland or Northern Ireland.

2. Data Gathering Methodology

In order to examine patent litigation at the PHC and IPEC in detail, it was necessary to collect detailed information about patent cases filed at both courts for the period 2007-2013. We proceeded as follows: first we evaluated the available published empirical research on the topic; second we drew lessons from our experience of analysing patent case-level data (Helmets and McDonagh 2013a); thirdly, we obtained access to the physical court records at the Rolls Building in London. As detailed below, for this project collecting and analyzing data from the physical files was an imperative because information on all patent case filings is not available online; indeed, the primary publicly available source – the Patents Court Diary – does not list information on all cases filed, merely all the cases for which a hearing has been scheduled.

Literature review and assessment of prior projects

With respect to the published literature, it is clear that for much of the recent past there has been little available empirical evidence on patent litigation in the UK (Weatherall et al., 2009). However, in recent years several studies have been published. For instance, Moss et al. (2010) examine the outcomes of a sample of 47 validity and infringement cases undertaken between January 2008 and August 2009 at the IPEC, the PHC, the Court of Appeal, and the House of Lords. Helmets and McDonagh (2013a) offer a more comprehensive analysis that covers all patent cases filed/heard at the PHC between 2000 and 2008 for which some information was publicly available, as well as all patent cases decided at the IPEC in 2007 and 2008. In a further paper based on this dataset Helmets and McDonagh (2013b) also discuss how the costs of patent litigation are allocated between the litigating parties. In addition to the court data, Greenhalgh et al. (2010) collected survey data on a small sample of patenting and non-patenting companies (alive between 2002 and 2009) in order to analyse the IP litigation activity of micro firms and SMEs. We took into account the findings of the above papers when designing our methodological approach to this project, particularly noting that none of the above papers contains a complete dataset drawn from the relevant physical court records – in each case either the available online records or a very limited dataset is used.

Patent cases at the IPEC (formerly the PCC)

In the context of the IPEC, it is worth noting that in our prior research we analysed anonymised case-level data provided to us by the UK IPO for all IP cases decided in 2007 and 2008 (Helmets and McDonagh 2013a). Due to the limitations of these data, it was necessary as part of this project to collect detailed information on all patent cases filed at the IPEC for the entire period 2007-13.

In order to be able to analyse all IPEC patent cases filed during this period – and to provide the requisite data to the IPO – we developed the following methodology: first, we – along with a team of research assistants – collected and compiled the physical IPEC court records/files and associated information held at the Rolls Building for patent cases filed 2007-13; secondly, we used a specially devised patent-specific excel spreadsheet to extract and organize the relevant information gathered from these often extremely detailed and complex records; thirdly, we analysed these data in order to produce reliable statistics. These first two tasks were made possible in part thanks to the assistance we received from the IPEC clerk, as well as Hacon J. and Birss J., who helped us to compile lists of relevant cases from the IPEC Diary and other internal court sources. However, a small proportion of the IPEC case files are regularly missing from the IPEC clerk's filing system at any given time due to the fact that case files are needed at IPEC trials. For this reason, the research assistants frequently did a sweep of the IPEC filing system to see if missing files had been returned, which helped us to locate the vast majority of cases which were not immediately accessible to us.

Nonetheless, the record keeping at the IPEC remains largely paper-based – rather than digital – and as such, it is not possible to keep track of or locate every file within the system. For this reason there are a very small number of IPEC cases for which we were unable to obtain any information except for the case file number. Nonetheless, we are confident that, given the methodical approach we took to case-counting during September 2013-July 2014, and the frequent sweeps we took of the IPEC records to search for missing cases, we have examined every possible physical IPEC patent case file for 2007-13. On this point, it is further worth noting that in September 2014 we examined the available IPEC patent judgments for 2007-13 online (via BAILII); importantly, we did not find any cases that we did not already have a record of from our search of the physical files. In other words, our data were collected from paper records at the Rolls Building during the period September 2013-July 2014, with further online data gathering in September 2014. Thus, our IPEC patent claim dataset includes data drawn from all physical files available at the Rolls Building and all available digital court records; as such, it is as complete as possible.

For IPEC patent cases, the information that we possess includes data on the amount of cases filed, the types of claims and counter-claims made (infringement, validity etc.), the types of litigants, and the relevant patents in dispute (EP numbers, GB numbers etc.). These data are analysed below in section 3.

