Protecting Inventions in Chemistry

Commentary on Chemical Case Law under the European Patent Convention and the German Patent Law

by

Dr. Bernd Hansen
Dipl. Chem., European and German Patent Attorney, München

Dr. Fritjoff Hirsch
Dipl. Chem., Former Judge at the Federal Patent Court, München

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Hansen · Hirsch

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Foreword

Chemical industries are going through dramatic changes. Growing in size by way of mergers and acquisitions, globalising and specialising appear now more than ever to be important. Increasing investments in research and development are designed to produce innovations that allow 'maximum shareholder value'.

A change in the 'patent landscape' goes along with it. New Laws have been created for extended protection of pharmaceuticals and agricultural products, existing regulations in the biotech field have been adapted and to a certain extent relaxed, utility model Laws have emerged for chemical product inventions and new European directives dealing with the involved ethical questions can be expected to surface. Litigation has gone crossborder, and as regards respective financial implications, has also reached new dimensions.

The chemical inventor who is looking for protection in Europe has a variety of choices, as he can begin the process by way of the National, European or PCT patent route or even now resort to the utility model system. These possibilities are basically introduced and at times compared in this Commentary. Even when filing and obtaining patents through the European Patent Office in München, as many applicants do, the proprietor cannot escape the impact of National Law. Revocation, Infringement and Compulsory License Proceedings are being referred to the National Courts. Thus the patents granted by the EPO will be put to the test of national Law for re-evaluation. While national regulations are largely similar or identical to the respective Articles of the European Patent Convention, the approach to same and the standards of interpretation may differ. This has encouraged us to discuss the European as well as the German legal system (sometimes reflecting as well on their historical development) and to point out their existing parallels or differences between them. Suggestions for analogous situations in other European countries or the USA have also sometimes been provided.

Where the European and the German Case Laws differ to a large degree or are even in open conflict, we have chosen to separate them. Otherwise, an effort has been made to intermingle the presentation of respective Case Law, especially when the underlying Laws/Articles are identical and their basic interpretations are largely comparable.

The Case Law of the German Infringement and Revocation Courts of the First Instance has consciously been included, even in circumstances where an appeal is pending, and thus reversal is still possible. We believe there is a true interest to find out how these specialised Courts decide, and this is the more so, as a good share of these often unknown decisions are, in fact, confirmed or otherwise accepted. For such a reason, even cases that were settled prior to a decision were included when the tactical approach taken by the parties or the Court, or the scenario as such appeared interesting.
Foreword

Although such a book combines the long professional experiences of a Patent Judge and a Patent Attorney, it cannot be written without ‘behind the scenes’ help. For his valuable assistance, we wish to especially thank Dr. Thorsten Bausch who shared his ample knowledge and valuable ideas with us, as well as greatly helped with the figures, tables and the index. For linguistic support, we are grateful to Dr. Christopher Hill who had no easy task, particularly when being confronted with ‘old fashioned’ German Court language!

On the ‘typing front’, we wish to present our special thanks to Frau Margot Küsters. Without her competence, patience and good will we would have been lost! And we are furthermore grateful to Hoffmann · Eitle, München and London, for logistic support.

We shall be very happy should this book be of value to the practitioner. In light of any discrepancies or errors, we kindly ask for your understanding; any hints for correction and improvement will be gratefully received.

