

# **The Scope of Art. 69 European Patent Convention: Should Sub-combinations be protected ? - A Comparative Analysis on the Basis of French and German Law.**

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## A. French Law

### I. Introduction

As of the beginning of 1993, with the entry into force of a number of regulations intended to create the uniform Common Market many areas of law, also in the field of industrial and intellectual property, have been harmonized - at least formally and on paper

Patent law is an area which had been harmonized already to a great extent as to the granting procedure, on a national level and through the European Patent Convention. However, patent law lacks harmony when it comes to the enforcement of rights, since the entire infringement law is still in the hands of national judges without any possibility to appeal to European instances in case of divergent decisions on the interpretation of identical legal provisions.

One of the central problems of patent infringement is the determination of the scope of protection of patents granted. Although a European rule exists, Art. 69 EPC and its Interpretation Protocol, the application of this provision in the national courts is far from being uniform<sup>1</sup>. In France a discussion has been going on for some time already on a topic which is of great significance in this context for the determination of the scope of protection of French patents as well as for the interpretation of Art. 69 EPC.

The problem concerns what is called in French patent law "contrefaçon partielle" (partial infringement), and the confusion which seems to have arisen is due on the one hand to allegedly controversial court decisions and, on the other hand, a lack of agreement in the literature on the meaning of "contrefaçon partielle".

### II. The discussion in the literature

1. The discussion started with a decision of the French Supreme Court<sup>2</sup> which several authors severely criticized<sup>3</sup>, whereas the decision was regarded as justified by Mathély in a note<sup>4</sup> and in his latest book<sup>5</sup>. The decision concerned a patent for a fixing device of a windshield wiper. The

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<sup>1</sup> Cf. the diverging decisions in the different "Epilady" cases: OLG Düsseldorf, 21 IIC 572 (1990); Gerechthof te Gravenhage, 21 IIC 586 (1990); Patents Court, 21 IIC 860 (1990).

<sup>2</sup> Marchal vs. Journée, 1988 Annales 117

<sup>3</sup> J.P. Martin, 1987 JCP 636; Mousseron, Dossiers Brevets 1987 III 1; Vigand, Mélanges Paul Mathély, 339; Chevallier, 1989 RDPI 23

<sup>4</sup> Mathély, 1988 Annales 117

<sup>5</sup> Mathély, *Le Nouveau Droit Français*, 1991, at 417 et seq.

facts of the case as they can be found in the decision of the Court of Appeals of Paris, as the second instance, can be summarized as follows: The defendant had admittedly infringed claim 15 which was a dependant claim referring back to one of the claims 1 to 14. Of claim 5 the defendant only had reproduced one of two features, as well as the preamble of claim 1. The Court of Appeals had denied an infringement, which decision was regarded as legally erroneous by the Supreme Court with a very short reasoning as is usual in French practice, which held that the Court of Appeals had not examined whether a partial infringement was given; it therefore remanded the case to another Court of Appeals.

2. Mathély, in his comment to the decision of the Supreme Court, and later in his book, starts from the general assumption that nowhere in the law can one find a rule that an infringement is only given, if all features of a combination claim are used by the infringer. According to Mathély one must distinguish between "combination" claims in the strict sense and so-called "complex" claims. He understands by a combination claim a claim in which all features work together in order to achieve the inventive result, or where at least it was the intention of the patentee to ask for protection in the form of the entire combination only. In a so-called complex claim the different elements keep their individual function, do not work together in order to achieve the inventive result and could in principle be used separately. The definition corresponds therefore to the former "juxtaposition" (aggregation) of French case law<sup>6</sup>.

Mathély is of the opinion that partial protection should be limited only to such complex claims, where the elements are only accidentally combined together. He criticizes such a claim as misdrafted. His argument is that even with the best effort of patent attorneys in drafting claims they often either contain unnecessary elements<sup>7</sup> or additional solutions which may be useful, or even contain a separate invention, and where the core of the invention can be infringed without necessarily accomplishing every single feature. Such a claim, in contrast to a real combination claim, does not provide any synergistic effect which goes beyond the sum of its individual features. A fair compensation of the inventor requires according to Mathély that the use of each of such elements, also separately, is regarded as an infringement in the form of partial infringement<sup>8</sup>. His arguments sounds convincing that if nothing is added to a claim and the description is sufficient to understand the individual function of each element, one is still within the limits defined by Article 69 EPC.

He gives a concrete example, a claim describing the assembly of three hairdryers mounted on a frame and working together in a specific way; each separate dryer has specific characteristics which are described in detail in the claim. Mathély argues that if somebody uses one of the dryers with the characteristics of the claim as a hand-dryer instead of the dryer being mounted on a frame, such use would constitute partial infringement.

3. J.P. Martin, who had already criticized the decision of the French Supreme Court in a first article, also criticizes Mathély's comment<sup>9</sup>. In a more recent article the same author summarizes

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<sup>6</sup> Cf. Emig, Les problèmes de la contrefaçon partielle de brevets en droit français, Diss. Paris 1990, at p.41, 42.

<sup>7</sup> Already for the reason that the inventor normally does not know the entire prior art when drafting the claims, cf. also Kraßer, 23 IIC 467, 472 (1992)

<sup>8</sup> 1988 Annales 119

<sup>9</sup> Martin, RDPI 1989, 15

his views and comes to the conclusion that the granting of protection to any form of sub-combination, also in the form of a complex claims<sup>10</sup>, constitutes a violation of the legislative intent when introducing mandatory claims in 1968<sup>11</sup>. The same goal allegedly was intended by Art. 69 EPC and the Interpretation Protocol which he obviously wishes to interpret as clearly disallowing the protection of sub-combinations<sup>12</sup>. In this context he severely criticizes the more lenient attitude of the Paris courts and the French Supreme Court as allegedly "ruining legal security"<sup>13</sup>.

4. Le Tallec had already in 1986 taken the view that in a case of a combination with a number of features the judge could arrive at the conclusion that each deserves separate protection, so that already the reproduction of one single feature constitutes an infringement<sup>14</sup>. This statement is however even contradicted by Mathély as being not in conformity with Art. 69 EPC and its corresponding French provision of Art. L.613-2. Mathély and Emig seem to rely here on a resolution of the AIPPI in 1980 when Mathély was still its Reporter General, where it was clearly stated with respect to Q 60 that a combination claim "shall not provide independent protection for separate features of the combination"<sup>15</sup>.

### III. The Case Law

In view of this discussion it is worthwhile examining some of the French decisions which are quoted as controversial by the different authors. It is also alleged<sup>16</sup> that there is a divergence between the generally more liberal opinion of Mathély and some of the court decisions.

#### 1. Ste H.K. Industries vs. Ste Fichet-Bauche

This decision of the Court of Appeal of Paris<sup>17</sup> concerned a key and lock system with a number of claim features. Among others, the key was characterized by an uninterrupted longitudinal edge on the top of the key which was used as a guiding means, and a flat edge at the end part of the operational part of the key between this part and the key ring; this flat edge was to prevent that

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<sup>10</sup> Martin, 1992 RDPI 22; his argument with respect to complex claims is that if courts start to dissolve claims consisting of a number of elements and to examine them separately, they would try to do the same for the examination of inventive step.

<sup>11</sup> With similar arguments Vigand, *Mélanges Paul Mathély*, 339 et seq. who regards the protection of sub-combinations as a violation of Art. 28, now Art. L.613-2 of the French Law; a summary of the former legal opinion in French literature is presented by Czekay, 1985 GRUR Int. 147, 155 et seq.

<sup>12</sup> One has the impression that legal security is regarded by some French authors as a value of its own which supercedes equity rules and the interests of the inventor, since similar arguments have been raised in France against the proposed introduction of a grace period.

<sup>13</sup> 1992 RDPI 26

<sup>14</sup> See the citation by Emig, loc.cit. at 20; cf.also Le Tallec, 20 IIC 385 (1989).

<sup>15</sup> *Annuaire AIPPI* 1981, 244

<sup>16</sup> See Emig *ibid.* at 23.

<sup>17</sup> 1990 *Annales* 114

the key entered into the lock deeper than necessary to rotate.

The defendant had used the longitudinal edge, but had interrupted it by a short cut. In addition the flat edge at the end of the key was replaced by three smaller pieces which fulfilled the same function to prevent the further entry of the key. The Court regarded the feature of an uninterrupted ridge or edge as missing, but since it had no functional interaction with the other features this fact, according to the Court, could be disregarded. With respect to the second feature, it regarded the splitting of the one edge into three pieces as an equivalent which fulfilled the same function with a somewhat inferior result. An infringement was therefore affirmed.

In a comment Mathély regarded this decision as a confirmation of partial infringement<sup>18</sup>. The Court however did not use this term, and in view of the facts as explained before, one could very well argue that the interruption of the ridge constituted, like the modification of the other feature, a substitution by an equivalent and not a total omission of this feature. Therefore, this decision does not necessarily confirm the protection of sub-combinations in the normal understanding of this principle.

## 2. Stork Brabant vs. Meyn<sup>19</sup>

The patent at issue concerned a machine for the treatment of intestines with three operational steps

- separation of the gesier(...) and the intestines
- the cutting of the gesier(...)
- the cleaning and peeling for its preparation into edible form.

The defendant's machine provided also for the separation of gesier and the intestines. The machine also had means for cutting the gesier, although the transportation for the cutting process occurred somewhat differently than in the patent.