Patent cases at the PHC

Regarding the PHC, as with the IPEC cases, our aim was to collect data on all patent cases filed during 2007-13. In order to ensure consistency with our IPEC data, we followed largely the same methodology as above: first, we collected and compiled the physical PHC court records/files and associated information held at the Rolls Building for patent cases filed 2007-13; secondly, we used a specially devised patent-specific excel spreadsheet to extract and organize the relevant information gathered from these PHC case files.

However, while the IPEC records from 2007-13 are held within a specified area solely allocated to IPEC files – and there is a specific IPEC Clerk that assisted us – the PHC files are not held separately from the regular Chancery Division case files; nor is there a list of all available PHC case file numbers which would enable researchers to easily locate a case. As a result, the only way to count and examine PHC files is to physically go through the estimated five thousand Chancery Division cases that are filed each year, opening each file to see if it is a PHC claim or another Chancery matter (e.g. a property dispute, an insolvency claim etc.).

Given the challenges of counting and examining PHC patent case files, and in consideration of our overall aim of obtaining a complete dataset, in addition to the physical count we developed an additional multi-pronged approach:

- For the years 2011 and 2012, the law firm Powell-Gilbert provided us with a list of case file numbers from a physical search of files they had undertaken during early 2013. These numbers helped us to identify the 2011 and 2012 PHC files, though we also undertook a complete search of all Chancery files for these years in order to ensure we covered every possible case, which enabled us to verify and on a few occasions make minor corrections to the Powell-Gilbert numbers.
- In order to ensure we did not miss any physical files during our search i.e. files that were not in the basement but which were instead in active use at trial, we used the Patents Court Diary in order to cross-reference the listed cases with what we found in the physical records. For any cases listed in the diary that we did not find in our initial search, we returned to the basement on a number of occasions in order to see whether the case had been re-filed. We located a number of missing case files in this way.
- We liaised with HMCTS regarding their annually collected and published records showing the amount of PHC cases filed per year. We attempted to use these as a comparative guide to our search. Unfortunately, there is no way to directly verify the HMCTS statistics as HMCTS do not link the raw data with actual case file numbers (and as such there is no way to methodically search for all of these apparently filed cases).⁶ The methodical search we undertook of all Chancery files is the only way to actually verify how many PHC patent cases are filed each year (the vast majority of PHC cases are patent cases, rather than e.g. registered design cases). On the completion of our search, we discovered discrepancies between the number of case files we actually found and the published HMCTS statistics. Having discussed the issue with several HMCTS staff, we came to the conclusion that the HMCTS published statistics are not reliable. In light of the methodological approach we took, we are confident that our numbers are a better reflection of the amount of cases filed per year, and are more reliable than the published HMCTS numbers.
- HMCTS informed us that some 2007 Chancery files were destroyed in a fire during 2008. Unfortunately HMCTS could not give us any more information as to which files were destroyed. As a result our PHC numbers for 2007 have to be treated cautiously as it is likely some PHC case files were destroyed before we could examine them. (However, there are no such worries for the 2008-13 files.)

⁶ Note that at the request of Birss J. from 2013 in its record keeping HMCTS has kept data on PHC filings separate from IPEC filings, something that has increased the accuracy of the statistics viz. our own records (though the HMCTS statistics are still not entirely reliable, and still not linked to actual case file numbers).

- As with the IPEC, from September-October 2014 we examined the available PHC patent judgments for 2007-13 online (via BAILII). This was useful, as we found a small number of cases for 2007-13 that were missing from our dataset (taken from the physical records). We then collected data from the online judgments and added these cases to our overall dataset. Thus, as with the IPEC, while there are a very small number of PHC patent cases for which we are missing data, we are confident that our PHC dataset comprehensively includes all available physical and online records; as such it is as complete as possible.

For PHC patent cases, as with the IPEC, the information that we possess includes data on the amount of cases filed, the types of claims and counter-claims made (infringement, validity etc.), the types of litigant, and the relevant patents in dispute (EP numbers, GB numbers etc.). These PHC data were collected from September 2013-October 2014 and are analysed in detail in section 3 below.

