



Are Patents merely „Paper Tigers“?

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Patents, whose legal validity is assumed generally and particularly in infringement proceedings, are in fact subject to a considerable risk of being declared invalid. The present contribution confirms this based on a statistical evaluation of the case law of the German Federal Patent Court and the German Federal Court of Justice in nullity matters in the period from 2010 to 2013. A broad discussion on the causes, effects and possible corrective measures seems to be necessary. The following contribution is to give occasion for this.

A. Introduction

There is hardly any innovative company that is able and willing to do without patent protection, as is supported by the yearly increasing numbers of applications filed with patent offices worldwide.¹ The applicants/proprietors rely on receiving a carefully examined right for their considerable financial efforts, on the one hand, and the comprehensive disclosure of their invention, on the other hand, said right – once granted – being subject to property guarantee in Germany, according to Art. 14 German Constitutional Law (*GG*).

In German practice, however, one gets the impression that the number of declarations of (partial) invalidity of granted patents has always been considerable and may even have increased in the last years. Specifically, it seems that the successful (partial) invalidation of a patent is no longer an exception, but the rule. If one

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¹ See., e.g., the statistical presentations of the European Patent Office, available under: http://www.epo.org/about-us/annual-reports-statistics/annual-report/2012/statistics-trends/patent-filings_de.html (last downloaded on: June 25, 2014).

looks for proof confirming this impression, one comes first across the official statistics² which list the (partial) invalidity rates, but do not contain any additional information, e.g. the grounds for the invalidations.

When analyzing the patent law literature, one realizes that apparently more detailed current investigations do not exist. Furthermore, it is noteworthy that conclusions drawn from the resulting invalidity rates are made in a cautious and reluctant manner.³ To the authors' knowledge, the last comprehensive evaluation of invalidity decisions of the German Federal Patent Court and the German Federal Court of Justice was carried out by *Liedel*⁴ for the years 1963 – 1971. If one looks at the general overview of (partial) invalidations for this period of time, the aforementioned impression is confirmed already for that time:⁵

German Federal Patent Court (<i>BPatG</i>)					German Federal Court of Justice (<i>BGH</i>)					
File entry at the BGH in the year	invalid	partially invalid	of which upon application	complaint dismissed	invalid	partially invalid	of which upon application	complaint dismissed		
1963	13	3	1	4	11	3	1	6		
1964	7	8	2	9	7	5	1	13		
1965	9	5	2	2	11	5				
1966	5	3	1	5	6	6	1	1		
1967	5	1		3	6	1		3		
1968	3	6	3	5	3	5	2	6		
1969	6	3	1	2	7	1		3		
1970	4	1		2	4	3	1			
1971	3			3	3			3		
outcome unknown(6)					outcome unknown(4)					
	55	30	10	35	120	58	29	8	35	122
%	45.8	25	8.3	29.2	100	47.5	23.8	6.6	28.7	100

² Here, it is worth mentioning, for example, the information brochures on the Internet sites of the German Federal Patent Court.

³ See, e.g., *Kühnen/Claessen*, Die Durchsetzung von Patenten in der EU – Standortbestimmung vor Einführung des europäischen Patentgerichts, GRUR 2013, 592, 595. Here, the years 2010 and 2011 were taken into consideration.

⁴ *Liedel*, Das deutsche Patentnichtigkeitsverfahren, Cologne 1979.

⁵ Cf. the overview, printed in *Liedel*, loc. cit., p. 140.

According to the survey represented in the above table by *Liedel*, the (partial) invalidation rate of all patents attacked before the German Federal Patent Court as well as the German Federal Court of Justice in the examined period of time is of **over 70%**.

As a reason for this high (partial) invalidation rate, one may state that in the period of time examined by *Liedel*, the examination procedure before the “German Reich Patent Office”, which had been established in Germany before the Second World War, had not returned to its old form after the turmoil of the Second World War.⁶ For this reason, the legislator found itself forced to abrogate, to the furthest possible extent, the examination system for newly filed patents⁷, by means of the First Law on Amendment and Transition of Regulations in the Field of Industrial Property Rights of July 8, 1949 (*Erstes Gesetz zur Änderung und Überleitung von Vorschriften auf dem Gebiet des gewerblichen* es)⁸. According to Sec. 3 of this law, particularly no examination of novelty was required.⁹ The examination procedure was only reintroduced for applications filed as from 1952¹⁰, after the trained personnel which had been “lost” during the war had been replaced.¹¹ This suggests that at least a part of the judgments from *Liedel’s* statistics concerned such patents that either had not been examined or had been subject to the “new” examination procedure. For in such a case, the figures would have to be relativized. The slightly decreasing (partial) invalidation rates in the later years of the statistical survey match this suggestion.

A further approach to explain high (partial) invalidation rates is based on the fact that these statistics concern only about 1% of all patents, namely only those which were in fact attacked by way of a nullity complaint, and which therefore have an only very limited representativity. Nonetheless, it may be difficult to assume that the particularly “weak” patents are principally attacked by way of nullity com-

⁶ *Schade*, Einzelfragen des Einspruchsverfahrens nach dem ersten Überleitungsgesetz, GRUR 1951, 205 et seq.

⁷ Cf. also *Schade*, loc. cit., 206.

⁸ WiGBL. 1949 p. 175

⁹ Cf. Sec. 3 of the First Law on Amendment and Transition of Regulations in the Field of Industrial Property Rights of July 8, 1949, WiGBL. 1949, 175, 176.

¹⁰ *Kraßer*, Patentrecht, 6th ed., p. 69.

¹¹ *Schade*, loc. cit., 205 et seq.

plaints. Rather, nullity complaints are typically the down-side of infringement proceedings, so that these may especially concern patents that are particularly “important”.¹² Insofar, it is often assumed that this is due to the fact that particularly intensive and successful (follow-up) prior art searches are conducted here.

Therefore, the *Liedel* statistics show that in the period examined the particularly relevant patents which had been asserted by means of an infringement action could be successfully attacked in most cases by way of a nullity complaint.

However, the statistical data of *Liedel* have no significance for today’s situation, so that a current investigation is necessary.

The present contribution first illustrates the methodology of this current investigation. Its results are then presented in tabular form. Finally, the explanation approaches are presented and discussed.