Finally, the third step, namely the cleaning and peeling was also accomplished by the machine of the defendant, however with means of the prior art and not those contained in the patent claims. The Court counted two features as fulfilled and granted the injunction. The term "partial infringement" was not used by the Court<sup>20</sup>.

## 3. Viguerie vs. Argiles<sup>21</sup>

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<sup>18</sup> Mathély, 1990 Annales 114, 115; similarly J.P. Martin, 1991 RDPI 6, 8

<sup>19</sup> TGI Paris, PIBD 1986, III-247

<sup>20</sup> The evaluation of the facts under rules of equivalence would lead to the conclusion that in fact this was not a case of the protection of a sub-combination, since also the third feature was given, and it would therefore have been appropriate for the Court to examine whether the exchange of this third feature by a solution already contained in the prior art would have to be regarded as an equivalent. Emig, loc.cit p. 19, however regarded this decision as the most liberal in favour of the protection of subcombinations; cf. also Vigand, Mélanges Paul Mathély, 339

<sup>21</sup> Court of Appeals of Paris of October 27, 1988, 1989 PIBD, III-74

The patent concerned a cement mixture for the making of a special kind of concrete which consisted of four specified ingredients with very precise indications of weight percentages.

The infringer had used the same ingredients but partly far outside the weight indications claimed. The Court decided that in particular with respect to the prior art which disclosed the use of three ingredients without, however, the same indications as to percentages as the patent, an infringement can only be affirmed if the infringer is also working within the limits contained in the claim. Since three of the elements were known in the prior art the claims must be interpreted narrowly, and the argument of the patentee that the use of only two features would be sufficient to affirm an infringement, had to be rejected. The Court expressly said that

- a patentee who has claimed a combination of four elements, cannot choose two of them and ask for partial protection which he could have done when filing the application; he is bound by his initial choice<sup>22</sup>

#### 4. Surepack Industrie vs. Oceanic<sup>23</sup>

This case concerned a packing machine for goods to be transported in folding cardboard boxes. One of the main features of the machine was that the merchandise to be packed was transported by the machine to a place where the unfolded cardboard box was put over it from above. In a further step, the machine closed the upper and lower opening of the box. The fact that the merchandise never changed the level, i.e. was transported only horizontally, was mentioned in the specification as "an extremely important advantage" over the prior art.

In the trial it turned out that the seizure which normally starts every infringement action and the description of which constitutes in practice the most relevant proof of infringement in France, did not say anything about how the merchandise of the infringer was transported during the operation of the machine. To the contrary the seizure protocol talked about "a somewhat higher platform" on which the box received the merchandise. The Court expressly criticized that no photographs were added to the protocol of the seizure.

Without citing the specification and the fact that the respective feature had been expressly characterized as extremely important, the Court simply concluded that one feature of the main claim was not proven, and it dismissed the action.

#### 5. Dolle vs. Emsens<sup>24</sup>

The patent concerned a machine and process for placing small pieces of meat on a barbecue stick(...?). The Court found that one of the features, namely a tray for receiving the meat which moved with the process of meat fixing (embrochage), was missing, as well as the means for causing the movement. Also pressing elements for the meat had been omitted, nor were there features present which could have been regarded as an equivalent to the missing ones.

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<sup>22</sup> It may be doubtful whether this reasoning is in conformity with Art. 69 EPC, however the result reached is certainly correct. It is difficult however to perceive this decision as a rejection of partial protection as Martin suggests, see 1991 RDPI 6, 7

<sup>23</sup> TGI Paris 1990 PIBD II-543

<sup>24</sup> Court of Appeals of Paris 1991 PIBD III-2

The Court found that the patentee had formulated the claim as a combination claim, and although one of the elements, namely the tubes which contained a die was novel and non-obvious, the patentee could have claimed this element separately but had not done so. The Court found that

- partial protection can only be considered in case of the use of an essential element of a complex claim and not of an element of a combination of means.

This decision was favorably commented upon by Mathély for its clear distinction between the partial use of a "complex claim" and a claim of a combination of means. Only in the first case, in taking over an essential element, could a partial infringement be affirmed according to Mathély<sup>25</sup>  
<sup>26</sup>.

6. There are a number of similar decisions concerning combination claims which are cited by some authors as examples for and against the partial protection. However, like in the above cited cases those decisions either (correctly) deny the protection of a sub-combination in the given situation without rejecting this doctrine generally<sup>27</sup> or concern questions of equivalence in the general sense, i.e. the replacement of features by other means which is not directly connected with partial protection. The decisions therefore examined primarily whether the conditions of equivalence are fulfilled<sup>28</sup>. Nevertheless, these cases are partly interpreted in the literature<sup>29</sup> as confirming the protection of sub-combinations.

Several authors who criticize the liberal attitude of the French courts<sup>30</sup> refer to the German and also to the European practice which shall therefore be presented hereafter.

## **B. German Law.**

### **I. General**

Contrary to what one might assume when following the discussion in France, the problem of so-called partial protection or the infringement by sub-combinations is not unknown in other countries, and it is neither surprising that courts in other countries have also admitted the

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<sup>25</sup> 1990 Annales, 235, 237.

<sup>26</sup> One can certainly agree that under general standards of equivalence, in particular under the Interpretation Protocol of Art. 69 EPC, the decision is correct. J.P. Martin, in his commentary, 1991 RDPI 6, 10 however seems not to distinguish between element protection and the omission of individual elements, and it is therefore surprising that he equates this case with the "key" case (Fichet-Bauche), where it was a matter of simple exchange, not of omission of features.

<sup>27</sup> E.g. Tribunal de Lyon in the case Beaumont 1991 PIBD 497, III-193 only demonstrates the limits of partial protection and does not reject the doctrine generally; contrary view J.P. Martin, 1991 RDIP 6, 9

<sup>28</sup> E.g. both instances affirmed an infringement in the case ACEC v. Applimo, Court of Appeals of Paris of November 19, 1982, aff'd French Supreme Court of January 3, 1985, 1985 Annales 98 and 101 respectively, where the defendant had added and improved features of the claim which were even inventive as such but still fulfilled the functions of the inventive idea.

<sup>29</sup> Emig, *ibid.* at 29.

<sup>30</sup> J.P. Martin, 1991 RDPI 15; Vigand, *Mélanges Paul Mathély*, p. 341; Emig, *ibid.* p. 56.

necessity for a protection going beyond the wording of the claim, since otherwise infringements would be facilitated and the scope of protection reduced to a degree which would be intolerable if one wants to ensure a fair compensation for the inventor<sup>31</sup>.

The following presentation will show that in the patent field German law comes very close to a case law practice in which a system of precedents has been developed which is surprising for a civil law country, where the courts normally rely on statutes and which does not have any case law tradition. This does not mean that German case law in this area is unpredictable. It means, however, that each individual case requires special attention, and experienced attorneys and judges to handle it. It also does not mean that the Supreme Court makes a decision without rules and guidelines. They are however more refined and subtle on a case by case basis, and leave room for exceptions where the facts ask for them<sup>32</sup>.

In this context it is worth mentioning that the German Federal Supreme Court with its 10th Senate, the Patent Chamber, handles nearly 100 patent cases per year in nullity, infringement and granting as well as opposition proceedings, a number which is probably unmatched worldwide for a last instance court in this very special field of law. These enormous numbers of patent cases and the traditionally long experience which judges in patent law receive, explain that the German courts and, in particular the Supreme Court, have by far more opportunities to develop rules on the basis of the variety of cases which are being heard than courts in other countries.

## II. The former case law of partial protection

1. In Germany the question discussed in France is dealt with under a very similar heading, namely "patentrechtlicher Teilschutz" (partial protection of patents). Under German law three different cases of partial protection were distinguished, namely the so-called element protection (Elementenschutz), the protection of sub-combinations (Unterkombination) and as a special case of sub-combinations the so-called over-claiming (Überbestimmung)<sup>33</sup>.

The courts have affirmed the protection of a sub-combination, in particular where the feature which the infringer did not accomplish constituted part of the prior art, so that the new and inventive features were all present<sup>34</sup>. Some decisions emphasize that a partial infringement in the form of a sub-combination is given where only self-evident and economically useful elements have been omitted by the infringer which the user would be able to complete without

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<sup>31</sup> For German law see Bruchhausen, 5 IIC 253 (1974); id. 20 IIC 341 (1989); König, 1991 Mitt. 21, 25 with further references to case law; for English law see Beton, 1992 Mitt. 189,190; Turner, 1992 EIPR 181; for Austrian law Holzer, Mitt. 1992, 129; for Dutch law Brinkhof, 22 IIC 908, 911 et seq. (1991), also decision of the Hoge Raad 23 IIC 529 (1992) - Extraction Device with comment by Ruijsenaars; for US law see Hantman, 72 JPOS 454, 511 (1990); id. 70 JPOS 511, 521 (1988); Nieman, 70 JPOS 153 (1988); Adelman/Francione, 173 Univ.of Pennsylvania Law Rev. 673 (1989); Gatto, 73 JPOS 61 (1991).

<sup>32</sup> French authors like J.P. Martin, 1992 RDPI 22, seem to prefer more rigid rules, even if they are as a result unequitable with respect to the inventor.

<sup>33</sup> See in detail Benkard/Ullmann, Patentgesetz, § 14, note 141 et seq.; König, 1991 Mitt. 21, 27

<sup>34</sup> BGHZ 73, 40, 45 et seq.- Aufhänger; for further case law cf. references cited by Benkard/Ullmann, § 14 note 143.

difficulties<sup>35</sup>.

