



**THE GERMAN EMPLOYEE INVENTOR'S ACT -
A pitfall for companies from abroad**

Dr. Bernd Fabry, Martin Fabry PhD

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Amid all the enthusiasm about a successful innovation, it is easy to forget that every invention also involves at least one inventor. Even if circumstances differ greatly from country to country, inventors are entitled to far-reaching rights, in particular a right to an appropriate participation in the economic success of their invention. Ignorance and neglect of the many obligations that await the employer after the invention has been transferred can have dramatic consequences for a company.

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For many non-German, in particular US American companies, the idea of not only paying an employed inventor a salary, but also letting him share in the fruits of his service inventions, sounds strange. Even though the US Patent Act grants the inventor the right to the invention and his employer only a limited right to exercise it ("shop right"), the inventor has the possibility at any time until the patent is granted to demand a complete transfer of rights ("assignment") and this without any financial compensation.

However, this view can change very quickly if, for example, the German branch of a US company is an employer and as such is confronted with claims for payment of inventor's compensation, especially if such claims have accumulated over a long period of time and can then add up to considerable sums in addition to default interest. The situation can get even worse if at the end of the day it turns out that there is no effective transfer of rights under German law, that the invention has become wholly or partially free and then a possibly also particularly significant protective right does not even belong to the employer, but the inventor's claim also has (partial) transfer and possibly also a financial compensation claim. In the vast majority of cases, the corresponding time limits have expired and a reinstatement is not possible, so that irreparable damage has occurred.



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In the meantime, companies are active in the German market that work similarly to patent trolls and in particular offer retired inventors' free advice on still existing rights under the German Employee Invention Act ("Arbeitnehmererfindergesetz, ArbEG"). If there are starting points for claims against the (former) employee, they can have the rights assigned to them against participation and then often try very aggressively and with excessive claims to collect payments. US companies in particular, which are little familiar with the customs in Germany and are accustomed to a completely different legal system, are very much targeted because of the high chances of success.

The aim of this White Paper is to give an overview of the systematics of the German Employee Inventors Act (ArbEG) and to point out the biggest pitfalls that companies that are not aware of the special features of this law regularly fall into.

1. Systematics

According to US law, the invention is the property of the inventor, who owes the transfer to his employer, provided it was a service invention. The assignment can be claimed by the employer at any time, but at the latest until the patent is granted. Apart from symbolic recognition ("inventor's dollar"), the inventor is not entitled to any financial compensation unless the parties have contractually agreed otherwise.

In German law, however, the situation is somewhat different, since two legal provisions are opposed here: on the one hand, patent law, which grants the inventor the right to the invention, as in the USA, and on the other hand labor law, according to which the employee owes his employer the fruits of his work, including the intellectual property created. German law resolves this contradiction by a compromise between the opposing positions as follows: The employer has the right to demand the transfer of service inventions from the inventor and thus receives an intangible asset. However, if he wants to use this commercially, he must give the inventor a fair share of the fruits of his invention. This idea of compensation results in the German Employee Inventions Act and the associated Compensation Guidelines, which establish a manageable web of mutual obligations and deadlines in which the uninformed can easily get lost. The

guideline may be that this is primarily an employee invention protection law, i.e., whenever an action is taken within the scope of this law which could be directed against the objective interests of an inventor, one can trust that this will be inadmissible. We will explain this in the following.

At this point, it should be pointed out that the idea of balance outlined above is not a purely German construct and can be found in a similar form in France, Japan and especially in China. On the contrary, the legal obligation to transfer one's own intellectual property free of charge to the employer is a special feature of Anglo-Saxon-influenced legal systems, which can also be found in Great Britain, India and Australia in particular. This circumstance is also expressed in the fact that the relevant provisions are not to be found in the Patent Act but are part of the Civil Law.

The protection concept of the ArbEG has already been mentioned. The fact is that the duties of the employee inventor are clear and are limited to reporting an invention immediately, participating in the preparation of the application text, signing all necessary signatures and otherwise maintaining confidentiality. All other obligations are incumbent on the employer.

In this context, it should be noted that the Act dates back to 1959 and has only been slightly amended twice since then. In fact, the remuneration guidelines have remained completely unchanged since that time, which means that the supreme courts of the Federal Court of Justice consider them to be so outdated in certain areas that, for example, with regard to the amount of license fees, they cannot be applied. Further revisions, in particular those which could reduce the high administrative expenditure for employers, are not politically enforceable as things stand at present. Therefore, companies in Germany and abroad must prepare themselves for the foreseeable future to have to comply with the existing regulations if they do not want to find themselves in proceedings before the Arbitration Board of the German Patent and Trade Mark Office or, in case of doubt, before civil courts.