B. Course of the survey

The aim of the current survey is to obtain comprehensive statistics with regard to all nullity decisions of the German Federal Patent Court and the German Federal Court of Justice in the time period from 2010 up to and including 2013. For this purpose, all judgments of all nullity senates¹³ of the German Federal Patent Court in the examined period of time were determined, i.e. 392 judgments in total.¹⁴

These were categorized according to the operative provisions of the decision, the docket number, the date of the decision, the patent number, the IPC class and the technical field. In addition, the grounds for the decision rendered by the judgments were analyzed in order to be able to assess the frequency and thus the statistical prospects of success of the different grounds for invalidity. Following this, all judgments from nullity appeal proceedings of the Senates X and Xa¹⁵ of the German Federal Court of Justice, in total 173 judgments¹⁶, were analyzed, also for

¹² *Keukenschrijver*, Patentnichtigkeitsverfahren, 5th ed., marginal No. 90. Deviating therefrom, however, *Kühnen/Claessen*, who (with surprise!) remark that only about every second patent claimed in infringement proceedings is attacked by way of a nullity complaint, loc. cit., 594.

¹³ For the years 2010 until 2013, these were the nullity senates 1, 2, 3, 4, 5 and 10.

¹⁴ All decisions were called up via the Internet sites of the German Federal Patent Court, <http://www.bundespatentgericht.de>. On request, the information was given that principally all decisions are available on the Internet sites, status of June 20, 2014.

¹⁵ The Xa. Senate was active only until 2010 inclusive, which is why no surveys were possible for the years 2001 – 2013.

the period of time from 2010 up to and including 2013. The judgments of the German Federal Court of Justice were also categorized according to the aforementioned factors. In addition, these judgments were grouped according to whether they confirm or amend the judgment of the court or first instance. Confirming judgments were – like the judgments of the German Federal Patent Court – categorized according to whether the patent was invalidated, partially invalidated or maintained. Amending judgments were categorized according to whether the patent was invalidated, partially invalidated, partially restored or whether the proceedings were referred back to the German Federal Patent Court.

From the data obtained in this manner, all judgments concerning patents from the currently particularly “competitive” technical fields of **software** and **telecommunication** (S/T patents)¹⁷ were separately assessed. This individual assessment seemed to be relevant from a practical point of view because on the basis of the authors’ own experience a particularly high invalidation rate had to be presumed for these patents.

C. The invalidation rate and further figures

I. German Federal Patent Court

In the following, the survey regarding the aforementioned judgments of the German Federal Patent Court is represented as a whole in tabular form. The representations concerning the different Senates are preceded by an overall presentation.

¹⁶ For the German Federal Court of Justice, all decisions were called up via the Internet sites of the latter, <http://www.bundesgerichtshof.de>, status of June 20, 2014.

¹⁷ All patents of the IPC main classes G and H were grouped here.

1. Overall presentation German Federal Patent Court

a. Figures 2010-1013 in total

Total of Proceedings	Invalidation	Partial Invalidation	Maintenance
392	171	139	82
100%	43.62%	35.46%	20.92%

Patents	Frequency	Rate
EP	295	75.26%
DE	97	24.74%

EP Patents	Invalidation	Partial Invalidation	Maintenance
295	132	102	61
	44.75%	34.58%	20.68%

DE Patents	Invalidation	Partial Invalidation	Maintenance
97	39	37	21
	40.21%	38.14%	21.65%

(Partial) Invalidation	Frequency	Success Rate
Lack of Novelty	80	20.41%
Lack of Inventive Step	206	52.55%
Lack of Enablement	8	2.04%
Inadmissible Extension	43	10.97%
Miscellaneous	46	11.73%

Grounds for (Partial) Invalidation EP Patents	Frequency	Success Rate
Lack of Novelty	60	20.34%
Lack of Inventive Step	162	54.92%
Lack of Enablement	3	1.02%
Inadmissible Extension	30	10.17%
Miscellaneous	34	11.53%

Grounds for (Partial) Invalidation DE Patents	Frequency	Success Rate
Lack of Novelty	20	20.62%
Lack of Inventive Step	44	45.36%
Lack of Enablement	5	5.15%
Inadmissible Extension	13	13.40%
Miscellaneous	12	12.37%

b. Figures concerning S/T Patents

Total of Proceedings	Invalidation	Partial Invalidation	Maintenance
143	83	43	17
100%	58.04%	30.07%	11.89%

Patents	Frequency	Rate
EP	106	74.13%
DE	37	25.87%

EP Patents	Invalidation	Partial Invalidation	Maintenance
106	62	32	13
	58.49%	29.25%	12.26%

DE Patents	Invalidation	Partial Invalidation	Maintenance
37	21	12	4
	56.76%	32.43%	10.81%

Grounds for (Partial) Invalidation	Frequency	Success Rate
Lack of Novelty	38	26.57%
Lack of Inventive Step	82	57.34%
Lack of Enablement	3	2.10%
Inadmissible Extension	29	20.28%
Miscellaneous	13	9.09%

Grounds for (Partial) Invalidation EP Patents	Frequency	Success Rate
Lack of Novelty	29	27.36%
Lack of Inventive Step	61	57.55%
Lack of Enablement	1	0.94%
Inadmissible Extension	20	18.97%
Miscellaneous	10	9.43%

Grounds for (Partial) Invalidation DE Patents	Frequency	Success Rate
Lack of Novelty	8	21.62%
Lack of Inventive Step	21	56.76%
Lack of Enablement	2	5.41%
Inadmissible Extension	9	24.32%
Miscellaneous	3	8.11%

2. Overview of the figures of the 1st Senate

a. Figures 2010 – 2013 in total

Total of Proceedings	Invalidation	Partial Invalidation	Maintenance
44	19	13	12
100%	43.18%	29.55%	27.27%

Patents	Frequency	Rate
EP	35	79.55%
DE	9	20.45%

EP Patents	Invalidation	Partial Invalidation	Maintenance
35	17	10	8
	48.57%	28.57%	22.86%

DE Patents	Invalidation	Partial Invalidation	Maintenance
9	2	3	4
	22.22%	33.33%	44.44%