2. A special case of the protection of sub-combinations is dealt with by German courts under the heading of a so-called "inferior solution" which means that by omitting a feature of the claim the result achieved does not reach the same quality as the invention. The question is whether nevertheless an infringement can be affirmed. Early court decisions have found a definition which requires that the effect of the invention must be achieved "to a practically significant extent" as <sup>36</sup>. The former German law only occasionally made a distinction between essential and non-essential elements<sup>37</sup>, but mostly examined whether it was obvious to a person skilled in the art to achieve the same result with less features than contained in the patent claim<sup>38</sup>.

### III. The Situation under the Patent Act of 1981

What are the rules for partial protection and in particular with respect to sub-combinations under German law after its harmonization with the Munich Patent Convention ?

1. A first remark must be made here for all those who might fear that Germany is still living under the system of the "general inventive idea" which, similarly as the practice under the French law of 1844, allowed the patentee to ask for protection by the courts with a claim, which he could change and extend on the basis of the specification and with knowledge of the infringing subject matter<sup>39</sup>.

This era of a very generous interpretation of patent claims is definitely over with the implementation of Art. 69 of the Munich Patent Convention. As will be shown below, the German Federal Supreme Court has whole-heartedly accepted the new law by affirming that a strict interpretation is required by the new text of Sect. 14 Patent Act, which is identical with Art. 69 EPC. It also confirmed that the Interpretation Protocol of Art. 69 is equally applicable for the interpretation of national patents, although its text has not been expressly included into the German Patent Act<sup>40</sup>.

2. A number of authors, among them also Justices of the Patent Chamber of the Federal Supreme Court, have discussed the influence of Art.69 EPC on the protection of sub-combinations in Germany.

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<sup>35</sup> BGH 1971 GRUR 78, 80 - Diarähmchen V; BGH 1977 GRUR, 250, 252 - Kunststoffhohlprofil.

<sup>36</sup> BGH 1955 GRUR 139 - Eiserner Grubenausbau; Reimer, 1977 GRUR 384; Ballhaus/Sickinger, 1986 GRUR 337, 340.

<sup>37</sup> BGH 1961 GRUR, 409, 411 - Drillmaschine; the same rule was partly applied in English law, see Beton, 1992 Mitt. 189, 190, 198, 200

<sup>38</sup> See Ballhaus/Sickinger 1986 GRUR 337,340; see details on former law Winkler, 10 IIC 296 (1979).

<sup>39</sup> Emig, loc.cit. p. 56 et seq., gives a short comparison between the former German and French law; cf. also Report of the German group of AIPPI concerning Q 60 in Annuaire 1980/II, 4.

<sup>40</sup> BGH 1989 GRUR 205 - Schwermetalloxidationskatalysator

a) Bruchhausen, the Presiding Judge of the Patent Chamber of the Federal Supreme Court, in a comparative law article of 1974, had already confirmed that the then newly introduced European interpretation rules do not necessarily abolish the principle of the protection of sub-combinations<sup>41</sup> by emphasizing at the same time that claims are no longer mere guidelines and that the requirement of legal security "defines the limits of partial protection". He refers to decisions in other European countries, including France, which had confirmed infringement in cases where the infringer had omitted a feature of a combination claim. Bruchhausen pointed out, however, that there was no uniform principle of how to treat such cases, some courts distinguishing between essential and non-essential features, others using a kind of abstraction principle like Germany for which such a distinction was of less importance. He already indicated then that in view of the intended European harmonization courts should not try to adhere too much to their national principles<sup>42</sup>.

One sentence of Bruchhausen which sounds as if the author had foreseen the present discussion in France:

*Theoretical discussions often refer to the case where the patent claim defines the invention by means of features A, B, C, and D and where the defendant is using features A to C but not feature D. The problem cannot be solved arithmetically<sup>43</sup>.*

According to his opinion there might be cases where the inventor should have claimed not only ABCD, but also ABC, but there could also be cases where D is an insignificant feature or, although significant, becomes superfluous only because the infringer modifies features ABC to an extent that the inventive result is achieved without D. Such situations, as Bruchhausen correctly points out, can seldom be foreseen when drafting the claims, and it therefore is the task of the courts to grant adequate protection. His arguments are very similar to those of Mathély and the following citation could be used as a guiding line in the discussion on sub-combinations, namely that

*"Human fantasy does not suffice to already forecast at the granting stage the multitude of questions which arise later at the infringement stage and which may be relevant for the definition and limitation of the scope of protection of patents, since nobody is able to predict the many different possibilities which an invention offers for its use, development and circumvention"<sup>44</sup>.*

b) Beier<sup>45</sup> warned in 1973 against a too rigid approach at an International Colloquium in Nice where he summarized the discussion in his Rapport de Synthèse with respect to French law by indicating that after a long period of legal uncertainty in a system without claims one can understand that some people wish to see stricter rules to be applied. One should however avoid the pendulum to swing too much to the other extreme. Citing Bruchhausen from a speech given in Munich in 1973 who had announced that the Federal Supreme Court would not be ready "to

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<sup>41</sup> Limits of protection Bruchhausen, 5 IIC 253, 270 (1974)

<sup>42</sup> Bruchhausen IIC.. p. 9.; id.1988 GRUR, 8 IIC ?

<sup>43</sup> Bruchhausen, 5 IIC 253, 270 (1974); Benkard/Ullmann § 14, note 144.

<sup>44</sup> Bruchhausen..IIC, 1974 GRUR Int. 1, 4; in the same sense Kraßer, 23 IIC 467 472 (1992)

<sup>45</sup> Similarly also the former Swiss law, which Beier already presented as a model in his "Rapport de Synthèse" on the International Colloquium in Nizza in 1973 (unpublished).

sacrifice the inventor on the altar of legal security", he favored a middle way which anyway was the intent of Art. 69 EPC and its Interpretation Protocol. He expressly favored the French and Swiss approach of the "essential elements" for the question whether protection can be granted if features of a claim have been modified or omitted.

c) In a more recent article<sup>46</sup> Bruchhausen confirms that the protection of sub-combinations has always been part of the German law and that the majority of voices in German literature are of the opinion that also under the new law Art. 69 EPC does not hinder an interpretation which goes beyond the wording of the claim. Bruchhausen recognizes realistically that one cannot assume that patent claims, when they have received the blessing of the Examiner, i.e. are granted as patentable by the Patent Office, do not contain any inconsistencies, and do not contain any unnecessary features or elements<sup>47</sup>.

d) Von Falck is of the opinion that although an incomplete use of the invention in the sense of an inferior solution is no longer covered by the "terms of the claim"<sup>48</sup>, under the requirements of equivalence an infringement can still be affirmed<sup>49</sup>. This means that the so-called "Formstein doctrine" is applicable, and the defendant can raise the objection that his embodiment only makes use of the prior art or that it would not have been patentable over the prior art and therefore falls outside the scope of protection. Von Falck affirms, however, that the terms of the claims would still be used if a new advantageous compound was mentioned as a claimed feature, but the inventor uses a cheaper mixture for the new material.

In a former article v. Falck and Ohl had stated that the protection of sub-combinations must be understood as the use of the subject matter of the invention itself and that no deliberations about equivalence are necessary<sup>50</sup>. Also Ballhaus, the former Presiding Judge of the Patent Chamber of the Federal Supreme Court argued that if certain features are absolutely unnecessary for the technical solution, a case which as mentioned before is called "over-claiming" (Überbestimmung), this is not a question of sub-combination or partial protection, but of identical use, since partial protection presupposes that the missing element or feature at least contributes to a certain extent to the inventive solution<sup>51</sup>. If, however, the Court has determined that a feature does in fact contribute to the solution, the evaluation as to whether the protection of a sub-combination can be affirmed should depend on the importance and relevance of the

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<sup>46</sup> 1989 GRUR Int. 468, 471, English translation 20 IIC 341 (1989).

<sup>47</sup> Lewinsky, 1990 Mitt. 79, 80 also underlines that a patent attorney cannot be a "clairvoyant" who can foresee the manifold forms of infringement which may later occur so that the claims as granted should not be interpreted restrictively - also with respect to partial protection; the same view by Bardehle, 1992 Mitt.133, 136.

<sup>48</sup> Festschrift 100 Jahre GRUR at 477.

<sup>49</sup> Cf. the somewhat different reasoning by Krieger 1980 GRUR 683, 684; in favor of protection also König, 1991 Mitt. 21, 25, who however does not regard a "considerably inferior solution" as still covered by the scope of the claim.

<sup>50</sup> Von Falck and Ohl, 1971 GRUR, 541, 544

<sup>51</sup> Ballhaus/Sikinger, 1986 GRUR 337, 340; similarly von Falck, Festschrift GRUR, p. 543, 573 et seq.

features used<sup>52</sup>.

e) Other German authors who deal with the interpretation of Art. 69 EPC<sup>53</sup> argue also in favor of exploiting the full scope of the limits of Art. 69 EPC and to grant the infringement judge a broad discretion of interpretation. This discretion is only limited in two ways, by the wording of the claim, its absolute scope of protection, and its relative scope as it is defined in Art. 69 EPC and more precisely in the second sentence of its Interpretation Protocol, i.e. the principle of legal security. They underline that it is the aim of Art. 69 to reach an interpretation which takes into account the interest of the inventor in a reasonable compensation in exchange for the disclosure of its invention.