2. Scope of application

The ArbEG distinguishes between service inventions and free inventions. Service inventions are those made by an employee within the scope of his official duties and using the employer's resources as well as knowledge acquired within the scope of his work for the company.¹ All other inventions are considered free and belong to the inventor alone.² German law thus contains only two categories and therefore differs, for example, from the law in France, which additionally differentiates between inventions made by employees and inventions made in the course of their employment. The latter are understood to mean inventions in the company's field of work, but where the inventor did not have a specific development assignment. Under German law, however, such a distinction is irrelevant. In practice, this means that not only the engineer or chemist, from whom inventive activity is expected, makes service inventions, but also the marketing or sales employee, who, for example, recognizes market needs and in this way provides impetus for new developments. A differentiation between these groups of inventors takes place later when calculating the remuneration. Free inventions are prima facie characterized by the fact that they are located in a field of work in which the employer is not active and, in all likelihood, will never become active. Although the employee-inventor is not obliged to file a report in such cases, it is advisable to do so in order to prevent later disagreements. A considerable number of cases end up at the arbitration board unnecessarily because the inventor is under the misapprehension that the invention is free because he made it in his free time. It should be noted that place, time and event are completely irrelevant for the distinction between free and service inventions; only the standards outlined above apply.

Service inventions include both those which are patentable and those for which the employer only wishes to apply for a utility model; the decision as to which of the two forms of protective rights he prefers lies solely with the employer³. In addition, the ArbEG also



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¹ ArbEG, section 4(2)

² ArbEG, section 4(3)

³ ArbEG, section 2

covers the so-called "qualified suggestions for improvement".⁴ These are notifications which are not expressly identified as inventions, but which are aimed at improving the external state of the art.⁵ The boundaries between a qualified improvement proposal and an invention disclosure are naturally fluid. It is not uncommon for an improvement proposal to result in a patent or utility model application. Unlike in the USA, designs are not covered by the Patent Act but are regulated by a separate law⁶. Designs therefore do not fall within the scope of the ArbEG.⁷

Furthermore, the ArbEG only regulates the relationship between employer and employee (inventor). This has a number of very concrete implications: If, for example, an invention is made jointly in an internationally staffed team, only the inventors who have an employment contract under German law are subject to the provisions of the ArbEG. Since the ArbEG is generally associated almost exclusively with the remuneration claim of the German inventor, and sums are regularly assumed that are far removed from reality⁸, it is clear that unequal treatment in an inventor community can be a burden for the success of a project. To solve this problem is one of the further tasks for a company.

Here, another difference to the U.S. system becomes clear, because instead of a territorial or nationality principle, the employment contract alone decides on the applicability according to ArbEG. In other words, a U.S. inventor working for a German company in the U.S. is also subject to the ArbEG if he has a German employment contract (which will be rather rare). Conversely, an inventor with a German passport who is sent to the USA, for example, and receives a US

⁴ ArbEG, section 3

⁵ In addition, there are also the so-called "simple improvement proposals", which merely improve the internal state of the art and are not covered by the ArbEG.

⁶ In China, too, the parts of the patent law dealing with the inventor and his rights also include the creator of a design. Incidentally, there is also an obligation to pay remuneration here.

⁷ Under German law, the design does not belong to the creator, but directly to the employer. No transfer of rights is required and there is also no claim to remuneration.

⁸ According to empirical studies, the annual compensation from claims under the Employee Invention Act for inventors with German employment contracts is less than EUR 5,000 in 95% of all cases.

employment contract there, is in principle no longer within the scope of the ArbEG.⁹

Another important limitation of the scope of the ArbEG is often overlooked, because it only arises from a precise knowledge of the German legal system: the ArbEG regulates the relationship between employer and employee-inventor. Therefore, if there is no employee relationship, the ArbEG does not apply. This usually applies to the case where an invention has become available due to a lack of transfer of rights and has reverted to the inventor. The inventor is then no longer to be regarded as an employee in the specific case, but is given the status of a freelance inventor.

According to the German Works Constitution Act, members of the executive bodies of a company are also not employees, since they lack the characteristic of being bound by instructions. Basically, the inventions of a managing director therefore do not fall within the scope of the ArbEG for the time being and require a special regulation. For example, the managing director's contract may stipulate that the ArbEG shall nevertheless apply.

However, in a most recent landmark decision, the German Federal Finance Court has decided that this is only true, in case the managing director holds at most 50 % of the shares of the company. In other words: managing directors owning less than 50 % of the company share or even none are most likely considered as employees underlying the ArbEG! This has not only consequences for the future, but also for already existing contracts.¹⁰

3. The small amendment of the ArbEG

Before the main aspects of the German Employee Invention Act are presented in the following sections, the so-called "small amendment" of the ArbEG, which dates from October 1, 2009 and divides the ArbEG into an "old version" (ov) and a "new version" (nv) as of this effective date, shall be discussed first.

⁹ However, this must be regarded as a simplification: depending on the duration of the assignment, the ArbEG may still have an effect here. Without doubt, only so-called "ex-patriots" are outside the scope of the ArbEG.

¹⁰ BFH 20.10.10, VIII R 34/08, DStR 11, 911; BFH 2.12.05, VI R 16/03

While a first amendment from 2002 only affected a single aspect of the ArbEG, namely the rights of university employees, the "small amendment" includes some essential aspects, namely in particular

- waiver of the written form and
- assignment fiction

Before the effective date, the inventor was bound to submit his invention disclosure in writing. Any other form of transmission was initially inadmissible and, above all, did not trigger any time limits for the employer.¹¹ The notification of an invention in writing, i.e., also signed by the inventor himself, was one of the few obligations of the inventor towards his employer. The abandonment of the written form requirement, however, takes into account the fact that nowadays communication takes place predominantly electronically. Under the new law, text form is now sufficient; however, the oral transmission of invention disclosures is still not permissible.

