



Patents – Paper tigers or real tigers?

By Aloys Hüttermann

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“一切反动派都是纸老虎”² – “*Imperialism and all reactionaries are paper tigers*”, this is how the famous saying by Mao Zedong goes, which made the expression “paper tiger” internationally known.

Naturally, Mao Zedong regarded patents as part of the antiquated reactionary system he was fighting³ as a fervent supporter of communism; it is nevertheless quite astonishing that *Hess, Müller-Stoy* and *Wintermeier* called patents “paper tigers”.⁴

But what are patents? Are they real tigers or merely paper tigers – or both at the same time?

The reasoning of *Hess et al.* as well as of *Henkel* and *Zischka*⁵ in the same year can be summarised as follows:

The (partial) invalidation rate of the Federal Patent Court in patent invalidity suits ranges between 70 and 80%. From this it can be concluded that most patents granted are actually invalid, which means that patent offices do not do their job properly.

From this, in turn, astonishing conclusions are drawn, namely:

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² Speech at the conference of the Communist Party of China on 1 December 1958. However, Mao Zedong already used this expression in previous statements, such as interviews.

³ The development of Chinese patent law was first considered after Mao’s death, starting around 1978/1979, see also *Guo*, Development and outlines of Chinese patent law, GRUR Int 1985, 1

⁴ *Hess, Müller-Stoy, Wintermeier*, Are patents merely paper tigers“, Mitt. 2014, 439.

⁵ *Henkel, Zischka*, Why most patents are invalid, first version 29 September 2014, current version 24 March 2015, available for download at: http://www.tim.wi.tum.de/fileadmin/w00bcy/www/Research/Publications/Henkel/Henkel_Zischka_Patent_Validity.pdf

“From the authors’ point of view, such a development [namely regarding patents as fundamentally invalid] 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 twisted, the system would virtually lever out itself.”⁶

Henkel and *Zischka* suggest significantly higher examination fees and another increase in the required inventive steps.

But is it really true that such a startlingly poor patent granting practice can be concluded from the (partial) invalidation rate of the Federal Patent Court?

At this point, some initial remarks should be made. First of all, the presented statistical data per se is not objectionable – the author came to similar results as part of a survey⁷ conducted in 2012 on behalf of the U.S. organisation IPO.

However, the (partial) invalidation rate is only that high when adding up the partial and full invalidation rates. Admittedly, the proportion of partial invalidations is considerable, exceeding the proportion of full invalidations in some fields of technology, as is also demonstrated by the presented data.

However, drawing the conclusion that a partial invalidation always indicates shortcomings in patent granting – as is stated in both articles – is, to say the least, daring. It should be checked on a case-by-case basis whether only editorial or minor changes were made that only limit the scope of the patent to a small extent or whether the changes were substantial.

However, this was not done and – in the authors’ defence – is probably not possible either. The failure to differentiate between partial invalidations and full patent invalidations on account of this impossibility, however, does not seem to be the right approach.

⁶ *Hess, Müller-Stoy, Wintermeier*, Are patents merely “paper tigers”, Mitt. 2014, 439

⁷ *Hüttermann*, Lecture at the IPO Annual Meeting in San Antonio 2012 and the corresponding white paper, available from the author upon request

Furthermore, it should be noted that a large number of invalidations in the fields of chemistry / pharmacy / biotechnology during the period under review result from the different definitions of novelty by the EPA and the Federal Patent Court or the Federal Court of Justice (BGH), which led to (partial) invalidation rates of close to 90%.⁸

Despite the decision on olanzapine,⁹ which led to a harmonisation of the situation, the author observed this trend until 2011. In 2010 and 2011, the full invalidation rate of the 3rd Nullity Senate of the Federal Patent Court was still above 70%.¹⁰ Many of these decisions were overruled at the second instance before the Federal Court of Justice.

Nevertheless, it is fair to say that the invalidation rate as well as the number of substantial partial invalidations before the Federal Patent Court is considerable.

But can a poor patent granting practice on part of the patent offices be concluded from that?

An indication of why this is not the case is provided in the article by *Hess et al.* itself – who write the following in footnote 12: “[...] *Kühnen/Claessen*¹¹ [...] (with surprise!) remark that only about every second patent claimed in infringement proceedings is attacked by way of a nullity complaint.”