The above voices from the literature, including those of members of the Supreme Court's Patent Senate, can be summarized that they have been unanimous, in clear contrast to French authors, in favoring the protection of sub-combinations, already before the first court decisions had been handed down under the new law. In view of the generally favorable attitude of the German courts with respect to patents one could in addition expect a fair protection of patentees also under the new rules. The first decision of the Supreme Court had therefore been expected with great interest.

3. A review of cases decided by the Federal Supreme Court does not permit a final answer to the question examined here, however allows reliable predictions as to the future practice in this field.

a) Several decisions of the Supreme Court (BGH) under the new law make it clear that the principles developed in cases of exchange of features (equivalency) will also be applied when features of combination claims are lacking<sup>54</sup>. In the "Formstein" case, which today is considered a landmark decision, the Federal Supreme Court had a first opportunity to confirm that under the new interpretation rules the protection of a claim extends beyond its wording to include also equivalents. The test applied by the Court was that the allegedly equivalent solution must be derived from the invention as described in the patent claims, on the basis of deliberations of the person skilled in the art which he is able to recognize as equivalent with the aid of his knowledge in the field<sup>55</sup>.

With respect to combination claims the BGH uses a very similar test by asking whether the allegedly infringing combination of features can be derived by a person skilled in the art from the claims of the granted patent, and whether the skilled person was able to recognize the equivalent

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<sup>52</sup> It is interesting to note that German authors and the Supreme Court expressly derive this distinction between essential and non-essential elements of a claim from French law; cf. Ballhaus/Sikinger, 1986 GRUR, 337, 340; Krieger, 1980 GRUR 683, 684, quoting expressly Mathély in his book of 1974, p. 581; Bruchhausen 5 IIC 253, 270 (1974); see also Winkler who, by citing Beier's Rapport de Synthèse, supra note 44, mentions that also the Swiss, British and Italian law follow the same rules.

<sup>53</sup> Dreiss, 1977 Mitt. 221, 227; Rupprecht, Mitt. 1991, 235; König, Mitt. 1991, 21; Benkard/Ullmann § 14 note 141.

<sup>54</sup> BGH 1991 GRUR 444 - Autowaschvorrichtung, English translation 23 IIC 120 (1991)

<sup>55</sup> GRUR 1985, 803, 805 - Formstein, English translation 18 IIC 795 (1987)- Moulded Curbstone with comment by Geissler

effect on the basis of his knowledge and without creative activity<sup>56</sup>.

In a later decision the rule was further defined as follows

*the person skilled in the art based on ideas deriving from the meaning of the content of the invention defined in the patent claims, was able, due to his technical expertise, to identify the modified means employed in the challenged embodiment as being equally effective in the solution of the problem underlying the invention<sup>57</sup>.*

The Court also ruled that for the determination of the scope of protection, i.e. the evaluation of equivalency, the whole prior art must be taken into account, not only the prior art mentioned in the specification. On the other hand, with respect to the meaning of technical terms used in the claims, it is the meaning which the inventor has given such terms in the description, which is relevant, not the meaning which the term has in other publications in the prior art<sup>58</sup>.

These very general rules show that the Supreme Court does not rely on preset principles, but rather tries to find the adequate solution for each individual case<sup>59</sup>. The Court nevertheless showed that it wanted to stay within the boundaries of Art. 69 EPC when underlining in a number of decisions issued in recent years nearly with the identical wording

*the determination of the scope of protection under the new Act requires that the meaning of the content of the patent claims, to be determined by interpretation, constitutes not only the point of departure but the decisive basis for the determination of the scope of protection<sup>60</sup>.*

b) As a consequence of these rules another line of cases could only have come as a surprise to those inventors and practitioners who were accustomed that if they had forgotten to claim a feature or even half of the invention, the courts would add the missing parts and insert them into the claims if they were disclosed in the description. That this period is over, was probably best demonstrated in the Radio Broadcasting System case<sup>61</sup>. The claim was for a

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<sup>56</sup> BGH 22 IIC 249 (1991)-Ion Analysis.IIC; BGH 1990 GRUR 432, 433, commented by Kraßer 23 IIC 467, 482 (1992); cf. for the criteria used by the BGH cited by Bruchhausen, 1988 GRUR 8, English translation 20 IIC 341 (19898); similar Ballhaus/Sikinger, 1986 GRUR 337, 339 et seq. with further references to former case law.

<sup>57</sup> Federal Supreme Court (BGH) 22 IIC 104, 107-Handle Cord for Battery Case; under the former case law cf. BGH GRUR 1973, 465, 467 -Diebstahlsicherung; see also Rupprecht, 1991 Mitt. 235, 237

<sup>58</sup> BGH 1987 GRUR 280, 283 - Befestigungsvorrichtung I; 19 IIC 243 (1988) - Fixing Device.

<sup>59</sup> Bossung, 22 IIC 916, 917 (1991).

<sup>60</sup> BGH 22 IIC 249 (1991) - Ion Analyssis; 1989 GRUR 205, 208 - Schwermetalloxydationskatalysator; confirmed in 22 IIC 104, 107 - Handle Cord for Battery Case; BGH 1985 GRUR 803, 805 - Formstein, English translation 18 IIC 795 (1987) with comment by Geissler; cf. the more severe interpretation in the decision of the Court of Appeals of Karlsruhe 1990 Mitt. 28, for the case of an inferior solution, with critical comment by Lewinsky.

<sup>61</sup> 19 IIC 811 (1988) with commenting article by Pagenberg, 19 IIC 788 (1988).

VHF stereophonic radio transmission system in which a VHF transmitter is modulated with a base band...

The patentee attacked the manufacturer of car radios with the argument that a broadcasting "system" in the normal understanding consists of a transmitter and a receiver. Also the fact which could not be disputed that a receiver must contain the same technical specifications as the transmitter, which therefore were all disclosed not only in the description but in the very claim concerning the transmitter, made it self-evident for the person skilled in the art how to build the receiver. The Supreme Court pointed out, however, that not one single sub-claim mentioned the receiver, and it told the patentee that it is not the task of the of the judge to examine what the inventor wanted to claim but what he in fact did claim.

This decision shows that the Supreme Court today is certainly far from a too generous interpretation, and that it takes the intent of Art. 69 EPC serious, if one considers that the inventor on the basis of his invention might have been able to sell a dozen transmitters to German radio stations, but that millions of car radios were sold by his competitors without the possibility of stopping them. An application of the so-called "general inventive idea", as it was occasionally practiced under the former law<sup>62</sup>, was thereby at least implicitly rejected. In a further decision the Supreme Court confirmed its approach indicating<sup>63</sup> that something which the person skilled in the art can only derive from the description, but which is not mentioned in the claim, cannot be used for extending the protection.

c) In decisions on the basis of the Patent Act of 1981 in which the question of partial protection was touched upon, the BGH has indicated that an interpretation beyond the wording of the claim is foreseen in Art. 69 EPC, so that an omission of a feature does not necessarily exclude that an infringement may be confirmed, if the omitted feature does not belong to the core of the invention. Adequate protection for the patentee must however be balanced and combined with sufficient legal security for third parties<sup>64</sup>. Some of the cases shall be presented here.

aa) Although none of the decisions handed down so far concerned a real case of a sub-combination, the Supreme Court took the opportunity to express its views on partial protection. The Court first of all made it clear that the question of the protection of sub-combinations must be considered as part of the general concept of equivalence which always presupposes a careful analysis and a full understanding of the technical meaning of the invention by the judge.

In a decision, which was not a case of omission but of an exchange of a feature, remarks can also be found with respect to partial use. The Court underlined that the principle of legal security must be balanced with the interest of the inventor in a fair compensation for his invention. This means that the interpretation of a patent claim must be predictable for third parties and cannot be

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<sup>62</sup> Sceptical already in 1973 Beier in his Report cited supra note 44; see for the former law Geissler, in *Les brevets d'invention - Rédaction et interprétation*. at p. 21, 48 et seq.; Bruchhausen, 5 IIC 253 (1974) has demonstrated that the importance of the general inventive idea was often overestimated in particular abroad; see also Pagenberg, 19 IIC 788 (1988)("Good-bye to the General Inventive Idea").

<sup>63</sup> 1989 GRUR 205 - Schwermetallkopfböhrer

<sup>64</sup> BGH 22 IIC 104 (1991) - Handle Cord for Battery Case; the Court left the question of the protection of a sub-combination expressly open, also in a later case, 1992 GRUR 594 - Mechanische Betätigungsvorrichtung.

a surprise for them. The Court affirmed its view that omitting a feature does not exclude infringement and is also covered by Art. 69 EPC, if the feature does not form part of the core of the invention<sup>65</sup>. Because of the result reached the Court could leave it open whether generally the protection of sub-combinations is possible under the Act of 1981.

In a subsequent decision which is interesting also for other reasons<sup>66</sup>, the Court again took the opportunity to deal with the question of partial protection. By using a very carefully chosen language it cited its own earlier decisions on claim interpretation as follows:

*For reasons of legal certainty, following the introduction of Sec. 14 of the 1981 Patent Act, the public must be able to rely on the fact that the patent claims reflect with sufficient clarity which invention is protected...Whether and under what conditions the patentee could, in exceptional cases, nevertheless be conceded patent protection...must not finally be decided here and can also hardly be abstractly decided in advance<sup>67</sup>.*

bb) That the German Supreme Court is willing to adopt the French method of claim interpretation, the "essential elements" doctrine<sup>68</sup>, has become apparent in a decision concerning the determination of equivalence. In the decision "Autowaschvorrichtung", the Federal Supreme Court denied protection for a sub-combination, since the patentee had indicated in the specification that the feature which the infringer had omitted was an *essential* one and even represented the basic inventive idea and the advantage over the prior art<sup>69</sup>. Furthermore, the alleged infringer had exchanged this feature by one which he had taken from the state of the art, and this very solution had been described by the inventor as one which should be avoided.