The so-called "claim fiction" is a further step towards adapting the ArbEG to the needs of the 21st century and is particularly noteworthy because it exceptionally strengthens the position of the employer - even if this could only be achieved because it does not worsen the position of the employee. A decisive regulation of the ArbEG (old) consisted in the fact that the employer only had exactly four months after notification of the invention to claim the invention in writing and to transfer the rights to himself. If this deadline was culpably missed - for whatever reason - the invention was automatically released and reverted to the inventor. After it had happened again and again, especially in small and medium-sized companies, that inventions had become free unintentionally due to ignorance of these regulations, the legislator had an understanding here: the rules of the game were simply turned around and now the employer has 4 months after notification to reject the transfer of the invention in writing. If there is no rejection, the transfer of rights takes place automatically after the 4-month period has expired. This has the advantage that the unintentional release of an invention reported after

¹¹ This could only be deviated from if a corresponding company agreement existed or if it was regularly accepted in a specific company that invention disclosures were not submitted in writing ("company practice").

the cut-off date October 1st, 2009 is avoided. Unfortunately, the regulation has created a new problem, which will be pointed out in the course of this essay.

All in all, this means that in the following, a distinction must be made in some relevant places between the legal situation according to the old and the new version of the ArbEG, which does not help to simplify the situation for an employer based outside Germany.

4. Obligation to report and transfer of rights

The transfer of rights from the inventor to the employer is a particularly critical phase. Let us first look at the situation under ArbEG (ov), i.e., for inventions that were reported before the cut-off date of October 1, 2009. Even if the number of cases to be judged under the old law is decreasing from year to year, they are still particularly conflict-prone and will continue to occupy the courts at least as long as protective rights exist that fall under this regulation.

4.1. Situation prior to October 1st, 2009

Every employee who has made a service invention is obliged to report it to his employer without culpable delay, and to make it clear that it is a report of an invention.¹² The employer must immediately confirm the date of receipt of the report to the employee. According to the old version of the ArbEG, an invention disclosure is considered proper if it is made in writing, signed by the (main) inventor and provides the employer with all the information he needs to file a patent application. This includes the task and solution, but also the names of the persons involved in the invention and how they contributed to the invention.¹³ This is essentially the end of the inventor's main duties.

The receipt of an invention disclosure in accordance with the rules triggers a non-extendable period of 4 months within which the employer must also declare in writing that the invention has been taken

¹² ArbEG, section 5(1)

¹³ ArbEG, section 5(2)

over.¹⁴ Two consequences are linked to this claim, namely on the one hand the obligation to file a national patent application¹⁵ and on the other hand the claim of the inventor to be adequately remunerated when using his invention.¹⁶

It is possible that an invention is reported in writing, but that its content is insufficient, for example because the task and solution are not described in sufficient detail or because information about the inventors is missing. In this case, the ArbEG provides for the so-called "objection"¹⁷ within a period of two months after receipt of the invention disclosure, which is also not extendable, the invention disclosure can be objected to and the inventor can be requested to provide the missing information. The objection suspends all further time limits, in particular the time limit for assignment.¹⁸ Here we encounter another trap for the uninformed employer: if the time limit for objection is not used, the correctness of the invention disclosure is implicitly acknowledged. This means that after the assignment has taken place, the obligation to file a national patent application exists even if the content of the invention disclosure is so poor that objectively there is no prospect of obtaining an IP right on this basis. However, to release an invention disclosure under these circumstances involves the risk that the inventor will file his own application and then, with knowledge that may have been withheld, may very well get it granted. In this context, proving that the inventor acted culpably is laborious at best after the fact.

4.2. Inadvertent Release due to Lack of Assignment

The legal consequence for a duly disclosed invention which has not been claimed in due time under the old law is that it becomes free and reverts to the free disposal of the inventor; the same applies to

¹⁴ ArbEG, sections 8(1), 6(2)

¹⁵ ArbEG, section 13(1); at least also an EP or PCT application establishing priority is considered equivalent.

¹⁶ ArbEG, section 9(1)

¹⁷ ArbEG, section 5(3)

¹⁸ If a supplemented invention disclosure is submitted after the objection, the 4-month period for claiming starts again from the date of its receipt.

such inventions which are actively released by the employer because he sees no benefit in a takeover.

Apart from these cases, however, there is another constellation which the courts - although decreasing in the future - regularly deal with: namely, lack of claim in the absence of a written invention disclosure as well. A typical example is where the inventor reports his invention only electronically or orally and the employer prepares and files a patent application on this basis without first declaring the claim in writing. At this point, one might expect that despite the lack of notification, the invention has been claimed by implied action, namely the filing of a patent application, i.e. erroneous actions of both parties cancel each other out. Unfortunately, this is not true, because although the idea seems pragmatic, it disregards the fact that the ArbEG is primarily a law to protect the rights of the employee-inventor. In fact, the legislator takes it for granted from the fact that the employer has filed a patent application that the latter has just obtained by other means all the information necessary for this purpose, to which the latter is entitled under Art. 5 ArbEG. According to the fundamental decision "Adhesive label"¹⁹ of the BGH, the 4-month period for claiming is basically first set in motion by the date of the patent application. The only prerequisite here is that the employer has also named the inventor, as this indicates that there is knowledge of the subject matter of the invention and the inventor.