Gathering firm-level data on PHC and IPEC litigants

We obtained the names of all litigating parties from the court records as described above. We first cleaned and standardised these names as they often appear in different ways on different court records. In a second step we classified litigants into 3 categories: (i) companies, (ii) individuals, and (iii) government, universities and not-for-profit. In a third step, we searched for all companies on the Companies House online database WebCheck as well as Bureau van Dijk's FAME database. We obtained basic information on companies from Companies House (SIC code, incorporation date, current status etc.) and detailed financial information from FAME (assets, turnover, employees etc.). The combination of information from Companies House and financial data from FAME allowed us to classify companies into size categories (micro, SME, large), something which enables us to discuss company size-specific litigation issues in section 3 below.⁷

⁷ We follow the standard EU definition, which relies on information on a firm's number of employees, turnover, and total assets (http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/index_en.htm).

3. Statistics

IPEC case counts

Table 1: PCC/IPEC: case counts, 2007-2013

Year	Case count	Cases with EP	Cases with EP involving UK firm	Number of UK firms involved in cases with EP	Cases with EP involving UK SME	% Cases with EP involving UK SME	Cases with EP involving UK defendant
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
2007	6	2	2	5	2	33.33%	2
2008	4	3	3	7	3	75.00%	3
2009	8	4	4	6	4	50.00%	3
2010	8	5	5	10	5	62.50%	5
2011	27	13	13	27	11	40.74%	13
2012	26	11	8	17	8	30.77%	8
2013	17	9	9	19	8	47.06%	9
Total	96	47	44	91	41	42.71%	43

Notes: patent numbers missing for 1 case in 2007, 1 case in 2009, and 1 case in 2011; information on litigating parties missing for 1 case in 2007 and 1 case in 2011.

Table 1 provides case counts for the PCC/IPEC for 2007-2013. A total of 96 patent cases were filed at the IPEC during the 7-year period. However, the more relevant number for the purposes of the UPC relates to cases that centre on an EP – these are shown in column (2) (there are a total of 47 such cases). It is worth giving consideration to these IPEC EP cases because these are cases that in future years could potentially fall within the jurisdiction of the UPC. On this, it is worth recalling a number of points made above: first, for a seven year transition period (which may eventually be extended by another seven years) patentees holding EPs will be able to opt-out of the UPC's jurisdiction (an opt-out which will last for the lifetime of that patent); secondly, for patents that are not opted out of the UPC's jurisdiction it will be possible to take a case at either a relevant national court venue – such as the IPEC – or at the UPC; thirdly, if a patentee decides to obtain a UP, it will not be possible to undertake patent litigation concerning that UP at national venues such as the IPEC – litigation must take place at the UPC. Finally, after the transition period ends, patentees will no longer be able to opt-out EPs from the UPC's jurisdiction – the UPC will become the sole venue for all EP and UP litigation (excluding litigation concerning EPs which have already been opted-out).

SME EP litigation at the IPEC

As noted above, for all UK companies the decision whether to opt-out their existing EP portfolios from the UPC will be an important one. Moreover, this decision is of particular significance for SMEs because losing access to the IPEC will obviously have litigation cost ramifications, though the UP and UPC will of course have the advantages of enabling wider protection within Europe, something that could bring commercial and financial benefits (McDonagh, 2014).

In this regard, knowing the share of UK SMEs involved in IPEC EP litigation during 2007-2013 can help us to assess the popularity of the venue for SMEs. From our data we observe that at present a large share of IPEC patent cases feature UK companies – and that UK SMEs are frequently involved. Column (3) shows the number of patent cases for 2007-2013 that feature both an EP and a firm registered in the UK; meanwhile, column (4) shows the corresponding number of firms registered in the UK. We observe that in 44 out of 47 EP-centred cases a UK firm was an active party, and of these cases a total of 91 UK firms were involved. Regarding SMEs, column (5) shows the number of EP cases that involve a UK SME – 41. Of further note is column (6) which shows the corresponding SME share of the total number of patent cases (column (1)), illustrating the difference in SME share over time as the overall number of patent case filings has increased (an increase which appears to have occurred largely since the coming into force of the IPEC reforms 2010-2013). Finally, column (7) shows the case count for cases where at least one defendant is registered in the UK.

Overall, the data suggest that since 2010 UK companies, including SMEs, have increasingly availed of the IPEC for patent litigation concerning their EPs. Although we cannot draw firm conclusions from this about future SME litigation behaviour, it seems likely that the availability of low cost UK-based patent enforcement at the IPEC for EPs will play a part in many SMEs' considerations regarding (i) the decision whether to opt-out EPs from the UPC and (ii) the decision whether to seek to obtain UPs. Indeed, SMEs that prize low cost UK enforcement over more costly Europe-wide enforcement may choose to opt their EPs out of the UPC and continue to litigate at the IPEC (McDonagh, 2014).