The rule which one can derive from this decision is that if an infringer renounces to the use of essential elements, the infringement would be denied. If however, he leaves out a superfluous element (over-claiming) or one or perhaps even more less important (less essential) elements, and if the non-essential character of these elements could be recognized by a person skilled in the art on the basis of the teaching of the claims of the patent, the infringement will be affirmed<sup>70</sup>.

cc) Although not directly related to partial protection, but often discussed in this context, the

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<sup>65</sup> GRUR 1989, 903 - Batteriekastenschnur; 22 IIC 104 (1991)- Handling Cord for Battery Case; with a similar result already District Court of Düsseldorf, 1980 GRUR Int. 382 which held that the result obtained by the patent "need not be achieved quite as complete"; the question of protection of a sub-combination was left open in the decision "Autowaschvorrichtung", BGH 1991 GRUR 444; see also the report of the German Group of AIPPI published in 1980 GRUR Int. 501

<sup>66</sup> BGH 1992 GRUR 305-Heliumeinspeisung

<sup>67</sup> Federal Supreme Court, 24 IIC (1993) with comment by Pagenberg

<sup>68</sup> Cf. for this proposal taken from Swiss law already Beier in 1973, see FN 44 supra, and Winkler, 10 IIC 296 (1979) with references to British and Italian law.

<sup>69</sup> BGH 23 IIC 120 (1992) - Apparatus for Washing Vehicles.

<sup>70</sup> Cf. König, 1991 Mitt. 21, 23

question was decided whether an infringement must be affirmed, if the infringer uses all the features of the patented invention but adds additional features. The Court affirmed that the infringer thereby carries out the inventive teaching<sup>71</sup>, so that this would not even be regarded as a case of extended protection<sup>72</sup>.

In the decision, "Fixing Device II", which was very carefully drafted the infringer had modified a feature in the preamble and nevertheless reached the same inventive result<sup>73</sup>. The modification was even held patentable by the EPO, which however was not regarded as excluding partial use by the Federal Supreme Court<sup>74</sup>. As long as the infringer uses the teaching of the prior patent and the person skilled in the art could have recognized the modified form as equivalent, infringement must be confirmed. The Supreme Court further held that even if a feature has been declared as being vital for the invention, this does not mean that an infringement is always denied, if this feature is substituted by an equivalent<sup>75</sup>. Especially a specific embodiment of a more general teaching of the invention must be regarded as an infringement, although the concrete embodiment would not have been obvious for the skilled person. The fact that in a product claim a specific function, purpose or effect have been mentioned does not limit the claim. The Supreme Court confirmed at the same time what it had already expressed many times before, that the distinction between the preamble and the characterizing part has no bearing on the interpretation of the scope of protection of the different features used.

dd) The latest case was handed down in May of 1992<sup>76</sup>. It concerned a new solution for a compensatory device for sliding cables. In its feature analysis of the main claim and its comparison with the features of the attacked embodiment the Supreme Court came to the conclusion that "half of a feature" was not used by the alleged infringer. In the patent it had been explained that in contrast to solutions of the prior art the patented solution *allowed* the placing of the compensatory device *anywhere* along the length of the sheath, so that it was *not necessary* to attach it to the chassis. The defendant however who had delivered the construction to a customer, demonstrated that the customer had not made use of this advantage and had fixed it like in the prior art to the vehicle.

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<sup>71</sup> BGH 23 IIC 111 (1992)- Fixing Device II; see also Kraßer, 23 IIC 467, 478 (1992); König, 1991 Mitt. 21, 25 with further references.

<sup>72</sup> That exceptions may also apply here is demonstrated by a recent US case, *Transco Products Inc. v. Performance Contracting Inc*, DC NIII. of May 5, 1992, 44 BNA PTCJ 1085, 123. This shows that flexibility should be exercised both ways.

<sup>73</sup> This contradicts an opinion raised in the French discussion that a modification of features in the preamble would always change the underlying problem of the invention; cf. König, 1991 Mitt. 21, 27.

<sup>74</sup> See for the opposite view under Dutch law Brinkhof, 22 IIC 908, 914 (1991) who would not extend the protection to a solution which is an invention of itself. This view would abolish the concept of a dependent invention which is well established under German law. The author obviously overlooks that a person skilled in the art may be able to derive a solution from the teaching of an invention but nevertheless design the embodiment in an inventive way.

<sup>75</sup> BGH 23 IIC 111 (1992) - Fixing Device II; for further details see König, 1991 Mitt, 21, 28; see for this question also Benkard/Ullmann para. 14, note 93 with further references.

<sup>76</sup> BGH 1992 GRUR 594 - Mechanische Betätigungsvorrichtung.

In its reasoning the Court found that the general teaching of the invention consisted in facilitating a reliable locking and unlocking of the telescopic parts of the sheaths which no longer depends on being attached to a specific fixed point on the vehicle and that it does not any control element permanently mounted on the sliding cables. On the other hand, the operation of the invention does not depend on whether it is located directly on the vehicle panel. Therefore, if the patent teaches that the compensatory device can be mounted at any distance from the chassis, it can also be mounted at zero distance.

The court however emphasized that it could leave the decision open, whether generally protection for sub-combinations for European patents is available. This decision is by no way excessive with regard to the protection granted in view of then following facts.

- The prior art had not offered a solution which allowed any other fixing of the compensatory device than to the chassis. The inventor therefore had disclosed a considerable improvement of the long existing prior art.

- The patent did not contain a limitation in the sense that the fixing to the chassis was to be avoided or always constituted a disadvantage, as in the "Apparatus for Washing Vehicles" case. The teaching of the invention provided the user the possibility to attach the fixing means at any distance from the chassis, which included, as the Supreme Court correctly pointed out, that he could also affix it without any distance from the chassis, i.e. directly to it.

- The defendant in the case was the manufacturer of the attacked embodiment, who delivered the cables to a car manufacturer. Because of the inherent advantages of the construction the car manufacturer could in principle use all the advantages of its function. If a car manufacturer chooses not to take full advantage of the construction, although the cable manufacturer delivers him a fully equipped embodiment, this cannot exempt the latter of his liability.

- One must finally ask the question why both, the cable manufacturer and the car manufacturer, did not use the construction of the prior art which only allowed the attachment to the chassis. Thus there must have been other advantages in the protected solution which were so interesting that they risked a patent infringement action.

Summarizing the German attitude as compared to the French discussion it is probably safe to say that a majority in the German literature is clearly in favor of a liberal interpretation of Art. 69 EPC and advocates the protection of sub-combinations, partly even element protection under certain safeguards. A number of decisions of the Supreme Court which have addressed the issue of partial protection have held that Art. 69 EPC does not stand in the way of such a construction, if the infringer finds the information that features can be omitted in the teaching of the invention by the mere application of ordinary skill in the art. The Supreme Court did however mention that so far it was not necessary to decide whether sub-combinations are generally protectable under Art. 69 EPC.

Since no rules have been developed in either country, France or Germany, which answer all questions that may arise in the context of partial protection, proposals will be made hereafter which may serve as a basis for a discussion in the two countries.

### C. Practice of the EPO in connection with Art. 123 EPÜ

Also the EPO has dealt with the problem of claim interpretation in a number of cases. In the

granting procedure the question often arises under Art. 123 EPC whether an amendment of the originally filed claims, in particular the deletion of features, is possible on the basis of the original disclosure<sup>77</sup>. The situation differs there from an infringement situation where the claims have definitely been granted. However, considerations of legal security apply also in those cases<sup>78</sup>.

As Kraßer has demonstrated in detail in a recent article, the EPO practices different levels of severeness depending whether the amendment occurs before grant or in the opposition procedure<sup>79</sup>. It appears that the Boards of Appeal use a very similar test as the German Supreme Court but partly also as the French Supreme Court in cases concerning the omission of features in combination claims.

1. Omission of a feature was regarded as admissible on the express condition that the disclosure content of the original application had not been exceeded<sup>80</sup>. Similarly, omission of a feature was not allowed in a process claim<sup>81</sup>, since a process lacking the feature was not disclosed in the original documents nor directly inferable from the original description. Interesting enough and in conformity with the traditional French case law the TBA also used the criterion that the respective feature could also not be regarded as obviously inessential to a skilled person.

With the same arguments another decision underlined that the deletion of a feature from a claim cannot be allowed, if that feature had been presented as an essential one and the application did not contain an express or implied disclosure that the feature could be omitted<sup>82</sup>. On the other hand, the deletion of a feature and thus a broadening of the claim was allowed provided the skilled person could recognize that the problem solving effect could still be obtained without it<sup>83</sup> or where an embodiment without that feature could be recognized from the description and the drawings<sup>84</sup>.

2. In a recently published decision of a Board of Appeals the rules for the deletion of features have been summarized as follows:

- (1) the feature was not explained as essential in the disclosure,
- (2) the feature is not, as such, indispensable for the functioning of the invention in the light of the

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<sup>77</sup> See for the discussion of this question the Report by Pagenberg, 10 IIC 604 (1979); for the relationship between Art. 69 and 84 EPC see Poth, 1991 Mitt. 227, with respect to Art. 138 see Holzer, 1992 Mitt. 129

<sup>78</sup> For the criteria to be applied in the context of Art. 123 EPC see Pagenberg, 1979 GRUR Int. 346, English translation 10 IIC 604 (1979); as to the general question of claim modification Kraßer, 23 IIC 467 (1992); for the same question under German law cf. BGH 1988 GRUR, 197 - Runderneuern, as well as Bruchhausen, 14 IIC 732 (1983).