In concrete terms, this means that the inventor's omission can very well be cured at the employer's expense; conversely, the employer cannot rely on implied action when making a claim. In the past, this has led to inventions being unintentionally released in these cases as well. In recent years, however, the Federal Court of Justice has modified its case law somewhat in the "Initial idea" decision²⁰ and established that further evidence is required in addition to the patent application and the naming of the inventor in order to establish that the employer was actually in possession of all the necessary information even without a written invention disclosure. This concerns in particular the information about the respective contribution of the inventors involved and how the invention came about. However,

¹⁹ BGH, 04.04.2006, X-ZR 155/03 - *Hafteticket*

²⁰ BGH, 12.04.2011, X-ZR 72/10 - *Initialidee*

even if this could lead in individual cases to the fact that corresponding inventions do not revert to the inventor, it is clear that another source of danger lurks here for the filing employer.

4.3. Situation after October 1, 2009

With the small amendment to the ArbEG, the legislator has solved the problem of the unintentional release of an invention by reversing the causality: now an invention is conversely only released if it is actively released within the 4-month period. In addition, inventions can now also be properly reported in text form, for example by e-mail, whereby a handwritten signature is no longer required. As welcome as this regulation is, it nevertheless harbors new dangers:

- Since additional persons are usually included in the copy of electronic messages, it is unclear whether these persons are co-inventors or not.
- if inventors of different origins are involved in inventions, it can easily be overlooked that for some of them written claims may very well still be required. This applies, for example, to employees with Austrian or French employment contracts.

It is also important to note that the fiction of claiming does not mean that the invention is immediately transferred to the employer upon notification, but only after the expiration of the 4 months. If the employer reports the invention in his name within this period, he is not entitled to do so from a purely formal point of view. If priority is then drawn within one year, this means, for example for European patent applications, that this was not rightfully claimed, because it may be the same invention, but the named applicant does not correspond to the originally only entitled applicant.²¹ If there has then been a prior publication in the priority period, not only is the priority date lost, but the subsequent application is also prescribed in a manner detrimental to novelty.

²¹ Art 87 (1) EPÜ

For the reasons mentioned above, it should be considered very carefully whether one really wants to rely on the assignment fiction or whether one should not consistently rely on a written claim.²²

5. Duty to compensate

The duty to allow the employee to participate appropriately in the fruits of his invention is one of the principal obligations of the employer and is regulated in Art. 9 ArbEG. The duty arises with the effective claim.²³ The calculation of the remuneration is based on the so-called "Remuneration Guidelines" which, as mentioned, date back to 1959, but in principle are still applied to this day.²⁴ The guidelines span a complex web of regulations as to when which method is to be applied and how, in particular, the factors to be used in the calculation are to be determined, so that this essay can only provide an outline of the most important regulations. To date, a calculation that will stand up to scrutiny by the arbitration board or the courts requires an expert in the field.

5.1. Methodology

The official Compensation Guidelines (comp. German „Vergütungsrichtlinien (RL) für den privaten Dienst“) which are the implementation rules for the Employee Inventors' Act offer 3 remuneration possibilities in case of internal use:

- (i) Analogy to a license (RL 6 to 10):
- (ii) Seizable Company's Benefit (RL 12) and
- (iii) Valuation

These three methods, however, are not on an equal footing. In practice, the analogy to a license which is the easiest and often most reliable method has priority as it best reflects the actually achieved economic benefits to an employer.

²² In this case, preferably with a period of 3 months, in order to also take into account regulations in other states that provide for shorter periods.

²³ ArbEG, section 9

²⁴ Higher Regional Court Düsseldorf, 2004-03-04, InstGE 4, 165, 182 (Spulkopf II)

Unlike the license which is sold to third parties on the free market, the calculation of remuneration considers the fact that the employee-inventor is not a free inventor but, as a result, owes his employer the invention which drastically reduces the license income, namely by 80 to 90 %.

5.2. Territory for calculating basis of remuneration

Basis for any claim for compensation requires that the employer must have the opportunity to obtain a monopoly for the invention and, in this case, the employee-inventor should receive a share of the monetary benefits.

This principle has one central aspect namely the causal relation between use and invention. Thus, if a turnover is achieved in a country where the employer has no (patent) monopoly, the use (i.e. the turnover) is not causally related to the property right. Accordingly, the employee-inventor is not to be participated into these turnovers.²⁵ Consequently, for calculating the compensation it is only permissible to include the turnover achieved in patented countries.