Analysing IPEC litigation involving companies in different business sectors

Table 2: PCC/IPEC: case counts across industries (case counts involving EPs/GBs), 2007-2013

Year	SIC available		life sciences		mechanical engineering		all others		involving UK defendant not life sciences	
	EP (1)	GB (2)	EP (3)	GB (4)	EP (5)	GB (6)	EP (7)	GB (8)	EP (9)	GB (10)
2007	2	2	0	1	1	1	2	2	2	1
2008	3	1	0	0	0	0	3	1	3	1
2009	4	3	1	0	1	1	2	2	2	3
2010	4	3	0	0	1	0	3	3	4	3
2011	13	12	2	0	4	4	12	10	11	12
2012	8	14	0	3	2	3	7	13	8	10
2013	9	8	0	1	3	0	8	7	9	7
Total	43	43	3	5	12	9	37	38	39	37

Notes: patent numbers missing for 1 case in 2007, 1 case in 2009, and 1 case in 2011; information on litigating parties missing for 1 case in 2007 and 1 case in 2011.

Table 2 offers a breakdown of UK registered companies for cases that involve an EP and/or a GB across broad industry categories.⁸ Columns (1) and (2) show the number of cases for which we have information on a company's SIC code (this information comes from Companies House) for cases involving EPs and GBs respectively; meanwhile, columns (3)-(8) break the count down into (i) life sciences, (ii) mechanical engineering, and (iii) other (for more information see the appendix). Finally, columns (9) and (10) show the number of cases that involve UK defendants outside of the life sciences.

Notably, very few UK life sciences companies were involved in litigation at the IPEC during 2007-2013 regardless of whether we focus on cases that involved an EP or GB. This can be contrasted with the relatively high number of such cases involving EPs at the PHC (as shown below) and it may indicate that life sciences cases are unsuited to the IPEC due to issues such as complexity, costs, and overall case value.

⁸ Cases can involve both GBs and EPs.

PHC Case counts

Table 3: PHC: case counts, 2007-2013

Year	Case count	Cases with EP	Cases with EP involving UK firm	Number of UK firms involved in cases with EP	Cases with EP involving UK SME	% Cases with EP involving UK SME	Cases with EP involving UK defendant
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
2007	33	27	22	31	8	24.24%	21
2008	71	65	50	69	21	29.58%	50
2009	49	38	30	43	17	34.69%	29
2010	50	42	29	43	14	28.00%	29
2011	92	77	55	66	18	19.57%	54
2012	89	75	44	44	17	19.10%	43
2013	61	48	41	43	11	18.03%	41
Total	445	372	271	339	106	23.82%	267

Notes: information on litigating parties missing for 2 cases; patent numbers not available for 17 cases.

Table 4: PHC: case counts across industries (case counts involving EPs/GBs), 2007-2013

Year	SIC available		life sciences		mechanical engineering		all others		involving UK defendant not life sciences	
	EP	GB	EP	GB	EP	GB	EP	GB	EP	GB
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2007	22	7	12	0	1	2	10	6	9	7
2008	50	6	11	1	4	0	39	6	39	5
2009	30	8	13	0	3	2	18	8	16	8
2010	29	7	10	1	7	3	18	5	19	6
2011	55	12	15	1	7	4	40	9	39	10
2012	44	10	18	3	3	4	26	6	26	7
2013	40	7	22	0	3	2	19	7	18	7
Total	270	57	101	6	28	17	170	47	166	50

Notes: information on litigating parties missing for 2 cases; patent numbers not available for 17 cases.

Tables 3 and 4 give the case count figures for the PHC. Table 3 shows that there were 445 patent cases filed at the PHC during 2007-2013, demonstrating that the majority of patent litigation takes place at the PHC rather than at the IPEC, even post-IPEC reforms. Again, for UPC opt-out considerations it is worth noting that a large proportion of these cases – 372, in fact – concern an EP. Meanwhile, Table 3 shows that 271 of the PHC cases that centre on an EP involve a UK firm.