<sup>79</sup> See Kraßer, 23 IIC 467 (1992).

<sup>80</sup> EPO TBA 1988 Mitt.173

<sup>81</sup> EPO TBA 1990 OJ EPO 297

<sup>82</sup> EPO TBA 1989 OJ EPO 105 - Coaxial Connector

<sup>83</sup> EPO TBA of 28 August 1987 T 151/84

<sup>84</sup> EPO TBA 1989 OJ EPO 167

technical result it serves to solve,

(3) the (replacement or) removal requires no real modification of other features to compensate for the change<sup>85</sup>.

The TBA added that a feature may be inessential even if it was incidentally but consistently presented in combination with other features of the invention. Also the generalization of features was allowed under similar conditions, namely that on the basis of the original disclosure the skilled person could derive the newly formulated feature<sup>86</sup>.

3. In a lecture before the Symposium of European Patent Judges, Bossung, chairman of the Legal Board of Appeal of the EPO, emphasized the responsibility of the EPO for the granting of sufficient protection to inventors<sup>87</sup>. He therefore advocates a considerably more liberal attitude by the EPO in the granting procedure - expressly also with respect to partial protection - in order to facilitate the task of the national courts with respect to equivalence problems. Bossung argues that changes which may be forbidden in the opposition procedure should not only be allowed under Art. 123 (2) EPC, *but be required*.

#### **D. WIPO Harmonization Treaty**

1. One author in France had argued<sup>88</sup> that a restrictive interpretation of combinations claims was also asked for by the Patent Harmonization Treaty for which the first part of the Diplomatic Conference took place in June 1991 and which is expected to be adopted in 1993<sup>89</sup>.

It is true that at one point during the meetings of the Expert Committee a proposal was made to define the concept of equivalence, in addition to its general definition, today Art. 21 of the Basic Proposal, by a separate Rule 304 which would have excluded independent protection of parts of a combination claim.

During the meeting in June 1988, in order to avoid an undue restriction of claim interpretation by examples in the description, Art. 21(4) was adopted which reads

- In particular, the mere fact that a product or process includes additional features not found in the examples disclosed in the patent, lacks features found in such examples ... shall not remove the product or process from the extent of protection conferred by the claims.

Nothing is said as to what should be the result, if a feature in the claim is omitted.

In April 1989 the former Rule 304 was deleted by a clear majority vote, because it was regarded

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<sup>85</sup> EPO TBA 22 IIC 384, 386 (1991)- Removal of Feature

<sup>86</sup> Cf. the examples cited by Kraßer, 23 IIC 467, 484 (1992); for further references of EPO decisions see Bossung, 22 IIC 916, 920 et seq. (1991).

<sup>87</sup> Bossung, 22 IIC 916, 925 (1991)

<sup>88</sup> Cf. Chevallier, 1989 RDPI 56

<sup>89</sup> See Pagenberg, 22 IIC 683 (1991); id. 19 AIPLA QJ 1 (1991); Bardehle, 1991 Mitt. 146; id. 1992 Mitt. 133

as too restrictive<sup>90</sup>. One can therefore only draw the conclusion from the discussion that the majority of delegations was against a too restrictive interpretation and wanted to leave the possibility of partial protection open. It may however be regretted that no positive rule in favor of the possibility of partial protection is presently contained in the Treaty so that it is left to the courts of the different countries how they interpret the claims in this respect.

2. Another point however is expressly laid down in Art. 21 (3), namely whether the documents of the granting procedure shall be examined for the determination of the scope of protection.

Art. 21(3) reads

- In determining the extent of protection, due account shall be taken of any statement limiting the scope of the claims made by the Applicant or the owner of the patent during procedures concerning the grant or the validity of the patent.

This means that for the mere interpretation the language of the claim is decisive. However, if the Applicant or patent owner had expressly renounced to the protection of features individually, or has expressly limited the scope of protection to the combination as claimed in view of close prior art, such statements will have to be taken into consideration after the enactment and ratification of the Harmonization Treaty.

## **E. Proposal for a Solution**

### **I. General Remarks**

From the great variety of decisions and authors dealing with the broad question of partial use of a patented invention it becomes clear that it is extremely important to achieve a common understanding at least in Europe, how claim interpretation shall be practiced in the future. This presupposes a common understanding on the goals one wants to achieve and an examination whether these goals can be achieved on the basis of the applicable law, Art. 69 EPC and its Interpretation Protocol.

The views of some authors in France advocating against any form of partial protection emphasize the principle of legal security, a goal which is contained in the Interpretation Protocol. The denial of any claim modification by interpretation certainly has the additional practical advantage that by allowing only a protection which is based on the very wording of the claim no detailed understanding of the technical background of the invention, the significance of the claim features and the relevance of the prior art and the knowledge of the person skilled in the art are necessary. If claim interpretation is reduced to the stereotype answer to the patentee seeking protection "Bad claim drafting, that's your problem", both sides, the inventor and the public know at least where they stand. However, in the opinion of this author such a view can neither be in the interest of the public as a patent promoting society nor is it reconcilable with the text and purpose of Art. 69 EPC<sup>91</sup>. If a fair treatment of the inventor is the goal, which obviously is also the purpose of Art. 69, the limits of an abstract interpretation must be drawn, where the claims bear only a guideline character<sup>92</sup>.

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<sup>90</sup> Cf. WIPO Doc. HL/CE/V/4 No. 150 and Doc. HL/CE/VI/5 No. 137, 154 respectively

<sup>91</sup> Beier already warned in 1973 against a too rigid approach in French law, see his Report cited supra FN 44; for the history of Art. 69 EPC see Stauder, 23 IIC 979 (1992).

<sup>92</sup> See Bruchhausen, 5 IIC 253 (1974); the postulate of König, 1991 Mitt. 21 that these

The purpose of the following proposal is not a dilution of the claim system, but its fair and equitable application in practice. The deliberations put forward are to be understood as a starting point in such a comparative law discussion which might need further refinement, if practical cases call for more specific rules.

## II. Definition of legal terms

It is first of all suggested to reach uniformity on the significance of the legal terms used<sup>93</sup>. If one wishes to maintain the traditional concepts in the two countries concerned, "Teilschutz" (partial protection) and "contrefaçon partielle" (partial infringement), it should be clear that these concepts comprise the two possibilities of

- (1) the use of a sub-combination, i.e. if the infringer renounces to the use of one ( or more) elements of the patented claim.

Cases where features have been exchanged, which are anyway to be treated in the opinion of this author under the same rules as cases of total omissions<sup>94</sup>, may also be discussed in this context, especially since they are partly overlapping with situations of an inferior solution, where sometimes the infringer renounces to features, sometimes exchanges them. Also the case "overclaiming", where a feature without any technical function has found its way into the claim, belongs here. One should however renounce to the French distinction between combination claims and complex claims.

- (2) Element protection, namely the situation that an individual element alone is used which in the claim as granted is combined with several other elements.

## III. Rules for the protection of sub-combinations

1. In view of the importance of the wording of a claim under Art. 69, one can certainly agree, as one German author has put it, that the basic rule for all claims is that the features which the inventor has formulated are generally not at the free disposal in an infringement suit; partial protection therefore will not be the rule<sup>95</sup>. Furthermore, for the sake of clarity and legal security one must regard the protection of a single element within a combination claim as an absolute exception<sup>96</sup>. In Germany, as shown, the opinion prevails that only in very exceptional cases

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boundaries should be exploited to the greatest extent, must therefore be supported.

<sup>93</sup> Cf. this proposal also by Rupprecht, 1991 Mitt. 235

<sup>94</sup> Cf. the decision of the Federal Supreme Court in 1991 GRUR 444 - Autowaschanlage with comment v. Falck

<sup>95</sup> König, Mitt. 1991, 21, 26et seq., who seems however to be less severe, if the infringing embodiment is not an inferior solution, but reaches the same result in spite of omitted features, because other elements have been modified in a way that their same result is obtained; cf. the cautious reasoning of the BGH in the decision 1992 GRUR 305 - Heliumeinspeisung; also BGH 1992 GRUR 40 -Beheizbarer Atemluftschlauch.

<sup>96</sup> König, 1991 Mitt. 21, 25 however observes that element protection constitutes the smallest unit of a sub-combination and is therefore subject to the same rules; see also the Report of the German group of AIIPPI, Annuaire 1980/II, p.5, where the independent protection of features

element protection could be envisaged<sup>97</sup>, a view which is probably also acceptable as a European standard. Neither a totally hostile attitude nor a too generous approach is warranted under Article 69 EPC.

The Hairdryer example of Mathély might be a case for such an exceptional situation, where element protection could be granted. The factual situation of that case differs from the Radio Broadcasting of the German Federal Supreme Court. If in the latter case the receiver had been claimed together with the transmitter in one single claim, it could be envisaged that protection would be granted against the use of the receiver (or the transmitter) separately. Under this assumption of a "complex claim" the situation would be comparable with the Hairdryer case.