The figures discussed by *Kühnen/Claessen* are from 2011, but the ratio of invalidity suits to infringement suits has been ranging at 50% or below over the last few years, if not decades¹². When (rightly) including appeals in the calculation, *Cremers et al.*¹³

⁸ See the following quotation: “The unbearable situation persists that the European Patent Office grants thousands of patents on “selection inventions” every year which are invalid at home due to lack of novelty of the subject matter” by *Maiwald* on BGH “Filter unit”, *Journal* 2002, 16, see also *Dinne/Stubbe*: “Chemistry patents. Europe vs. Germany”, *Journal* 2004, 337

⁹ BGH, decision of 16/12/2008 - X ZR 89/07 (BPatG – Federal Patent Court) (Olanzapine)

¹⁰ More specifically: 18 invalidations in 24 decisions in 2010 and 17 invalidations in 23 overall decisions in 2011, see White Paper *Hüttermann*, loc. cit.

¹¹ *Kühnen, Claessen*, GRUR 592.

¹² *Stauder* The actual significance of infringement and invalidity suits in the Federal Republic of Germany, France, Great Britain and Italy – Results of a statistical-empirical survey, GRUR Int 1983,

come to 44.3% patent infringement suits during the period 2000-2008 in which an appeal or invalidity suit was filed, with the latter accounting for about two-thirds.

The fact that an invalidity suit is filed in a maximum of only 50% of all infringement proceedings has been used in particular by advocates of the principle of separation as an argument in favour of the proposal to also introduce the principle of separation at the Unified Patent Court.

But what does all this mean?

To answer this question, it is helpful to see things with a practitioner's eyes. In Germany, about 1,200 new patent infringement suits are filed on average. In the vast majority of the cases, the alleged infringer is contacted beforehand and an attempt is made to reach an amicable settlement – if only to evade Sec. 93 ZPO [German Code of Civil Procedure].

The author is not aware of any publications on the proportion of patent infringement proceedings in which the parties reach a settlement beforehand. Based on personal experience, he estimates this proportion to be at least 80%; usually, only one in five cases (at maximum) is actually settled before court.

Of course, this settlement can also be attributed to the alleged infringer presenting an invention which has so far not been described in the prior art, causing the patent holder to refrain from filing a suit. Based on general experience, however, this only occurs in few cases – the alleged infringer is contacted beforehand in a maximum of 20% of all cases. In all other cases, the matter is settled without the patentability being challenged.

These 1,200 patent infringement suits mentioned above thus constitute the minority of the estimated minimum of 5,000 to 6,000 proceedings, i.e. that minority in which no

234: “*In half of all proceedings, an invalidity suit is filed as a defence against the [German] patent infringement suit*”, quoted in *Keukenschrijver*, Patent Invalidity Proceedings, 5th edition, marginal no. 90, see also *Henkel / Zischka*, p. 6. with further references

¹³ See *Cremers, Gaessler, Harhoff, Helmers*, 2014. Invalid but Infringed? An Analysis of Germany's Bifurcated Patent Litigation System. Working Paper, available at: <http://ftp.zew.de/pub/zew-docs/dp/dp14072.pdf>

settlement can be reached beforehand. It must be assumed that the positions are entrenched in these matters and that the alleged infringer will use all available means to defend himself. As is known, these defences include:

- a) No infringement has occurred or
- b) The patent in dispute is invalid.

But why do the accused infringers consciously decide not to use one of these two defences in half of all these suits? In such cases, the only option left is to claim that no infringement has occurred.¹⁴

The answer to this may be: They refrain from filing an invalidity suit because no relevant prior art was found.

The invalidity suits brought before the Federal Patent Court thus only constitute that portion of the cases in which the accused infringer reckons that there is a chance to invalidate the patent to at least such an extent that he no longer falls within the scope of protection. In all other cases, this is refrained from.

To draw a conclusion from the (partial) invalidation rates as to the overall patent quality, however, an at least identical number of cases – in which the patent is maintained as granted – would have to be added mentally to the cases in which an invalidity suit is filed.

To the rates¹⁵ of 43.62% invalidation, 35.46% partial invalidation and 20.92% maintenance in a total of 392 proceedings, as described by Hess, 392 proceedings¹⁶ would thus have to be added mentally in which 100% of the patents are maintained.

Of course, this substantially changes the overall analysis, as shown in the table below:

¹⁴ This also explains why *Kühnen/Claasen* are so astonished at the small number of invalidity suits in the above-mentioned article; see also footnote 12 in *Hess et al.*, loc. cit.

¹⁵ See *Hess et al.*, loc. cit.

¹⁶ Note: Of course, this figure is somewhat random, but it is mainly about understanding the overall situation. Assuming the rate of 44.3% established by *Cremers et al.*, loc. cit., would yield even 492 additional proceedings and a correspondingly higher maintenance rate, namely 64.93% at a full invalidation rate of 19.34% and a partial invalidation rate of 15.72%

Number of cases	Invalidation	Partial invalidation	Maintenance
392	171	139	82
	43.62%	35.46%	20.92%
“Corrected” number of cases			
784	171	139	474
	21.81%	17.73%	60.46%

The rate of maintenance as granted has thus tripled and these figures no longer suggest a sloppy patent granting practice on part of the patent offices.