SME EP litigation at the PHC

Interestingly, our data show that many more UK SMEs (106) were involved in EP litigation at the PHC during 2007-2013 than at the IPEC (though it is worth noting that a large number of these PHC cases took place pre-IPEC reforms, and that the IPEC is a much more popular venue post-reforms). Overall, almost a quarter of all PHC cases concerning one or more EPs featured an SME as a case party. While this share is significantly lower than the share of SME litigation at the IPEC, it is by no means an insignificant proportion. Furthermore, it indicates that many SMEs are acutely familiar with the (relative to the IPEC) high-cost litigation that occurs at the PHC – something that may influence their decision whether or not to opt-out the UPC system.

Analysing PHC litigation involving companies in different business sectors

Regarding Table 4, it is clear that a far greater proportion of life sciences patent cases occur at the PHC than at the IPEC. Notably, these cases involve, almost exclusively, EPs. By contrast, there are comparatively few mechanical engineering cases – an area that will come under the jurisdiction of Munich's UPC Central Division – and unlike the life sciences patents, which are mostly EPs, there is a more even spread of EPs and GBs with respect to the mechanical engineering patents.

The large share of life sciences EP litigation that occurs at the PHC is of interest because the London-based UPC Central Division will have jurisdiction to hear cases – mainly with respect to validity issues – concerning life sciences EPs (pharmaceuticals and chemicals) unless the EP is opted-out (and it will also have sole jurisdiction with respect to life sciences UPs). After the transitional period, the UPC London Central Division will have sole jurisdiction to hear life sciences EPs cases (unless a particular EP has already been opted-out - as noted above, opt-outs will last for the lifetime of the patent). Given the fact that London is perceived as a 'hub' in the area of life sciences – with respect to both scientific and legal expertise – it will be interesting to see in the coming transitional years whether life sciences companies based in the UK continue to use the PHC as their primary forum of patent litigation, or whether they make use of the London-based UPC Central Division either as an alternative venue to the PHC (for EPs) or as the sole venue (for UPs).

PHC and IPEC Patent-level comparison

Figure 1: IPEC/PHC: EP counts by year (cases with revocation and/or infringement claims), 2007-2013