Grounds for (Partial) Invalidation	Frequency	Success Rate
Lack of Novelty	9	20.45%
Lack of Inventive Step	29	65.91%
Lack of Enablement	2	4.55%
Inadmissible Extension	2	4.55%
Miscellaneous	1	2.27%

Grounds for (Partial) Invalidation EP Patents	Frequency	Success Rate
Lack of Novelty	8	22.86%
Lack of Inventive Step	26	74.29%
Lack of Enablement	1	2.86%
Inadmissible Extension	1	2.86%
Miscellaneous	0	0.00%

Grounds for (Partial) Invalidation DE Patents	Frequency	Success Rate
Lack of Novelty	1	11.11%
Lack of Inventive Step	3	33.33%
Lack of Enablement	1	11.11%
Inadmissible Extension	1	11.11%
Miscellaneous	1	11.11%

b. Figures concerning S/T Patents

Total of Proceedings	Invalidation	Partial Invalidation	Maintenance
9	5	4	0
100%	55.56%	44.44%	0.00%

Patents	Frequency	Rate
EP	8	88.89%
DE	1	11.11%

EP Patents	Invalidation	Partial Invalidation	Maintenance
8	4	4	0
	50.00%	50.00%	0.00%

DE Patents	Invalidation	Partial Invalidation	Maintenance
1	1	0	0
	100%	0.00%	0.00%

Grounds for (Partial) Invalidation	Frequency	Success Rate
Lack of Novelty	2	22.22%
Lack of Inventive Step	6	66.67%
Lack of Enablement	1	11.11%
Inadmissible Extension	2	22.22%
Miscellaneous	0	0.00%

Grounds for (Partial) Invalidation EP Patents	Frequency	Success Rate
Lack of Novelty	2	25.00%
Lack of Inventive Step	6	75.00%
Lack of Enablement	0	0.00%
Inadmissible Extension	1	12.50%
Miscellaneous	0	0.00%

Grounds for (Partial) Invalidation DE Patents	Frequency	Success Rate
Lack of Novelty	0	0.00%
Lack of Inventive Step	0	0.00%
Lack of Enablement	1	100%
Inadmissible Extension	1	100%
Miscellaneous	0	0.00%

3. Overview of the figures of the 2nd Senate

a. Figures 2010 – 2013 in total

Total of Proceedings	Invalidation	Partial Invalidation	Maintenance
71	40	21	10
100%	56.34%	29.58%	14.08%

Patents	Frequency	Rate
EP	48	67.61%
DE	23	32.39%

EP Patents	Invalidation	Partial Invalidation	Maintenance
48	25	14	9
	52.08%	29.17%	18.75%

DE Patents	Invalidation	Partial Invalidation	Maintenance
23	15	7	1
	65.22%	30.43%	4.35%

Grounds for (Partial) Invalidation	Frequency	Success Rate
Lack of Novelty	14	19.72%
Lack of Inventive Step	43	60.56%
Lack of Enablement	0	0.00%
Inadmissible Extension	15	21.13%
Miscellaneous	5	7.04%

Grounds for (Partial) Invalidation EP Patents	Frequency	Success Rate
Lack of Novelty	8	16.67%
Lack of Inventive Step	30	62.50%
Lack of Enablement	0	0.00%
Inadmissible Extension	7	14.58%
Miscellaneous	3	6.25%

Grounds for (Partial) Invalidation DE Patents	Frequency	Success Rate
Lack of Novelty	6	26.09%
Lack of Inventive Step	13	56.52%
Lack of Enablement	0	0.00%
Inadmissible Extension	8	34.78%
Miscellaneous	2	8.70%

b. Figures concerning S/T Patents

Total of Proceedings	Invalidation	Partial Invalidation	Maintenance
43	28	11	4
100%	65.12%	25.58%	9.30%

Patents	Frequency	Rate
EP	24	55.81%
DE	19	44.19%

EP Patents	Invalidation	Partial Invalidation	Maintenance
24	15	6	3
	62.50%	25.00%	12.50%

DE Patents	Invalidation	Partial Invalidation	Maintenance
19	13	5	1
	68.42%	26.32%	5.26%

Grounds for (Partial) Invalidation	Frequency	Success Rate
Lack of Novelty	10	23.26%
Lack of Inventive Step	28	65.12%
Lack of Enablement	0	0.00%
Inadmissible Extension	10	23.26%
Miscellaneous	2	4.65%

Grounds for (Partial) Invalidation EP Patents	Frequency	Success Rate
Lack of Novelty	5	20.83%
Lack of Inventive Step	17	70.83%
Lack of Enablement	0	0.00%
Inadmissible Extension	4	16.67%
Miscellaneous	1	4.17%

Grounds for (Partial) Invalidation DE Patents	Frequency	Success Rate
Lack of Novelty	5	26.32%
Lack of Inventive Step	11	57.89%
Lack of Enablement	0	0.00%
Inadmissible Extension	6	31.58%
Miscellaneous	1	5.26%

4. Overview of the figures of the 3rd Senate

a. Figures 2010 – 2013 in total

Total of Proceedings	Invalidation	Partial Invalidation	Maintenance
74	33	31	10
100%	44.59%	41.89%	13.51%

Patents	Frequency	Rate
EP	64	86.49%
DE	8	10.81%
Protection Certificate (with EP Basic Patent)	2	2.70%

EP Patents	Invalidation	Partial Invalidation	Maintenance
64	30	26	8
	46.88%	40.63%	12.50%

DE Patents	Invalidation	Partial Invalidation	Maintenance
8	2	5	1
	25.00%	62.50%	12.50%

Protection Certificates (with EP Basic Patent)	Invalidation	Partial Invalidation	Maintenance
2	1	0	1
	50.00%	0.00%	50.00%

Grounds for (Partial) Invalidation	Frequency	Success Rate
Lack of Novelty	19	25.68%
Lack of Inventive Step	47	63.51%
Lack of Enablement	2	2.70%
Inadmissible Extension	2	2.70%
Miscellaneous	9	12.16%

Grounds for (Partial) Invalidation EP Patents (including Supplementary Protection Certificates)	Frequency	Success Rate
Lack of Novelty	18	28.13%
Lack of Inventive Step	42	65.63%
Lack of Enablement	1	1.56%
Inadmissible Extension	2	3.13%
Miscellaneous	8	12.50%