2. The protection of a sub-combination, i.e. the normal, case where the infringer leaves out one or eventually more elements, should be admitted for both alternatives put forward in the French discussion, the so-called complex claims and the combination claims (combination of means). It will be shown that this distinction is not necessary, since the same criteria must be applied under Art. 69 EPC, whether it is a case of exchange of features or of their partial omission<sup>98</sup>.

In most cases the result will not be different in practice. What French authors and some French courts understand by (pure) combination claims for which partial protection is to be excluded, seem to be those cases which, also under German law, represent the limits for the application of the doctrine of partial protection like *Dolle vs. Emsens* (barbecue machine) and *Viguerie vs. Argiles* (cement mix). Omitting features of such claims would either render the invention no workable or would change the teaching of the invention in such a way that the embodiment would fall outside the scope of the claim.

It is important to recognize that a fair protection of inventors which should be the aim of the patent system, calls for flexible solutions as opposed to severe and rigid doctrines. The application of rigid rules like the distinction between different categories of claims, which anyway has no parallel in other countries, does not favor harmonization and cannot be the purpose of Art. 69<sup>99</sup> 100. Not only totally misdrafted claims deserve protection, in which none of the elements or features contributes to the inventive result, but also combination claims with several features, for which the inventor had not foreseen, how clever infringers would try to circumvent them. This means that one should not only examine whether for a person skilled in the art it was obvious on the basis of the claims to drop the respective feature. Protection is to be

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was recommended for "predictable" cases, as they had been decided by former German case law.

<sup>97</sup> See Benkard/Ullmann § 14 note 144 on the one hand and Ballhaus/Sikinger, 1986 GRUR 337, 341 on the other

<sup>98</sup> Some French authors seem to deny partial protection only, because of the difficulties of distinguishing between combination and complex claims, see Martin, 1992 RDPI 22; Mathély, loc.cit. p. 276 et seq.; Emig, loc.cit. at 42.

<sup>99</sup> The European Guidelines also treat both "combination" claims alike, cf. C IV 9.8 B 1 and B 2

<sup>100</sup> The argument of Vigand, *Mélanges Paul Mathély*, 341, that any change of the claim as granted must already be regarded as unlawful, because the search was based on the original claims, is not convincing: if a claim was granted which leaves room for interpretation, a court does not exceed its powers.

granted, if at least the (or the majority of) essential features are reproduced<sup>101</sup> in a way that the inventive result as disclosed in the patent is still being achieved, either fully or to a major extent (imperfect use)<sup>102</sup>.

A borderline case could be seen in a decision of the District Court of Paris<sup>103</sup> concerning a heat exchange device which was intended for heating purposes as well as for cooling in an air condition system. The alleged infringer only used the features which allowed the heating, not the cooling. The court affirmed the infringement, obviously with the not expressly mentioned argument, that all the features used by the infringer were in fact contained in the claim. One would reach the same result in German practice under the concept of imperfect use<sup>104</sup>. The result is opposite to the Radio Broadcasting case, but with good reason: in the latter case the second (combination) element, the receiver, was not mentioned in the claim, although it could be derived from the description. In the French Air Condition case the claim contained all the elements, but was only used in part<sup>105</sup>.

The Air Condition Case it at the same time a good example why the distinction between complex and combination claim is superfluous in practice, because it is already difficult to say whether this example would meet the test for a complex claim in Mathély's understanding or whether the alternate functioning as a heating and cooling device would be called a combination. If the approach proposed here were adopted, this distinction becomes indeed irrelevant, and the dividing line would be drawn between essential and non-essential elements. In fact, the Paris court decided in favor of partial protection without expressly mentioning whether the decision was based on the complex claim theory<sup>106</sup>. It is submitted that in many cases it is probably much easier to determine the essential features and then decide, whether the dropping of one or several non-essential features was obvious for a person skilled in the art - if necessary with the help of an expert.

That single features can be omitted which do not contribute, or only to an insignificant extent, to the inventive teaching, can occur in complex claims as well as in real combination claims. The author has also come across a typical case of overclaiming, where a feature was contained in the claim, which was clearly superfluous, although the patent had been examined by the US and the European Patent Office. It is obvious that such cases are even more frequent in non-examining countries. Practical examples shall demonstrate that also the principle of legal security can be

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<sup>101</sup> Cf. for the French case law also Czekay, 1980 GRUR Int. 147, 150, 154, from which it can be derived that also with respect to essential elements not all of them must be used to affirm infringement.

<sup>102</sup> See in this context the definition of "essential features" in the Resolution of the AIPPI, *Annuaire* 1980, 144 on Q 60: "Essential features of the invention are those which are sufficient and necessary for the realisation of the invention".

<sup>103</sup> TGI Paris, 1986 PIBD 385,III-74 - *Sorelec v. Cohen*.

<sup>104</sup> See District Court of Düsseldorf 1980 GRUR Int. 382 which indicated in a case of an inferior solution that the result obtained need not be as perfect as the one of the invention.

<sup>105</sup> Critical with respect to the French decision Vigand, *Mélanges Paul Mathély*, p. 338

<sup>106</sup> This fact is also acknowledged by Vigand, *Mélanges Paul Mathély*, p. 339

complied with, if a careful legal and technical analysis is conducted.

3. When determining whether partial protection should be granted, certain rules should be observed in order to safeguard legal security. This means that partial protection should be denied, if all features of a claim are necessary or of all equally "essential". A protection of sub-combinations should however be granted where

- one of the elements has been recognized as being totally superfluous (over-claiming)<sup>107</sup>,
- the result is still achieved at least to a greater extent even without the use of the element or elements which the infringer has omitted ("inferior solution")<sup>108</sup>,
- the essential features of the invention are at least used to a greater extent<sup>109</sup>, so that the inventive teaching, its problem and solution, is not changed,
- the omission of the features was obvious for a person of ordinary skill.

If the argument is made that under Art. 69 EPC interpretation does not mean "adding" something to the claim<sup>110</sup>, the answer is, that for the protection of a sub-combination according to the above rules, nothing is in fact added which was not contained in the claim language. As long as the infringer can derive all features from the claim itself, whether identically or in equivalent form, whether by using all of them or omitting some, which are not essential, the principle of legal security is still complied with. A fair and reasonable result is what Art. 69 and its Interpretation Protocol require<sup>111</sup>. The discussion of practical cases should help to define the limits.

4. Let us take a multi-feature claim, where the several features are of different importance for the inventive result<sup>112</sup>; an example is the Windsurfing patent. The features mentioned in the claim as it had been granted in Germany ("rigg for a sailboard"), comprised a mast, a sail, a boom, a joint for the mast and a rope. Should the action against a dealer who offers and sells all the individual parts of the combination with the exception of the rope be dismissed, although it is the easiest and most evident thing for the purchaser to add the rope and then use the rigg ? Another example is the before-mentioned Radio Broadcasting case of the German Supreme Court<sup>113</sup>. In our view it

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<sup>107</sup> See also Mathély, *Le nouveau droit*, at 422

<sup>108</sup> Accord Mathély, *Le nouveau droit*, at 416.

<sup>109</sup> Cf. for the former French law Czekay, 1980 GRUR Int. 147, 150, 1154 who demonstrates that under the former case law even of the essential elements not all had to be used in order to affirm infringement. See in this context also the definition of "essential elements" in the Resolution of the AIPPI to Q 60, *Annuaire* 1980 p. 241, cited supra FN 23.

<sup>110</sup> Cf. Emig, *loc.cit.* p. 39.

<sup>111</sup> On its applicability also for French patents see Emig, *loc.cit.* p.36; critical with respect to French case law which he regards as aviolation of Art. 69 EPC and the Interpretation Protocol, Vigand, *Mélanges Paul Mathély*, 340 et seq .

<sup>112</sup> See also the example by Bruchhausen, 1974 GRUR Int. 1, 8.

<sup>113</sup> 19 IIC 811 (1988) with commenting article by Pagenberg, 19 IIC 788 (1988).

is not correct to interpret this decision as a rejection of partial protection, as a French author has argued<sup>114</sup>. The claim was for a transmitter, and the alleged infringer had sold receivers. Obviously, a transmitter is not a receiver with less features or elements, it is a different product and a distinct invention which the inventor had forgotten to claim.

It should be evident that also from the standpoint of legal security it is a difference whether a claim does not contain a feature (or a different version of the invention) which is then used by the alleged infringer, or whether several features are mentioned in the claim of which one is not used. In the first case the general public could indeed rely on Art. 69 EPC in order to be informed about the protected subject matter and its features. On the other hand, if a number of features are expressly mentioned in the claim and an infringer finds out that one of them can be omitted and the inventive result still be achieved, an interpretation on the basis of equivalence is still within the wording of Art. 69 EPC<sup>115</sup>. Bruchhausen<sup>116</sup> derives this result from the principle of inventor remuneration, since it was the inventor who disclosed the invention to the public and has thereby enriched the art. Granting protection in such a case is neither to the disadvantage of the public nor of the potential user: somebody who knowingly uses an inventive teaching as starting point for modifications, must reckon that his solution is still covered by the patent claim and thus could be regarded as an infringement.

#### IV. Delimitation from indirect infringement

Finally, also the situation and legal concept of the so-called indirect infringement, in German law Sec. 10 of the Patent Act, in the new French law Art. L.613-4 (former Art. 29 bis), must be clarified. It is certainly not correct that this is the only case of "partial use" or "partial infringement" which the law has in mind or that there is a great similarity between partial protection and indirect infringement<sup>117</sup>. Here once again one must fully support Mathély that any infringement is prohibited by the law.