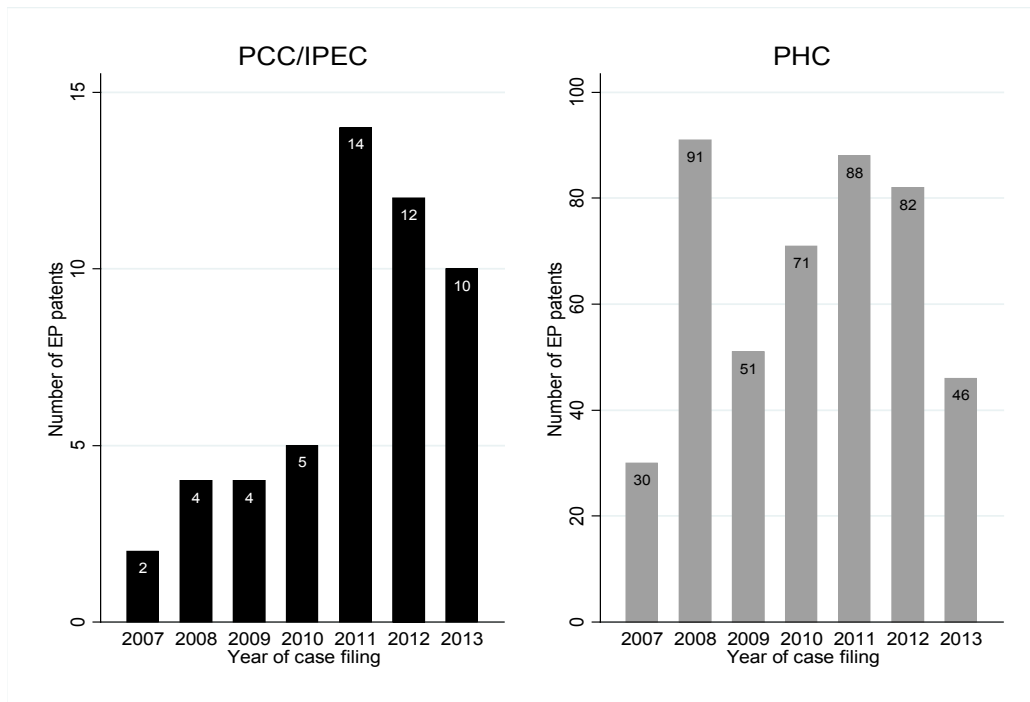


Figure 1 compares the total number of EPs involved in cases at the IPEC and the PHC by year over the entire 2007-2013 period.⁹ As would be expected given the much larger number of cases litigated at the PHC, the number of EPs litigated at the PHC is by many multiples larger than the number at the IPEC. Nonetheless, it is interesting to note that there was a substantial increase in the number of EPs litigated at the IPEC during 2011, with their number almost tripling relative to 2010. Although there is also a noticeable increase in patent case numbers between 2010 and 2011 at the PHC, the increase was not as steep as in the case of the IPEC. We observe that the number of EPs litigated at the PHC per year varies considerably between 2007-2013, with 2011 seeing the most EP litigation overall when the figures for both the PHC and the IPEC are taken into account.¹⁰

9 Note that we count each patent only once, that is, if a given patent appears in several cases in a given year, it is counted only once.

10 It is worth bearing in mind the caveat explain in section 2 - that the data for the PHC might be incomplete for 2007.

PHC and IPEC Case-level comparison

In addition to the case counts given above, we also provide case counts broken down by claim and counter-claim type (where again we distinguish between cases that involve EPs and GBs). Tables 5 and 6 show the breakdown by revocation and infringement claims for the IPEC and the PHC. Tables 7 and 8 show the corresponding figures for counterclaims at both courts. The tables demonstrate that the most common initial claim at both the IPEC and the PHC is for infringement regardless of whether we focus on EPs or GBs. In addition, a significant number of initial revocation claims – aimed at ‘clearing the way’ for a possibly infringing product – are filed at the PHC, with revocation also being a frequent counter-claim. Notably, very few revocation claims are filed at first instance at the IPEC. This might be explained by two things: (i) the complexity of many revocation issues; and (ii) the remit of the IPEC, especially its limitations on disclosure, expert evidence and the amount of hearing days. Nonetheless, revocation is a frequent counter-claim at the IPEC, illustrating that the IPEC is capable of dealing with this issue.

Table 5: PCC/IPEC: case counts by claim (EPs and GBs), 2007-2013

Year	Claim					
	Revocation		Infringement		Other	
	EP (1)	GB (2)	EP (3)	GB (4)	EP (5)	GB (6)
2007	0	0	2	3	0	0
2008	0	0	2	0	1	1
2009	0	0	4	3	0	0
2010	0	2	5	1	0	0
2011	0	4	12	7	1	1
2012	3	1	7	12	1	2
2013	1	0	6	8	2	0

Notes: total number of EP cases, 47, and GB cases, 45. Totals per row may exceed total number of cases as (a) multiple claims possible and (b) cases may include both EPs and GBs.

Table 6: PHC: case counts by claim (EPs and GBs), 2007-2013

Year	Claim					
	Revocation		Infringement		Other	
	EP (1)	GB (2)	EP (3)	GB (4)	EP (5)	GB (6)
2007	16	3	7	4	5	1
2008	19	2	43	5	6	2
2009	18	0	18	8	3	0
2010	23	2	18	6	3	0
2011	31	1	39	10	9	2
2012	39	2	30	9	6	2
2013	19	1	22	7	7	0

Notes: total number of EP cases, 372, and GB cases, 65. Totals per row may exceed total number of cases (a) multiple claims possible and (b) cases may include both EPs and GBs.

Table 7: PCC/IPEC: case counts by counter-claim (EPs and GBs), 2007-2013

Year	Counter-claim							
	Revocation		Infringement		No counterclaim		Other	
	EP (1)	GB (2)	EP (3)	GB (4)	EP (5)	GB (6)	EP (7)	GB (8)
2007	0	0	0	0	2	3	0	0
2008	2	0	0	0	1	0	0	1
2009	2	2	0	0	2	1	0	0
2010	3	2	0	0	2	1	0	0
2011	9	4	1	1	3	7	0	0
2012	5	7	3	3	3	3	0	2
2013	2	4	0	0	7	4	0	0

Notes: total number of EP cases, 47, and GB cases, 45. Totals per row may exceed total number of cases (a) multiple claims possible and (b) cases may include both EPs and GBs. Other category includes for example declarations of non-infringement or validity.