Grounds for (Partial) Invalidation DE Patents	Frequency	Success Rate
Lack of Novelty	1	12.50%
Lack of Inventive Step	5	62.50%
Lack of Enablement	1	12.50%
Inadmissible Extension	0	0.00%
Miscellaneous	1	12.50%

b. Figures concerning S/T Patents

Total of Proceedings	Invalidation	Partial Invalidation	Maintenance
5	2	3	0
100%	40.00%	60.00%	0.00%

Patents	Frequency	Rate
EP	4	80.00%
DE	1	20.00%

EP Patents	Invalidation	Partial Invalidation	Maintenance
4	2	2	0
	50.00%	50.00%	0.00%

DE Patents	Invalidation	Partial Invalidation	Maintenance
1	0	1	0
	0.00%	100%	0.00%

Grounds for (Partial) Invalidation	Frequency	Success Rate
Lack of Novelty	3	60.00%
Lack of Inventive Step	4	80.00%
Lack of Enablement	0	0.00%
Inadmissible Extension	1	20.00%
Miscellaneous	0	0.00%

Grounds for (Partial) Invalidation EP Patents	Frequency	Success Rate
Lack of Novelty	2	50.00%
Lack of Inventive Step	3	75.00%
Lack of Enablement	0	0.00%
Inadmissible Extension	1	25.00%
Miscellaneous	0	0.00%

Grounds for (Partial) Invalidation DE Patents	Frequency	Success Rate
Lack of Novelty	1	100%
Lack of Inventive Step	1	100%
Lack of Enablement	0	0.00%
Inadmissible Extension	0	0.00%
Miscellaneous	0	0.00%

5. Overview of the figures of the 4th Senate

a. Figures 2010 – 2013 in total

Total of Proceedings	Invalidation	Partial Invalidation	Maintenance
89	31	33	25
100%	34.83%	37.08%	28.09%

Patents	Frequency	Rate
EP	57	64.04%
DE	32	35.96%

EP Patents	Invalidation	Partial Invalidation	Maintenance
55	20	20	17
	36.36%	36.36%	30.91%

DE Patents	Invalidation	Partial Invalidation	Maintenance
55	20	13	8
	36.38%	40.63%	25.00%

Grounds for (Partial) Invalidation	Frequency	Success Rate
Lack of Novelty	9	10.11%
Lack of Inventive Step	37	41.57%
Lack of Enablement	3	3.37%
Inadmissible Extension	8	8.99%
Miscellaneous	14	15.73%

Grounds for (Partial) Invalidation EP Patents (including Supplemen- tary Protection Certificates)	Frequency	Success Rate
Lack of Novelty	4	7.27%
Lack of Inventive Step	26	47.27%
Lack of Enablement	0	0.00%
Inadmissible Extension	5	9.09%
Miscellaneous	8	14.55%

Grounds for (Partial) Invalidation DE Patents	Frequency	Success Rate
Lack of Novelty	5	15.63%
Lack of Inventive Step	11	34.38%
Lack of Enablement	3	9.38%
Inadmissible Extension	3	9.38%
Miscellaneous	6	18.75%

b. Figures concerning S/T Patents

Total of Proceedings	Invalidation	Partial Invalidation	Maintenance
28	11	8	9
100%	39.29%	28.57%	32.14%

Patents	Frequency	Rate
EP	20	71.43%
DE	8	28.57%

EP Patents	Invalidation	Partial Invalidation	Maintenance
20	8	5	7
	40.00%	25.00%	35.00%

DE Patents	Invalidation	Partial Invalidation	Maintenance
8	3	3	2
	37.50%	37.50%	25.00%

Grounds for (Partial) Invalidation	Frequency	Success Rate
Lack of Novelty	3	10.71%
Lack of Inventive Step	14	50.00%
Lack of Enablement	1	3.57%
Inadmissible Extension	2	7.14%
Miscellaneous	2	7.14%

Grounds for (Partial) Invalidation EP Patents	Frequency	Success Rate
Lack of Novelty	2	10.00%
Lack of Inventive Step	10	50.00%
Lack of Enablement	0	0.00%
Inadmissible Extension	1	5.00%
Miscellaneous	1	5.00%

Grounds for (Partial) Invalidation DE Patents	Frequency	Success Rate
Lack of Novelty	0	0.00%
Lack of Inventive Step	4	50.00%
Lack of Enablement	1	12.50%
Inadmissible Extension	1	12.50%
Miscellaneous	1	12.50%

6. Overview of the figures of the 5th Senate

a. Figures 2010 – 2013 in total

Total of Proceedings	Invalidation	Partial Invalidation	Maintenance
75	38	23	14
100%	50.67%	30.67%	18.67%

Patents	Frequency	Rate
EP	62	82.67%
DE	13	17.33%

EP Patents	Invalidation	Partial Invalidation	Maintenance
62	33	18	11
	53.23%	29.03%	17.74%

DE Patents	Invalidation	Partial Invalidation	Maintenance
13	5	5	3
	38.46%	38.46%	23.08%

Grounds for (Partial) Invalidation	Frequency	Success Rate
Lack of Novelty	24	32.00%
Lack of Inventive Step	32	42.67%
Lack of Enablement	1	1.33%
Inadmissible Extension	16	21.33%
Miscellaneous	10	13.33%

Grounds for (Partial) Invalidation EP Patents	Frequency	Success Rate
Lack of Novelty	19	30.65%
Lack of Inventive Step	26	41.94%
Lack of Enablement	1	1.61%
Inadmissible Extension	15	24.19%
Miscellaneous	9	14.52%

Grounds for (Partial) Invalidation DE Patents	Frequency	Success Rate
Lack of Novelty	5	38.46%
Lack of Inventive Step	6	46.15%
Lack of Enablement	0	0.00%
Inadmissible Extension	1	7.69%
Miscellaneous	1	7.69%

b. Figures concerning S/T Patents

Total of Proceedings	Invalidation	Partial Invalidation	Maintenance
56	36	16	4
100%	64.29%	28.57%	7.14%

Patents	Frequency	Rate
EP	48	85.71%
DE	8	14.29%

EP Patents	Invalidation	Partial Invalidation	Maintenance
48	32	13	3
	66.67%	27.08%	6.25%