The case of indirect infringement is in reality not covered by Art. 69 EPC at all, it goes beyond it, even beyond the case of element protection. Contrary to what Martin and Emig seem to assume<sup>118</sup>, it is not one of the essential elements as such which are protected by the principle of indirect infringement, but "means relating to an essential element of the invention". It is overlooked that Art. L.613-42 has a substantially different field of application, both with respect to the objective criteria which must be fulfilled, as well as to the subjective requirements.

The provision on indirect infringement only covers the offering and supplying of means, not the

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<sup>114</sup> Emig, *ibid.* p. 59.

<sup>115</sup> The argument of Vigand, *Mélanges Paul Mathély*, 341, that by omitting a feature of the claim Art. 139(d) EPC is violated which forbids the extension of the scope of protection after grant so that the patent must even be regarded as void, is not convincing: Art. 139 does not cover a case of "extension by interpretation", but only an extension by claim amendment. And the decision whether an (unlawful) extension is given belongs to the competence of the courts which have to apply Art. 69 and the respective national provisions.

<sup>116</sup> 1988 GRUR Int.8, 11.

<sup>117</sup> Emig, *loc.cit.* p.46; Martin, 1991 RDPI 6, 12.

<sup>118</sup> Martin, 1991 RDPI 6, 12; Emig, *loc.cit.* p. 46.

manufacturing, use or possession. Also, acts committed in dealings with foreign recipients of such "means" are not caught by this provisions<sup>119</sup>, whereas the offering or sale from abroad of an item which would constitute a partial (but direct) infringement can be attacked within the patentee's territory. Also, the (positive) knowledge of the supplier that the means are suitable and intended for putting the invention into effect limits the application of this provision<sup>120</sup>.

On the other hand, for a case of indirect infringement in the sense of Art. L.613-4 one need not examine, whether the means supplied are themselves essential elements, or whether the element to which they relate, is one among a dozen of essential ones, since no quantitative or qualitative evaluation is required. It is furthermore irrelevant whether by the use of the essential element in question already a significant technical result can be achieved, which would be necessary for the above described principle of an imperfect use in a sub-combination situation.

These remarks show that the concept of indirect infringement has little in common and should not be confused with the problem of partial protection, in particular the protection of sub-combinations. What the concept of indirect infringement wants to achieve, is protection of the inventor against infringing acts which, especially for process inventions, are sometimes difficult to detect in countries without a discovery proceeding or a "saisie". The inventor can already enjoin the supply of means which are not inventive as such, which are not even "elements" mentioned as such in the patent claim, but which are intended to be used for the patented invention.

#### V. File wrapper estoppel

1. Contrary to statements found in French case law<sup>121</sup> the German Supreme Court is of the opinion that the file history, although not generally an element for the interpretation of patent claims<sup>122</sup>, may be an important reference where the patentee has made binding declarations in the examination, opposition or revocation procedure, or in a nullity suit which must be interpreted as a limitation of the protection claimed<sup>123</sup>.

If a feature is mentioned in the specification as being vital and decisive for accomplishing the inventive result, it can neither be omitted nor exchanged without modifying the teaching of the invention<sup>124</sup>. However, if a solution is mentioned as preferred, this would not exclude to modify it or to include another feature disclosed but not expressly mentioned as preferred<sup>125</sup>. Where an

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<sup>119</sup> Accord Emig, loc.cit. p. 46; see also Preu, 1980 GRUR 697 et seq.

<sup>120</sup> See Schulte, Patentgesetz, § 10 note 5; Preu, 1980 GRUR 697, 698, who speaks of a complementary protection to the principle of equivalence protection.

<sup>121</sup> Cour d'appel de Paris, 1991 PIBD III-2.

<sup>122</sup> Cf. Bruchhausen, 1982 GRUR 1, 5 left col.; Krieger, 1980 GRUR 683, 685

<sup>123</sup> Bruchhausen *ibid.*; the same view was taken by the AIPPI in its Resolution concerning Q 60 in Buenos Aires, *Annuaire* 1981, 144.

<sup>124</sup> See BGH 1992 GRUR 40 - Beheizbarer Atemluftschlauch; BGH 23 IIC 120 (1991) - Apparatus for Washing Vehicles; OLG Karlsruhe 1990 Mitt. 78; cf. the same result in the French decision "Surepack" *supra* FN 23.

<sup>125</sup> See BGH 1990, 510- Crackkatalysator: the understanding of the skilled person in such a

additional feature was included into the claim for the purpose of delimitation with respect to the prior art and where the inventor has expressly declared that his protection claimed is limited to the concrete combination of the different features, element protection as well as protection of a sub-combination is excluded<sup>126</sup>. If, however, a feature was added in order to overcome an objection of insufficient disclosure the Supreme Court is of the opinion that this does not exclude that the patentee in an infringement proceeding can claim protection also for equivalents which go beyond such a limitation<sup>127</sup>.

A similar approach was taken by the French Supreme Court in the decision Lafarge<sup>128</sup> which carefully considered the prior art cited in the novelty report and decided that the patentee was bound to the integers of the claim because of close prior art from which he had distinguished his invention<sup>129</sup>.

As a result it can be stated that for the evaluation of a situation of partial use the file history can be an important source of information, at least in order to ascertain whether the element, which the infringer has omitted, had not been added by the patentee during prosecution upon request by the examiner in order to limit the claim against references of the prior art<sup>130</sup>.

Here again, the Windsurfing patent may be cited as an example. In Germany, the original claim of the patent application filed was for

- sailing vehicle...(consisting of a board and a rig..)

which was changed upon request by the Examiner, who had cited pertinent prior art, into

- rig for a sailboard...

While a "sailing vehicle" in the form of a "windsurfer" comprises not only the mast, sail etc. but also the board, at least sailors know that the rig consists only of elements above the boat or the board. Therefore, when the patentee in one of the German infringement proceedings against a board manufacturer tried to argue that because the board was cited several times in the claim (by

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context is always decisive; see the same result in the decision of the EPO BA supra note 84 - Removal of Feature.

<sup>126</sup> BGH 1964 GRUR 433, 436 - Christbaumbehang; cf. also the corresponding rule in the WIPO Harmonisation Treaty Art. 23. For French law cf. Lecca, in CEIPI, Les innovations de la loi de 2 janvier 1968, Paris 1972, p. 128.

<sup>127</sup> BGHZ 72, 119, 130f - Windschutzblech, BGH 1970 GRUR, 289, 293- Diarrähmchen IV; BGH 1964 GRUR 669, 672 - Abtastnadel.

<sup>128</sup> Cour Cass. Lafarge vs. Viguerie, 1991 PIBD III-430

<sup>129</sup> Contrary to Martin, 1992 RDPI 24, this therefore was not a case where the weighing of essential and non-essential elements would have been possible.

<sup>130</sup> Accord Martin, 1989 RDPI, 15, 22; id., 1991 PIBD 6, 10: if indeed a feature had been added by the patentee in order to overcome a citation of prior art, he cannot afterwards argue that this feature is nonessential and its omission by the defendant should not hinder the granting of partial protection; in fact this would lead to monopolizing the prior art and violate the Formstein-doctrine of the Federal Supreme Court and the corresponding doctrine of the WILSON case of the American CAFC.

way of reference as to its function together with the rig) it should be included into the scope of protection as one of the claimed elements of the *rig*, this action was dismissed in all three instances up to the Supreme Court.

On the basis of the German decision, the European Court of Justice consequently found that several of the licensee's obligations contained in the license contract - that licensees should affix a notice on the board "Licensed by Windsurfing International", the obligation not to sell board and rig separately, as well as the inclusion of the board into the royalty bearing items - constituted a violation of Art. 85(1) EEC Treaty<sup>131</sup>. The patentee was therefore bound by the formulation of the claim which he had chosen. In the reasoning of the German Courts it was made clear that they did not merely refuse element protection for the board, but followed the argument of the defendant that the board was not comprised by the preamble of the claim and therefore was not part of the combination at all, since the patentee had renounced it during prosecution.

## VI. Summary

The question of partial protection, i.e. the protection of sub-combinations in patent claims with multiple features touches basic principles of claim interpretation under Art. 69 EPC and the Interpretation Protocol; it therefore needs a uniform application within the member countries of the Munich Patent Convention. A possibility which promises an equitable evaluation of the inventive achievement and would still be compatible with the principle of legal security laid down in the Interpretation Protocol is the application of the rules developed for equivalents.

Here, the former French and Swiss practice, which distinguished between essential and non-essential features in a patent claim may play a useful role. It should however be avoided to create new complications, like the distinction between complex claims and pure combination claims which do not find a basis in Art. 69 EPC.

As demonstrated above, Art. 69 EPC requires that third parties can start from the assumption that features and elements, which are not contained in the patent claim, can freely be used. On the other hand, an infringer should not be allowed to develop on the basis of the features disclosed in the claims modifications which consist only in the omission of features, if this solution could be derived from the teaching without own inventive effort<sup>132</sup>. Equitable solutions which balance the interests of the inventor and those of third parties are called for which should also consider the goals of patent innovation through inventor's remuneration. Those who so far favor severe and rigid rules should be reminded that the public in all European countries cannot have an interest to suppress inventive activity by imposing too rigid rules on the possibilities of patent enforcement. A symbiosis of French and German rules in this field offers according to this author a basis for practical and equitable solutions.

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<sup>131</sup> ECJ 17 IIC 362 (1986)

<sup>132</sup> In the same sense Bruchhausen, 1988 GRUR Int. 8, 11.