5.3. NetSales as Basis for remuneration

It complies with the customs in the free license market to regularly stipulate the NetSales prices as reference value²⁶ because the normal market royalty factors usually refer to exactly that value.²⁷ Therefore, the employer is allowed to deduct all costs and expenses which are causally connected with the use of the employee-invention from the GrossSales.²⁸ This principle has always been used even by the Arbitration Board and can be understood as well established.²⁹

However, the employer is not allowed to deduct any costs occurring such as for the development of the products in order to reduce the NetSales to the detriment of the employee. Expenses deductible are

²⁵Bartenbach/Volz, "ArbEG Praxisleitfaden", 2007, Rn 208

²⁶Federal Court of 1979-09-24, GRUR 1980, 38 – "Fullplast Verfahren"; Arbitration Board of 2008-03-11, Arb.Erf. 24/07

²⁷Arbitration Board of 2008-05-08, Arb.Erf. 26/06

²⁸Arbitration Board of 2009-01-20 Arb.Erf. 40/06

²⁹Arbitration Board of 1981-05-25 Arb.Erf. 32/78; of 1996-06-22, Com. 1996, 220-221 – "Bedienungseinrichtung"

product-related distribution costs³⁰, taxes and duties (e.g. VAT)³¹, customer benefits and packaging.³²

In case that the NetSales cannot be calculated directly, a standardized deduction between 5 to 10 % from the GrossSales is accepted by the jurisdiction as well; typical is 7.5 %.³³ Conversely, this means that the inventor has the right to request the GrossSales reduced by the flat-rate of 7,5 % in case that it happens that the NetSales and GrossSales differ by more than 10 %, unless the employer will be able to explain this.

5.4. Contributing inventions

Identifying of the basis for remuneration in case the invention and the product is identical, is of course easy. But how to proceed if the invention contributes to product that is sold only in part? In this case, according to RiLi 8 S.1, the determination of the value of the invention can be based either on the value of the entire product or only on the part affecting the value. In order to determine which parts of the device or the product are influenced by the invention, it must be examined which parts receive their characteristic character from the invention or into which technical problem areas the product is to be divided and which problem areas are influenced by the subject matter of the invention. In principle, the ArbEG refers to the smallest technical-economic unit which is characterized by the invention or which is influenced in its function.³⁴

In order to correctly determine the invention value in the sense of the Arbitration Board's decision practice, a distinction should be made between the following two scenarios:

- (a) The invention relates to a single component (e.g., the SIRNA), which is also marketed as such and for which accordingly a turnover can also be stated. In this simplest case the total turnover would then also represent the reference figure.

³⁰Arbitration Board of 2001-06-21, Blatt 2002, 230-232, left column

³¹Bartenbach/Volz, "Kommentar zur Arbeitnehmererfindervergütung", RL 7, Rn 22

³²Arbitration Board of 2008-05-08, Arb.Erf. 26/06

³³Arbitration Board of 1985-05-21, Arb.Erf. 14/84; Regional Court Düsseldorf of 2007-12-18, Az 4a O 26/98 – "Pflückvorsatz"

³⁴BGH, "Kreuzbodenventilsäcke III" GRUR 1962, 401 (13.03.1962)

- (b) The invention concerns a single component (e.g., a SIRNA), which is not sold separately, but used together with a polymer forming a vector. Perhaps the application of the vector by means of a nasal spray forms another part of the product. In this case it is to be clarified whether as reference value the net-sales or the manufacturing value of the entire product (spray) is to be taken as basis or only the manufacturing value of the invention-influencing parts (vector) or even only the manufacturing value of the individual part (SIRNA). The correct determination of the reference value is essential, since otherwise the inventor would possibly participate inappropriately in parts which he has not invented or improved.³⁵

According to the current case law, the choice of the reference figure should be based on the part of the turnover that licensing parties would normally allocate to the invention, i.e., on which turnover or invention value the license would reasonably be based.³⁶ In this context, it is generally permissible for the reference figure and the license rate to influence each other. The more extensive the reference figure, the lower the license rate will generally be; conversely, the choice of a particularly small reference figure, e.g., in the case of extensive plants or large-scale technical processes, is indicative of a higher license rate. The important feature in this determination is the concept of customary practice. If, in the relevant industry, the license rates regularly refer to the entire component, customary use is to be assumed. The same applies vice versa, i.e., if the company always concludes its license agreements in such a way that they refer to the specific inventive element.

At the end of the day, however, each invention must be viewed as an individual case, and there may be no starting point for customary practice in one direction or the other. In its decision-making practice, the Arbitration Board instead tends to determine which technically functional unit of the overall component the invention imparts the characterizing feature. This approach is therefore advisable in all cases in which customary practice cannot be determined.

³⁵ LG Düsseldorf 4. ZK. 1998, 107, 113 (13.10.1998) - *Schaltungsanordnung*

³⁶ BGH GRUR 2010 223 (17.11.200) - *Türinnenverstärkung*

The concept of the characterizing feature is not clearly defined, but can only be explained by means of examples. However, the essential questions to be examined are whether the overall device

- had to be adapted to the invention;
- would not be functional without the invention and/or
- an essential feature has been achieved by the invention.

In practice, the Arbitration Board determines the technical-patent-law impact of an invention by focusing on the technical problem or functional circle. To do this, it first divides the product into the individual technical problem areas and weights them so that 100 % results. Then it is checked to what extent the invention influences one or more of these problem areas. From this, a percentage is calculated which is to be applied to the total sales with the component as a reference value and thus results in the invention value.

Example:

A medicament contains 3 technical function circles A, B and C, which account for 20, 30 and 50 % of the product. The invention concerns A to 10 %, B to 20 % and C to 30 %. Then the percentage for determining the invention value is as follows:

$$A = 20 \% * 0,1 = 2 \%$$

$$B = 30 \% * 0,2 = 6 \%$$

$$C = 50 \% * 0,3 = 15 \%$$

In total, the invention value is 23 % of the total sales as a reference value. In principle, all values between 1 and 100 % of total sales are possible for determining the invention value.