DE Patents	Invalidation	Partial Invalidation	Maintenance
8	4	3	1
	50.00%	37.50%	12.50%

Grounds for (Partial) Invalidation	Frequency	Success Rate
Lack of Novelty	21	37.50%
Lack of Inventive Step	28	50.00%
Lack of Enablement	1	1.79%
Inadmissible Extension	14	25.00%
Miscellaneous	9	16.07%

Grounds for (Partial) Invalidation EP Patents	Frequency	Success Rate
Lack of Novelty	18	37.50%
Lack of Inventive Step	23	47.92%
Lack of Enablement	1	2.08%
Inadmissible Extension	13	27.08%
Miscellaneous	8	16.67%

Grounds for (Partial) Invalidation DE Patents	Frequency	Success Rate
Lack of Novelty	3	37.50%
Lack of Inventive Step	5	62.50%
Lack of Enablement	0	0.00%
Inadmissible Extension	1	12.50%
Miscellaneous	1	12.50%

7. Overview of the figures of the 10th Senate

a. Figures 2010 – 2013 in total

Total of Proceedings	Invalidation	Partial Invalidation	Maintenance
39	10	18	11
100%	25.64%	46.15%	28.21%

Patents	Frequency	Rate
EP	27	69.23%
DE	12	30.77%

EP Patents	Invalidation	Partial Invalidation	Maintenance
27	6	14	7
	22.22%	51.85%	25.93%

DE Patents	Invalidation	Partial Invalidation	Maintenance
12	4	4	4
	33.33%	33.33%	33.33%

Grounds for (Partial) Invalidation	Frequency	Success Rate
Lack of Novelty	5	12.82%
Lack of Inventive Step	18	46.15%
Lack of Enablement	0	0.00%
Inadmissible Extension	0	0.00%
Miscellaneous	7	17.95%

Grounds for (Partial) Invalidation EP Patents (including Protection Certificates)	Frequency	Success Rate
Lack of Novelty	3	11.11%
Lack of Inventive Step	12	44.44%
Lack of Enablement	0	0.00%
Inadmissible Extension	0	0.00%
Miscellaneous	6	22.22%

Grounds for (Partial) Invalidation DE Patents	Frequency	Success Rate
Lack of Novelty	2	16.67%
Lack of Inventive Step	6	50.00%
Lack of Enablement	0	0.00%
Inadmissible Extension	0	0.00%
Miscellaneous	1	8.33%

b. Figures concerning S/T Patents

Total of Proceedings	Invalidation	Partial Invalidation	Maintenance
2	1	1	0
100%	50.00%	50.00%	0.00%

Patents	Frequency	Rate
EP	2	100%
DE	0	0.00%

EP Patents	Invalidation	Partial Invalidation	Maintenance
2	1	1	0
	50.00%	50.00%	0.00%

DE Patents	Invalidation	Partial Invalidation	Maintenance
0	0	0	0
	0.00%	0.00%	0.00%

Grounds for (Partial) Invalidation	Frequency	Success Rate
Lack of Novelty	0	0.00%
Lack of Inventive Step	2	100%
Lack of Enablement	0	0.00%
Inadmissible Extension	0	0.00%
Miscellaneous	0	0.00%

Grounds for (Partial) Invalidation EP Patents	Frequency	Success Rate
Lack of Novelty	0	0.00%
Lack of Inventive Step	2	100%
Lack of Disclosure	0	0.00%
Inadmissible Extension	0	0.00%
Miscellaneous	0	0.00%

Grounds for (Partial) Invalidation DE Patents	Frequency	Success Rate
Lack of Novelty	0	0.00%
Lack of Inventive Step	0	0.00%
Lack of Enablement	0	0.00%
Inadmissible Extension	0	0.00%
Miscellaneous	0	0.00%

II. German Federal Court of Justice

In the following, the result of the survey with regard to the aforementioned judgments of the German Federal Court of Justice is represented as a whole in tabular form. The representations concerning the different Senates are preceded by an overall presentation.

1. Overview of the figures for the Senates Xa. and X. of the German Federal Court of Justice

a. Figures 2010 – 2013 in total

Total of Proceedings	Amendments	Confirmations
173	71	102
100%	41.04%	58.96%

Patents	Frequency	Rate
EP	136	78.61%
DE	36	20.81%
DD	1	0.58%

b. Figures for confirming judgments

Confirming Judgments	Invalidation	Partial Invalidation	Dismissal of complaint
101	56	20	25
100%	55.45%	19.80%	24.75%

Patents concerning Confirming Judgments	Frequency	Rate
EP	79	78.22%
DE	21	20.79%
DD	1	0.99%

Confirming Judgments EP Patents	Invalidation	Partial Invalidation	Dismissal of complaint
79	43	15	22
100%	54.43%	18.99%	27.85%

Confirming Judgments DE Patents	Invalidation	Partial Invalidation	Dismissal of complaint
21	12	6	3
100%	57.14%	28.57%	14.29%

Confirming Judgments DD Patents	Invalidation	Partial Invalidation	Dismissal of complaint
1	1	0	0
100%	100%	0.00%	0.00%

c. Figures for amending judgments

Amending Judgments	Invalidation	Partial Invalidation	Partial Restoration	Restoration	Referral back to Federal Patent Court
72	8	12	38	9	5
100%	11.11%	16.67%	52.78%	12.50%	6.94%

Patents concerning Amending Judgments	Frequency	Rate
EP	57	79.17%
DE	15	20.83%

Amending Judgments concerning EP Patents	Invalidation	Partial Invalidation	Partial Restoration	Restoration	Referral back to German Federal Patent Court
57	7	9	29	8	4
100%	12.28%	15.79%	50.88%	14.04%	7.02%

Amending Judgments concerning DE Patents	Invalidation	Partial Invalidation	Partial Restoration	Restoration	Referral back to German Federal Patent Court
15	1	3	9	1	1
100%	6.67%	20.00%	60.00%	6.67%	6.67%

d. Total of figures concerning S/T Patents

Total of Proceedings	Amendments	Confirmations
49	15	34
100%	30.61%	69.39%

Patents	Frequency	Rate
EP	39	79.59%
DE	10	20.41%

e. Figures for confirming judgments concerning S/T Patents

Confirming Judgments	Invalidation	Partial Invalidation	Dismissal of complaint
34	20	7	7
100%	58.82%	20.59%	20.59%