Table 8: PHC: case counts by counter-claim (EPs and GBs), 2007-2013

Year	Counter-claim							
	Revocation		Infringement		No counterclaim		Other	
	EP (1)	GB (2)	EP (3)	GB (4)	EP (5)	GB (6)	EP (7)	GB (8)
2007	4	2	6	1	15	4	1	0
2008	30	2	6	0	21	4	4	1
2009	13	6	5	0	14	2	6	0
2010	12	5	9	2	15	2	7	1
2011	24	7	12	2	25	2	15	1
2012	10	5	15	1	33	5	17	1
2013	11	6	6	0	25	2	6	0

Notes: total number of EP cases 366 (no records available for 6 cases), GB cases 62 (no records available for 3 cases). Totals per row may exceed total number of cases as (a) multiple claims possible and (b) cases may include both EPs and GBs. Other category includes for example declarations of non-infringement or validity.

4. Conclusion

Our data show that 445 patent cases were filed at the PHC during 2007-2013, whereas a total of 96 patent cases were filed at the IPEC during the same 7-year period. This demonstrates that the majority of patent litigation in the UK's largest patent jurisdiction – England and Wales – takes place at the PHC rather than at the IPEC, even post-IPEC reforms. Nonetheless, we also observe that the amount of IPEC patent litigation has increased substantially post-reforms, while over the same period the PHC has not seen fewer cases – quite the opposite, in fact.

Regarding patent-level data, it is worth noting that a very large number of the PHC patent cases - 372 - concern an EP, while at the IPEC 47 out of 96 patent cases centre on an EP. In other words, EPs tend to be the subject of PHC litigation much more frequently than GBs, but there is a more even split at the IPEC. In terms of case-level data, we show that infringement is the most common initial claim at both the PHC and IPEC; but that revocation is a frequent claim at the PHC and a frequent counter-claim at both courts. With respect to litigant-level data, we observe that more SMEs (106) were involved in PHC litigation than were involved in IPEC litigation (41) over the same period, a fact which shows that despite the increasing popularity of the IPEC, a large proportion of litigant SMEs are familiar with the PHC, something which may enter into their UPC opt-out considerations.

Looking ahead to the UPC, there is little doubt that the answers to two key questions - (i) whether UK firms will begin to opt for UPs, and thus litigate solely at the UPC for these patents and (ii) whether UK firms will decide to opt-out their EPs during the transitional period, and thus continue to solely conduct litigation concerning their EPs at the PHC/IPEC, will determine how substantial and immediate the impact of the coming into being of the UPC/UP will be felt with respect to the amount and types of cases filed at the PHC/IPEC. On the one hand, if patentees decide en masse to opt for UPs instead of EPs or GBs it would seem logical that there would be less litigation at the PHC and IPEC in the coming years. On the other hand, recent survey evidence suggests that not all current patentees are actually considering doing this in the early years of the new system; some are taking a 'wait and see' approach (McDonagh, 2014). Indeed, in the coming years patentees may decide to maintain a spread of different types of patents – GB, EP and UP – a decision that would leave multiple potential litigation venues open, and which in turn would mean that in the immediate term the current rates of patent litigation at the PHC and IPEC may not be drastically affected by the coming into being of the UPC. Ultimately, by providing an authoritative, data-driven account of patent litigation at the PHC and IPEC for the period 2007-2013 this report makes a useful contribution to current discussions concerning patent litigation within the UK and the wider EU.

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Appendix: Definitions of life sciences and mechanical engineering

Life sciences:

- SIC 21.1: Manufacture of basic pharmaceutical products;
- SIC 21.2: Manufacture of pharmaceutical preparations;
- SIC 26.6: Manufacture of irradiation, electromedical and electrotherapeutic equipment;
- SIC 32.5: Manufacture of medical and dental instruments and supplies;
- SIC 72.1: Research and experimental development on natural sciences and engineering.

Mechanical engineering:

- SIC 25: Manufacture of fabricated metal products, except machinery and equipment;
- SIC 26: Manufacture of computer, electronic and optical products EXCL 26.6;
- SIC 27: Manufacture of electrical equipment;
- SIC 28: Manufacture of machinery and equipment n.e.c.;
- SIC 29: Manufacture of motor vehicles, trailers and semi-trailers;
- SIC 30: Manufacture of other transport equipment;
- SIC 33: Repair and installation of machinery and equipment.

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