5.5. Reduction scaling

License agreements often contain a reduction scaling of license fees going along with the sales. This is due to the fact that with increasing success, the active work of the licensee is in the foreground instead of the licensed property right. In order to create equality between free inventor and employee-inventor, even the legal guideline 11 provides such a reduction scaling as optional provision. It must be

pointed out that the reduction scaling has by far the biggest influence on the amount of the remuneration, much higher than the royalty factor or even the proportional factor.

As it is nothing but an optional provision, the inventor must always agree on its application. Since this would regularly be to his detriment and it is usually only accepted if the inventor does not know about the scope of that decision, in practice, it is common that such reduction scaling is applicable even without the inventor's agreement if such a Directive would have been common if it would have been a free invention of a third party. In this case, a double-evidence must be provided name **if** such a reduction scaling was applied and **how** this is to be achieved.

Herewith, the jurisdiction of the Arbitration Board replaced the term "customary" (comp. German „Üblichkeit“) with the term "adequacy" (comp. German „Angemessenheit“) pursuant to § 9 (1) ArbEG.³⁷ This is due to a view they still have namely that there would be no sector where a scaling is common or not common what would let the Directive lead to nothing.³⁸ The Arbitration Board has the point of view that the question whether it should be scaled or not would be up to the license market, the strength of the parties to a contract as well as the product properties.³⁹ Furthermore, the Arbitration Board agrees on the understanding that a high turnover would be due to the employer's benefits, namely to advertisement, sale, quality and the like. This is why the patent protection would remain behind increasingly.⁴⁰ In praxis, this means that the Arbitration Board makes a shift in causality in cases, where the customary cannot be evidenced: If it can be proven that the turnover is not only due to the patent protection (e.g. sharp increase in sales after the patent was granted), the scale is considered to be well founded⁴¹ such as it is generally considered in the chemistry sector⁴² as well as regarding highly promoted consumer goods⁴³ (this may also include the mint products).

³⁷ Arbitration Board of 1982-01-06, Arb.Erf. 66/81

³⁸ Arbitration Board of 1989-02-08, Arb.Erf. 88/87

³⁹ Arbitration Board of 1985-07-10, Arb.Erf. 72/84

⁴⁰ Arbitration Board of 1985-09-19, Arb.Erf. 23/85

⁴¹ Arbitration Board of 1995-06-22, Com. 1996, 220, 221 – *„Bedienungseinrichtung“*

⁴² Arbitration Board of 2003-10-21, Arb.Erf. 89/00

⁴³ Arbitration Board of 2007-09-20, Arb.Erf. 53/05

However, the jurisdiction of courts does not share this view. Following the Federal Court's decisions "Vinylchlorid" and "Copolyester I" of 1988 and 1994, in accordance with the wording of this Directive the situation is understood that way that the permissibility of scale is generally considered as present, if this corresponds to the Directive regarding free inventors in the concerned industrial area.⁴⁴ Accordingly, the regional courts as well as the higher regional court Düsseldorf still demand the evidence of customary, however, they accept the shift in causality if such an evidence cannot be provided. Deviate from the practice of the Arbitration Board, however, the scale is not used pursuant to Rule 11 by the regional courts and higher regional courts but it is replaced by a general scale which is calculated on the basis of the amount of turnover. In case of a turnover of 150 MEUR it is 25 %, for example, and in case of a turnover of 30 MEUR it is only 20 %.⁴⁵

5.6. Using the scaling table

According to Rule 11, scaling means a reduction of the royalty factor as listed in the scaling table. The higher the total sales the more decreases the royalty factor namely up to a share of 20 % in case of a total of more than 100 MDM or 51.129.188.11 EUR. In business practice, the actually achieved turnover is scaled⁴⁶ instead of the respective royalty factor for simplification purposes what mathematically leads to the same result

There is a general opinion saying that the scale would be supposed to be made every year. However, this is wrong: Rule 11 talks about a total turnover, consequently, the scale is cumulative.

The application of the scaling table is, admittedly, complex and a laymen would probably not be able to read it correctly. Moreover, it is confusing that it is still listed in the currency DM (German „Deutsche Mark“) what requires converting the currency into Euros back and forwards. The calculation of scale must be carried out according to

⁴⁴Federal Court of 1988-10-04, GRUR 1990,271,273 – Vinylchlorid; BH of 1994-05-17, GRUR 1994, 898, 9092 – Copolyester I.

⁴⁵Higher Regional Court Düsseldorf, 2004-03-04, InstGE 4, 165, 182 (Spulkopf II)

⁴⁶Arbitration Board of 1999-07-29, Arb.Erf. 16/98

the so-called *Kaube*-table (named after the former chairman of the Arbitration Board)⁴⁷ which is provided in the following:

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4
1 000 000	X 1	= 1 000 000	= 1 000 000
2 000 000	X 1	= 1 000 000	= 2 000 000
3 000 000	X 1	= 1 000 000	= 3 000 000
4 000 000	X 0,9	= 900 000	= 3 900 000
5 000 000	X 0,9	= 900 000	= 4 800 000
6 000 000	X 0,8	= 800 000	= 5 600 000
7 000 000	X 0,8	= 800 000	= 6 400 000
8 000 000	X 0,8	= 800 000	= 7 200 000
9 000 000	X 0,8	= 800 000	= 8 000 000
10 000 000	X 0,8	= 800 000	= 8 800 000
10 – 20 x 106	X 0,7	= 7 000 000	= 15 800 000
20 – 30 x 106	X 0,6	= 6 000 000	= 21 800 000
30 – 40 x 106	X 0,5	= 5 000 000	= 26 800 000
40 – 50 x 106	X 0,4	= 5 000 000	= 30 800 000
50 – 60 x 106	X 0,35	= 3 500 000	= 34 300 000
60 – 80 x 106	X 0,3	= 6 000 000	= 40 300 000
80 – 100 x 106	X 0,25	= 5 000 000	= 45 300 000
over 100 x 106	X 0,2	constant	over 100 x 106

Please note that data in the table are given in DM. For better understanding a simplified example is given in the following:

The turnover to be considered shall be 55 MDM. In column 1 you find a scaling amount of 30.80 MDM for sales until 50 MDM. There is left a surplus of 5 MDM. Therefore, the factor in column 2 for sales until 60 MDM must be applied namely 0.35 what makes 1.75 MDM. That way, a total sale of 55 MDM becomes a scaled turnover of (30.8 + 1.75 =) 32.55 MDM (equivalent to 16.64 MEUR).

⁴⁷GRUR 1986, 572-573

5.7. Patent pools

In case a product would not be protected by a single invention it would be necessary to give weight to each of the participating patents. The respective remuneration would be calculated according to the individual share of each patent within the patent pool.

5.8. Royalty factor

Identifying an applicable royalty factor is often under dispute between the parties. Basically, one should apply factors which are typical for licenses within the respective industry and for comparable products. As mentioned before, the examples for royalty factors cited in the Directives are from 1959. The Supreme Court (BGH) emphasizes that even the orientation on these figures is alarming, not to think about transmitting it. A good guidance is provided by the following book:

- Hellebrand/Himmelmann
„**Lizenzsätze für technische Erfindungen**“ (comp. to
“royalty factors for technical inventions”)
Carl Heymanns Verlag⁴⁸

In this book containing 700 pages which was published by two former chairmen of the Arbitration Board, hundreds of cases from practice of the Arbitration Board are listed together with the royalty factors which were judged to be adequate. The current one is from 2011 will be reprinted by the end of this year. The cases are sorted according to the IPC classes, i.e. here one can find an adequate royalty factor for most of the sectors corresponding to the respective product or technology.

5.9. Inventors' share of contribution

One of the employee-inventor's contributions is to inform the employer about the technical task as well as the related solution

⁴⁸(<https://www.amazon.de/Lizenzsätze-technische-Erfindungen-Ortwin-Hellebrand/>)

according to § 5 (2) ArbEG as well as to provide all relevant particulars for the development of the invention.

That includes providing information on who has participated in the invention and to which extent. Even if the law says “shall”, in practice this term is considered to mean “must”.⁴⁹ If several employees are involved in the invention, remuneration must be established for each of them separately⁵⁰. The share of each inventor to the invention is one of the information which must be provided by the inventor to the employer (amicably) so that the employer can calculate the remuneration. In case of unrestricted claiming of right to the invention, remuneration must be fixed by the employer⁵¹.

Without reliable information who has contributed to what share to an invention, employer is not in the position to calculate any compensation. Since this information can only be provided by the members of the inventive entity it is a pragmatic approach to set calculation and payment of compensation aside, unless the required information is available to set pressure on the inventors. On the other side, in case the inventors are neither willing nor in the position to come up with the needed information, employer is entitled to set the shares on his own behalf; such decision however is open for appeal. Notwithstanding the fact that it is often advantageous to set a path forward for getting remuneration it is not recommended to set the inventors share, since in case the shares need to be redistributed later a compensation that is once paid under wrong conditions cannot be reimbursed later.

5.10. Personal Share Factor

With the personal share factor (RL 30 to 37), it is considered that the employee-inventor is not be handled like a free inventor. Although that factor has the lowest influence on the remuneration, discussions about the value numbers are mostly lead very emotionally. The calculation is separated into the regulations of the following three partial factors:

- (i) Defining the problem to be solved (RL 31)

⁴⁹Federal Court, GRUR 2003, 702ff – “Gehäusekonstruktion”

⁵⁰ Art. 12(2) ArbEG

⁵¹ Art. 12(3) ArbEG

- (ii) Solution to the problem (RL 32) and
- (iii) Duties and position of employee in the company (RL 33).

The value numbers determined that way must be added and can be transformed into a percentage with the help of the conversion table (RL 37).

Provided that according to the Arbitration Board's experiences, the average proportional factor is between 10 and 25 %⁵², in exceptional cases 30 %⁵³ and on average 15 to 18 %.

5.10.1. Defining the problem (Value number a)

For determining the setting of the task, RL 31 differentiates between 6 situations. Thus, the employee has been brought to the invention:

1. because the company has set him an object while directly specifying the method of solution applied (1);
2. because the company has set him an object without directly specifying the method of solution applied (2);
3. without the company setting him an object, but through knowledge of the shortcomings and requirements gained as a result of belonging to the company, if the inventor has not realized these shortcomings and requirements himself (3);
4. without the company setting him an object, but through knowledge of the shortcomings and requirements gained as a result of belonging to the company, if the inventor has realized these shortcomings and requirements himself (4);
5. because he has set an object himself within the field of his duties (5);
6. because he has set an object himself outside the field of his duties (6).