Patents	Frequency	Rate
EP	26	76.47%
DE	8	23.53%

f. Figures for amending judgments concerning S/T Patents

Amending Judgments	Invalidation	Partial Invalidation	Partial Restoration	Restoration	Referral back to Federal Patent Court
15	1	1	9	3	1
100%	6.67%	6.67%	60.00%	20.00%	6.67%

Patents	Frequency	Rate
EP	13	86.67%
DE	2	13.33%

2. Overview of the figures of the Xa. Senate

a. Figures 2010 to 2013 in total

Total of Proceedings	Amendments	Confirmations
28	13	15
100%	46.43%	53.57%

Patents	Frequency	Rate
EP	22	78.57%
DE	5	17.86%
DD	1	3.57%

b. Figures for confirming judgments

Confirming Judgments	Invalidation	Partial Invalidation	Dismissal of complaint
14	11	1	2
100%	78.57%	7.14%	14.29%

Patents concerning Confirming Judgments	Frequency	Rate
EP	9	64.29%
DE	4	28.57%
DD	1	7.14%

Confirming Judgments EP Patents	Invalidation	Partial Invalidation	Dismissal of complaint
9	6	2	2
100%	66.67%	22.22%	22.22%

Confirming Judgments DE Patents	Invalidation	Partial Invalidation	Dismissal of complaint
4	4	0	0
100%	100%	0.00%	0.00%

Confirming Judgments DD Patents	Invalidation	Partial Invalidation	Dismissal of complaint
1	1	0	0
100%	100%	0.00%	0.00%

c. Figures for amending judgments

Amending Judgments	Invalidation	Partial Invalidation	Partial Restoration	Restoration	Referral back to Federal Patent Court
14	2	2	9	0	1
100%	14.29%	14.29%	64.29%	0.00%	7.14%

Patents concerning Amending Judgments	Frequency	Rate
EP	13	92.86%
DE	1	7.14%

Amending Judgments concerning EP Patents	Invalidation	Partial Invalidation	Partial Restoration	Restoration	Referral back to Federal Patent Court
13	1	2	9	0	1
100%	7.69%	15.38%	69.23%	0.00%	7.69%

Amending Judgments concerning DE Patents	Invalidation	Partial Invalidation	Partial Restoration	Restoration	Referral back to Federal Patent Court
1	1	0	0	0	0
100%	100%	0.00%	0.00%	0.00%	0.00%

d. Total of figures concerning S/T Patents

Total of Proceedings	Amendments	Confirmations
9	3	6
100%	33.33%	66.67%

Patents	Frequency	Rate
EP	8	88.89%
DE	1	11.11%

e. Figures for confirming judgments concerning S/T Patents

Confirming Judgments	Invalidation	Partial Invalidation	Dismissal of complaint
6	4	1	1
100%	66.67%	16.67%	16.67%

Patents	Frequency	Rate
EP	5	83.33%
DE	1	16.67%

f. Figures for amending judgments concerning S/T Patents

Amending Judgments	Invalidation	Partial Invalidation	Partial Restoration	Restoration	Referral back to Federal Patent Court
3	0	0	3	0	0
100%	0.00%	0.00%	100%	0.00%	0.00%

Patents	Frequency	Rate
EP	3	100%
DE	0	0.00%

3. Overview of the figures of the Xth Senate

a. Figures 2010 – 2013 in total

Total of Proceedings	Amendments	Confirmations
145	58	87
100%	40.00%	60.00%

Patents	Frequency	Rate
EP	114	79.31%
DE	31	20.69%

b. Figures for confirming judgments

Confirming Judgments	Invalidation	Partial Invalidation	Dismissal of complaint
87	45	19	23
100%	51.72%	21.84%	26.44%

Patents	Frequency	Rate
EP	70	80.46%
DE	17	19.54%

Confirming Judgments EP Patents	Invalidation	Partial Invalidation	Dismissal of complaint
70	37	13	20
100%	52.86%	18.57%	28.57%

Confirming Judgments DE Patents	Invalidation	Partial Invalidation	Dismissal of complaint
17	8	6	3
100%	47.06%	35.29%	17.65%

c. Figures for amending judgments

Amending Judgments	Invalidation	Partial Invalidation	Partial Restoration	Restoration	Referral back to Federal Patent Court
58	6	10	29	9	4
100%	10.34%	17.24%	50.00%	15.52%	6.90%

Patents concerning Amending Judgments	Frequency	Rate
EP	44	75.86%
DE	14	24.14%

Amending Judgments concerning EP Patents	Invalidation	Partial Invalidation	Partial Restoration	Restoration	Referral back to Federal Patent Court
44	6	7	20	8	3
100%	13.64%	15.91%	45.45%	18.18%	6.82%

Amending Judgments concerning DE Patents	Invalidation	Partial Invalidation	Partial Restoration	Restoration	Referral back to Federal Patent Court
14	0	3	9	1	1
100%	0.00%	21.43%	64.29%	7.14%	7.14%

d. Total of figures for S/T Patents

Total of Proceedings	Amendments	Confirmations
40	12	28
100%	30.00%	70.00%

Patents	Frequency	Rate
EP	31	77.50%
DE	9	22.50%

e. Figures for confirming judgments concerning S/T Patents

Confirming Judgments	Invalidation	Partial Invalidation	Dismissal of complaint
28	16	6	6
100%	57.14%	21.43%	21.43%

Patents	Frequency	Rate
EP	21	75.00%
DE	7	25.00%

f. Figures for amending judgments concerning S/T Patents

Amending Judgments	Invalidation	Partial Invalidation	Partial Restoration	Restoration	Referral back to Federal Patent Court
12	1	1	6	3	1
100%	8.33%	8.33%	50.00%	25.00%	8.33%

Patents	Frequency	Rate
EP	10	83.33
DE	2	16.67%

D. Summary of the results

The above figures presented in detail can be summarized as follows¹⁸:

- The invalidation rate of all Senates of the German Federal Patent Court is 79.08% in total.
- The invalidation rate of the German Federal Patent Court regarding the S/T patents which are (currently) of particular relevance from an economic point of view is even 88.11%.
- The invalidation rate of the German Federal Court of Justice regarding confirming judgments is 75.25%
- The invalidation rate of the German Federal Court of Justice regarding amending judgments is 80.56%.¹⁹
- The invalidation rate of the German Federal Court of Justice regarding confirming judgments concerning S/T patents is 79.41%.
- The invalidation rate of the German Federal Court of Justice regarding amending judgments concerning S/T patents is 73.34%.²⁰
- The German Federal Court of Justice has confirmed approx. 60 % of the judgments of the German Federal Patent Court and has amended approx. 40 % of the judgments of the German Federal Patent Court.
- About 2/3 of the amending judgments of the German Federal Patent Court are in favor of the patent proprietor.
- The main ground for invalidations by the German Federal Patent Court is lack of patentability in 75% of the cases, followed by “Miscellaneous”²¹

¹⁸ The „invalidation rates“ designated in section D include judgments which invalidate patents partially and as a whole. This choice of terminology which is negative from the viewpoint of the patent proprietor reflects that in cases of merely partial maintenance, there are often, if not regularly, problems concerning the infringement question which may lead to the dismissal of the infringement complaint, see also *Kühnen/Claessen*, loc. cit., 594.

¹⁹ Partial restorations are included, since, in this case, the patent also remains partially invalid.

²⁰ Partial restorations are included, since, in this case, the patent also remains partially invalid.

²¹ This includes declarations of invalidity for lack of defense, etc.

with almost 12%, inadmissible extension with almost 11% and lacking enablement with approx. 2%.

- A significant difference in the invalidation rate of German patents as compared to the invalidation rate of German parts of European patents is not established; in fact, the rates are nearly identical.²²

E. Reasons?

The obtained results show that the invalidation rates established by *Liedel* increased, as compared to the period of time examined then, by nearly 10 percent points, i.e. from approx. 70% to approx. 80%. In view of the now established examination procedure with highly qualified patent examiners and comprehensive research possibilities this development is noteworthy. The question for the reasons cannot be finally answered for lack of objectively determinable criteria. Nevertheless, special deliberations impose themselves which will be presented in the following. May they give rise to a fruitful discussion!

From a logical point of view, after all, only the following three causes come into consideration:

I. “Errors” of the patent examiners

First, it would be conceivable to simply assume working errors of the competent patent examiners. This includes examples such as the simple oversight of relevant passages in documents underlying the examination procedure, or the oversight of inadmissible extensions or lack of enablement. According to the authors’ experience, this reason is not particularly relevant as a cause for the high invalidation rates, as can be gathered, for example, also from the relatively low rate regarding the ground for invalidity of inadmissible extension (approx. 11%) and lack of enablement (approx. 2%).

As far as this problem is solvable at all – “human error” cannot be excluded – one might at first simply think of improving the work conditions during the examination, which means to give the examiners more time for the examination. Also

²² See also *Kühnen/Claessen*, loc. cit., 594.

common mechanisms for quality assurance might be considered. However, as already said, this problem is not an issue of priority for the authors.

II. New prior art

According to what has been said above, the by far most relevant ground for invalidity is lack of patentability. In almost every case, nullity plaintiffs introduce new prior art into the nullity proceedings, said new prior art playing often the central role in the further proceedings – possibly beside the prior art initially determined in the grant procedure.

The reason why nullity plaintiffs are often successful in finding relevant new prior art is regularly their particular proficiency in the technical field in question, and their ability, which is based on their market knowledge, to know/identify “public prior use” which is (necessarily) unknown to the Patent Office.

However, it seems to be questionable whether this justification is really convincing. Only very few nullity plaintiffs have large patent departments with their own “prior art collection” suitable for conducting their own (= better) researches. In cases of nullity complaints, most of the nullity plaintiffs engage specialized research institutes. However, according to the authors’ experience, cases where an asserted (not researchable) public prior use is dispositive of the dispute are rather rare; in most cases, the “new” prior art are patent documents.

III. Different examination standards between office and court

As a third reason for the high invalidation rate, it is often stated or “felt”, that there are different assessment standards between offices and courts, in particular with regard to the requirement of an “inventive step”.

One may object to this reason, which is not provided and even less intended by law, that in any case there will be differences resulting from factual reasons. For contradictory (nullity) proceedings differ from unilateral (application) proceedings already by their litigious character and thus by an increased amount and yield of argumentation.

This is, however, contradicted by the examiner’s clear and unambiguous task of always having to also anticipate and think through the counter-arguments when

doing their work, which means that they must also assume the role of a later nullity plaintiff.

G. Conclusion

Irrespective of whether errors of the examiner (also when finding the relevant prior art²³) or whether differences in the assessment standard are due to legal or factual reasons, one may state that in case of such errors and/or differences, there is (at least factually) a problem which has to be taken very seriously under constitutional law aspects. According to Art. 14 German Constitutional Law (*GG*), granted patents enjoy the protection of guarantee of ownership under constitutional law. In addition, legal security is a valuable asset recognized under constitutional law. Correspondingly, the assumption of the legal validity of an examined and granted patent is so far maintained in patent law practice. It may, however, be doubted whether this assumption can still claim validity in view of the obtained results. It is to be expected that there will be effects on the practice of infringement courts how to deal with requests for stay of proceedings or the grant of interlocutory injunctions for patent infringement.²⁴ Ultimately, not only the legitimacy of the German patent system (bifurcation principle) in general but, in addition, also the attractiveness of Germany as a forum for patent litigation is at stake. Therefore, all parties concerned can only be called on to exercise the greatest caution and care, be it with regard to the equipment and training of the examiners, be it concerning substantive questions regarding, e.g., general but not documented common knowledge of the person skilled in the art, or regarding the assessment whether or not the person skilled in the art had any reason to combine an identifiable and provable technical teaching with another one. In any case, one should avoid being distracted by (legal and) political considerations, like, for instance, the discussion conducted in the media, according to which there

²³ For greater knowledge, further statistical surveys of considerable effort would have to be made. So, for example, for each judgment, the prior art considered in the grant procedure could be compared to the prior art taken as a basis in the decision. In doing so, a better weighting of the cited reasons could be made. For the future, it would be desirable that such work be carried out.