Of course, the question now arises why the above-mentioned articles by *Hess et al.* and *Henkel* and *Zischka* did not come to this conclusion. There are different answers to this question:

Hess et al. apparently assumed that the number of infringement suits and invalidity suits is about equal. Concerning this, the book entitled “Invalidity Proceedings”¹⁷ by *Keukenschrijver*¹⁸ is quoted, with *Keukenschrijver* in turn quoting the “Textbook of Patent Law” by *Kraßer*¹⁹, literally:

“Although only about 1% of all granted patents are involved in an invalidity suit, the proportion of patents involved in an infringement suit is estimated to be in the same order of magnitude.”

After perusing both sources, however, it seems that they did not intend to say that the number of patent infringements and invalidity suits was equal – only that they are “in the same order of magnitude”, i.e. they do not differ by a factor of ten or the like. However, the source quoted by *Kraßer*²⁰ does not make any further statements on this.

¹⁷ See *Hess et al.*, footnote 12, loc. cit.

¹⁸ *Keukenschrijver*, Patent Invalidity Proceedings. Heymanns, 5th edition, marginal no. 90

¹⁹ *Kraßer*, Patent law, C.H. Beck, 2009, p. 614

²⁰ *Kraßer* quotes (literally, identical in the 6th and 5th edition) “*Ströbele*, How courts of law are bound by the decisions of patent authorities, 1975, p. 53” – i.e. it is not indicated where this article was published. However, there are two very similar articles: one published in GRUR Int, 1975,1 and the other in IIC 1975, 243, with only the former addressing foreign countries. However, neither of the two articles makes a statement of the ratio of invalidity and infringement suits; moreover, a source from 1975, i.e. before the EPA started working, seems to be somewhat outdated.

Although *Hess et al.* quote the deviating figures established by *Kühnen/Claasen*, they do not draw any conclusions from them. Regrettably, they seem to have regarded the former sources as more trustworthy.

If the number of invalidity suits and infringement suits was equal – which is not the case – there really would be reason for concern. This might explain the slightly alarmist tone of this article.

Although *Henkel* and *Zischka* explicitly mention that an invalidity suit is filed in a maximum of half of all infringement suits²¹, they fail to draw a conclusion from this discrepancy, which is very surprising.

Let me give you one final thought: Patent invalidation proceedings will *always* involve the invalidation of patents.

The reason for this is that the patent examination practice of the patent offices needs to be rationed. In view of the number of applications running into tens or hundreds of thousands, the patent offices have to take rationalisation and rationing measures to be able to complete the patent examination within a reasonable period.

According to the present state of knowledge, every examiner of the EPA spends about four to five hours on a search. This might appear to be too short – but several days or weeks will never be spent on a search for prior art, as is usual with a patent invalidity search.²² So much time can and will never be spent by a patent office, unless it would be prepared to demand five-figure fees for a patent examination. In this case, however, the question of equal treatment of the applicants would arise, since large corporate groups would have a major advantage over small companies or individual

²¹ See *Henkel / Zischka*, p. 6 with further references, among them the above-mentioned source by *Cremers et al.*, loc. cit., but not *Kühnen/Claessen*, loc. cit.

²² The reasoning of *Hess et al.* saying that patent offices have an advantage over plaintiffs in invalidity proceedings because they have better databases and more experienced examiners compared to patent invalidity search services, for example, cannot be accepted. The German Patent and Trademark Office (DPMA) even makes its database available to the public. The question of whether examiners are better searchers than search services is a rather academic question in view of the fact that the latter are often given much more time.

inventors, which would undoubtedly undermine the above-mentioned innovation-promoting basis of the patent system.²³

Moreover, the patent offices' sources of search are limited. Important sources of information such as product descriptions, prospects, etc. are not available. In many fields, especially in the IT or the electrical / mechanical engineering industry, however, these represent the prior art.

Hence, the factual (partial) maintenance rate of 78% of all patents can ultimately be regarded as good, if not excellent.²⁴

The answer to the question posed at the beginning is: Patents are real tigers rather than paper tigers.

²³ Note: This is all the more true when understanding the patent system, like the author, as an affordable and simpler alternative to direct subsidisation on part of the government, see *Hüttermann Journal* 2013, 181

²⁴ Note: Of course, this does not release the patent offices from the obligation to continuously review and improve their patent granting practices and to eliminate the existing shortcomings in some areas.

SUMMARY

The assumption expressed in recent publications that the high (partial) invalidation rate of the Federal Patent Court suggests a poor patent granting practice in general is not true. This is mainly attributable to the failure to take into account patents which are involved in an infringement suit, but the validity of which is not challenged.