Therefore, you differentiate between an operating setting of objects (groups 1 and 2), inventions bought through operational knowledge (groups 3 and 4) as well as own settings of object (groups 5 and 6).

⁵²Arbitration Board of 2003-07-15, Arb.Erf. 23/02

⁵³Arbitration Board of 2007-05-25, Arb.Erf. 23/05

5.10.2. Support for solving the problem (Value number b)

This value number considers the extent of mental and material help of the company when solving the technical problem. That means the company support on the way of solution of the technical doctrine. There are three situations:

1. the solution is found by means of reflections familiar to the inventor professionally;
2. it is found on the basis of company operations or knowledge;
3. the company supports the inventor with technical assistance.

If all these criteria are present in an invention, then the invention is given the value number 1 for the solution to the set object; if none of these criteria are present, then it is given the value number 6. If some of the three criteria listed are realized in the invention, then it is given a value number between 1 and 6 for the solution to set the object.

5.10.3. Position in the company (Value number c)

The third value number considers whether the employee-invention took place in implementing the object set by the employer or whether it significantly exceeded the typical expectations going along with his assigned position.⁵⁴ The less the invention corresponds to the employer's performance expectations in terms of kind and inventive activity the closer the employee inventor comes to a free inventor. Therewith, RL 33 differentiates eight groups:

- 8th Group: This includes employees who essentially have no prior qualification for the activity carried out in the company (e.g. unskilled workers, auxiliary workers, semi-skilled workers, apprentices) (**8**).
- 7th Group: This group includes employees who have received technical craftsmen's training (e.g. skilled workmen, laboratory assistants, fitters, draughtsmen), even if they are already entrusted with lower supervisory duties

⁵⁴ Arbitration Board of 198-02-06, BIPMZ 1987, 362, 363, right column

(e.g. supervisors, sub-foremen, shift foremen, gang foremen). It is generally expected of these persons that they carry out the work entrusted to them with a certain degree of technical understanding. However, it should be taken into account that this professional group is not generally expected to solve technical objects relating to design or processes (7).

6th Group: This includes persons who are employed as lower company management staff (e.g. foremen, chief foremen, works foremen) or have received a slightly more advanced technical training (e.g. laboratory technicians, technicians). It is generally expected from these employees that they make proposals for rationalization within the field of their duties and contemplate simple technical innovations (6).

5th Group: This group includes employees who have received an advanced technical training, whether at universities or at technical universities, or whether at higher technical institutes or in engineering or corresponding specialist colleges, if they work in production. These employees are expected to have a keen technical interest as well as the ability to solve certain set objects relating to design or process (5).

4th Group: This includes those acting in a managing capacity in production (project leaders, e.g., engineers and chemists, who are in charge of other engineers or chemists) and engineers and chemists working in development (4).

3rd Group: This group includes managers of an entire production group (e.g., technical heads of department and works managers) in production, project managers of design offices and development laboratories in development, and the engineers and chemists in research (3).

2nd Group: This is allocated to the managers of development departments and the project managers in research (2).

1st Group: This top group includes the managers of the entire research department of a company and the technical managers of larger concerns (1).

5.10.4. Calculation of the rate of share

The personal rate of share is to be calculated with the help of the conversion table pursuant to RL 37 as follows:

S	03	04	05	06	07	08	09	10	11
A	1	4	7	10	13	15	18	21	25

S	12	13	14	15	16	17	18	19	20
A	32	39	47	55	63	72	81	90	100

The legend of this table is as follows ($S = a+b+c$):

- a = value numbers resulting from the setting of the object
- b = value numbers resulting from the solution to the set object,
- c = value numbers resulting from the duties and position in the company,
- A = rate of share (share of the employee in the value of invention as percentage).

For example, the sum for the value numbers ($a+b+c$) would sum up to 8 this would be equivalent to a rate of share of 15 %.

5.11. A look over the edge

It is a misconception that the far-reaching rights of the inventor, especially with regard to his compensation, are a special feature limited to Germany. Even if it is certainly true that German employee invention law is very detailed and the Arbitration Board and the courts up to the Federal Court of Justice have provided for extensive case law, comparable regulations can be found practically everywhere in the world. The situation in Japan and China, for example, is very similar, since both have borrowed from German law. Likewise far-reaching regulations for both the transfer of rights and

remuneration can be found in Europe, for example in France, Spain, Italy and Austria. Surprisingly, the situation is completely different in the Netherlands.

Other exceptions are countries with an Anglo-Saxon legal culture, such as Great Britain⁵⁵, the USA or India, and, to a lesser extent, Australia. In these countries, the personal rights of inventors are protected, but no remuneration is granted.

⁵⁵ In Great Britain, a claim to inventor's compensation exists only if the patent protection is of overriding importance for the economic success. The conditions under which this is the case are left open by the case law. To date, only one decision is known in which inventors have been awarded compensation on their complaint (KELLY vs. GE HEALTH CARE [EWHC 181 (Pat), February 11, 2009]).