²⁴ See also *Kühnen/Claessen*, loc. cit., 595.

are, supposedly, too many patents (so-called “patent thickets”) which have to be removed²⁵ (by the court).

In any case, the *status quo* is a status which is not acceptable to the applicants/patent proprietors. For them, it does not matter which of the three named reasons is ultimately relevant for the high invalidation rate. They see themselves confronted with the following situation: First, they finance, from their own resources, the research and development work for new products (frequently in Europe, by securing high-paying jobs, especially also in Germany); then, they try to obtain patent protection²⁶ by incurring further financial expenditures, and at the cost of the complete disclosure of their invention, thereby also serving financial interests, with a view to the payment of official fees. When successfully marketing their product (only good products are copied), they see themselves exposed to imitators, i.e. patent infringers. Consequently, again by incurring considerable financial expenditures and by once again furthering fiscal interests (court fees), they call upon infringement courts, just to be told then, with regard to validity, that the patent is invalid (worthless). The troubles which additionally threaten the patent proprietor in such case, if they were to have provisionally enforced a successful infringement decision (for having been confident that the patent would be granted) need not be described here.²⁷ The reference to the patent as a risky business that is readily made in this respect is too short-sighted. For the risk has got out of control. With regard to the encountered results, attorneys would actually have to advise their clients not to enforce their patents in Germany, if not to refrain altogether from filing patent applications with effect for Germany. For, in

²⁵ It is not the task of this contribution to conduct the discussion of allegedly too many patents, although such a discussion – if conducted in a well-founded manner (!) – would certainly be valuable; for, in addition to patent law aspects, it also concerns economic and political positions of principle.

²⁶ In the framework of the patent application, technical know-how acquired through arduous work is disclosed. After disclosure and subsequent invalidation of the patent, said technical know-how is free and available to everybody. With a – finally unsuccessful – patent application, one deprives oneself – unlike in the grant procedure – of one’s competitive advantage obtained by said know-how, in which the applicant may withdraw their patent application still before the publication of the latter, if the chances of a patent grant appear to be poor.

²⁷ It corresponds to the procedure against a patent infringement complaint pursued in at least economically important cases to also reply by way of a patent nullity complaint (*Keukenschrijver*, loc. cit., marginal No. 90). If there is such a high probability that the patent underlying the infringement complaint will be destroyed, the claims asserted by the infringement claim will be practically worthless in many cases. Furthermore, in case of a successful infringement complaint and the subsequent enforcement of claims resulting from a corresponding judgment, one will see oneself exposed to high claims for damages of the (alleged) infringer. For the latter may claim to be reimbursed by the (former) patent proprietor of the financial burden resulting from the compliance with or the enforcement of an infringement judgment (*Kühnen*, Handbuch der Patentverletzung, 6th ed., margin Nos. 1917, 1930 et seqq.). Said financial burden includes payment of damages, enforcement costs, court fees, costs of legal defense as well as all other costs imposed on the (alleged) infringer by the infringement decision (cf. Kühnen, loc. cit., margin Nos. 1918 et seqq.).

the end, the applicant/patent proprietor turns out to be the loser – as is statistically clearly evidenced. Their (technical as well as financial) contributions are, in fact, highly welcomed by the system, but, in the end, often no consideration is provided, and this precisely when it really matters. The situation does not seem to be completely different under competition aspects, and, in particular, on the license market. Considering the results obtained, it may well be asked whether in-licensed patents really provide a privileged position. One might argue, based on the case-law which is still prevailing now, that this is at least factually the case.²⁸ Whether competitors, with regard to the high invalidation rates, still expect something from this privileged position, is questionable. Inversely, competitors who consider the statistics and risk of the patent proprietor might even be induced to commit patent infringement, with the motto: it is worth a try, for mostly it turns out all right!

At this point, it shall not be omitted to discuss the problem which is exemplarily addressed here with regard to patents from the field of software and telecommunications technology. As demonstrated, the (partial) invalidation rate is even higher in this area than is generally the case. In this area, one might possibly even speak of a failure of the patent system. At least in cases of first instance proceedings, it seems to be almost excluded that the validity of an S/T patent is confirmed. Whether this – other than, for instance, in mechanics – is due to the fact that technical teachings in the S/T area appear “simple” in retrospective and are often to be seen in a technical “concept” or “architecture”, the respective technical means of which, taken in isolation, were individually known, is only a matter of speculation. In any case, corresponding developments are – with a yearly increasing relevance of software and telecommunication techniques – of great value for the innovative strength of our entire economy. As regards S/T patents, one may not – with knowledge of the figures shown herein – assume that companies are going to file applications for their respective inventions in large numbers, with the considerable risk of losing their know-how. Such a development would at least bring about an impediment for innovation which, in the long run, would be detrimental to competition and thus to the economy. Correspondingly, there are

²⁸ Benkard/*Ullmann*, Patentgesetz, 10th ed., Sec. 15, margin Nos. 192 et seqq., with further references

already developments in the USA according to which it becomes common practice in product development in the high-tech area to (initially) ignore patents with the comment “we will sort out patent issues later”.

From the authors’ point of view, such a development cannot be regarded as desirable or in line with the system in any case and must be emphatically avoided. The basis of the patent system, i.e. the promotion of innovations, would be ed²⁹, the system would virtually lever-out itself. For a (presumed) right which is ultimately destroyed is neither desirable nor enforceable.

Is this really wanted?

The authors think that here is acute need for action and wish a discussion on the broadest possible basis. If this contribution can provide an incentive in this respect it has reached its objective.

²⁹ Cf. in detail with regard to the promotion of innovations by patent protection *Kohler*, Handbuch des Deutschen Patentrechts in rechtsvergleichender Darstellung, Mannheim 1900, p. 7 et seqq.; on the advantages of a functioning patent system, in addition, the discussion between the „Antipatentbewegung“ („*Anti-Patent Movement*“) and the „Propatentbewegung“ („*Pro-Patent Movement*“) under the leadership of, in particular, the VDI (*Association of Engineers*) and *Werner von Siemens* in the 19th century, which found its first conclusion in the Patent Act of 1877 (RGBl. (*Imperial Law Gazette*) 1877, pp. 501-510), concerning this *Kraßer*, loc. cit., p. 61 et seqq.



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