München, March 1997

Bernd Hansen
Fritjoff Hirsch
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<td>Art.</td>
<td>Article</td>
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<tr>
<td>BGB</td>
<td>Bürgerliches Gesetzbuch (Civil Code)</td>
</tr>
<tr>
<td>BGHZ</td>
<td>Entscheidungen des BGH in Zivilsachen</td>
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<tr>
<td>BPatGE</td>
<td>Decisions of the Federal Patent Court</td>
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<td>CPC</td>
<td>Community Patent Convention</td>
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<td>DNA</td>
<td>Deoxyribonucleic acid</td>
</tr>
<tr>
<td>EBA</td>
<td>Enlarged Board of Appeal of the European Patent Office</td>
</tr>
<tr>
<td>EC</td>
<td>European Community</td>
</tr>
<tr>
<td>ECJ</td>
<td>European Court of Justice</td>
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<tr>
<td>ed.</td>
<td>edition</td>
</tr>
<tr>
<td>EEC</td>
<td>European Economic Community</td>
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<tr>
<td>EIPR</td>
<td>European Industrial Property Review</td>
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<tr>
<td>EPC</td>
<td>European Patent Convention</td>
</tr>
<tr>
<td>epi</td>
<td>European Institute of Professional Representatives</td>
</tr>
<tr>
<td>EPO</td>
<td>European Patent Office</td>
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<td>EPOR</td>
<td>European Patent Office Reports</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>EuZW</td>
<td>Europäische Zeitschrift für Wettbewerbsrecht</td>
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<tr>
<td>FN</td>
<td>footnote</td>
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<tr>
<td>FPC</td>
<td>Bundespatentgericht (Federal Patent Court)</td>
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<td>FSC</td>
<td>Bundesgerichtshof (Federal Supreme Court)</td>
</tr>
<tr>
<td>GebrMG</td>
<td>Gebrauchsmustergesetz (Utility Model Law)</td>
</tr>
<tr>
<td>GG</td>
<td>Grundgesetz (German Constitution)</td>
</tr>
<tr>
<td>GKG</td>
<td>Gerichtskostengesetz (Act on Court Fees)</td>
</tr>
<tr>
<td>GPatG</td>
<td>Gemeinschaftspatentgesetz (Community Patent Act)</td>
</tr>
<tr>
<td>GPO</td>
<td>German Patent Office</td>
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<tr>
<td>GRUR</td>
<td>Gewerblicher Rechtsschutz und Urheberrecht</td>
</tr>
<tr>
<td>GRUR Int.</td>
<td>Gewerblicher Rechtsschutz und Urheberrecht, international part</td>
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<td>GVG</td>
<td>Gerichtsverfassungsgesetz (Court Act)</td>
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<tr>
<td>IIC</td>
<td>International Review of Industrial Property and Copyright Law</td>
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<td>IntPatÜG</td>
<td>Act on International Patent Conventions</td>
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<td>JZ</td>
<td>Juristenzeitung</td>
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<td>LG</td>
<td>Landgericht (Regional Court)</td>
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<td>Mitt.</td>
<td>Mitteilungen der deutschen Patentanwälte</td>
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<td>MO</td>
<td>Microorganism</td>
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<td>Abbreviation</td>
<td>Description</td>
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<td>NJW</td>
<td>Neue Juristische Wochenschrift</td>
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<td>OJ</td>
<td>Official Journal of the European Patent Office</td>
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<td>OLG</td>
<td>Oberlandesgericht (Higher Regional Court)</td>
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<td>PatAnmVO</td>
<td>Patentanmeldeverordnung (Rules on Patent Applications)</td>
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<td>Patentgebührengesetz (Act on Patent Fees)</td>
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<td>Patent Cooperation Treaty</td>
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<td>RG</td>
<td>Reichsgericht (Court of the Reich)</td>
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<td>RIW</td>
<td>Recht der Internationalen Wirtschaft</td>
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<tr>
<td>RNA</td>
<td>Ribonucleic acid</td>
</tr>
<tr>
<td>SortSG</td>
<td>Sortenschutzgesetz (Plant Variety Protection Law)</td>
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<tr>
<td>SPC</td>
<td>Supplementary Protection Certificate</td>
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<td>TBA</td>
<td>Technical Board of Appeal of the European Patent Office</td>
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<tr>
<td>UPOV-C</td>
<td>International Convention for the Protection of New Varieties of Plants</td>
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<tr>
<td>VGH</td>
<td>Verwaltungsgerichtshof (Higher Administrative Court)</td>
</tr>
<tr>
<td>WRP</td>
<td>Wettbewerb in Recht und Praxis</td>
</tr>
<tr>
<td>ZPO</td>
<td>Zivilprozeßordnung (Code of Civil Procedure)</td>
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I. The procedure for grant of a patent

Three basically different methods are available to inventors for obtaining patent protection in the territory of Germany and most other European States. In the following discussion, the aim is to give a comparative overview of the patent grant procedure before the European Patent Office (EPO), the German Patent Office (GPO) and via the international application procedure according to the Patent Cooperation Treaty (PCT). This is intended especially for applicants, without claiming to be a complete treatment. For a more comprehensive discussion on this theme, the reader is referred to the relevant literature and commentaries.

In principle, the formal treatment of patent applications in the area of chemistry does not differ in any way from applications in other technical areas; individual legal peculiarities arise for the most part in applications pertaining to microorganisms, or a peptide or nucleic acid sequence (see Chapter V). The patent grant procedure before both the EPO and GPO involves an examination step for determining whether the patent application satisfies formal requirements (formal examination) as well as examination on the merits (substantive examination). In the latter, in the light of the identified prior art, an investigation is undertaken to determine whether the application represents an invention which is workable by the man skilled in the art, which is new, which involves an inventive step and which is industrially applicable. As a fundamental rule, a patent may only be granted for a technical invention (see Chapter V C) and in § 1(2) of the German Patent Act (the Patentgesetz of 1981, hereinafter PatG) and in Art. 52(2) EPC, subject-matter which is not regarded as an invention as such is highlighted. If the formal as well as the substantive requirements for patentability of the application are fulfilled, then a patent is granted; otherwise, the application is refused.

The PCT procedure on the other hand represents merely an international standardised application procedure. At the request of the applicant and within a specific time period, it leads into national or regional examination proceedings before the Patent Offices of the Designated States in which patent protection is desired. Under the PCT procedure patents are not granted, but applications are processed up to a specific stage; the essential components of the PCT process are international publication of

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1 e.g. Benkard PatG 9th ed., page 791 et seq
Schulte PatG 5th ed., page 353 et seq
“How to get a European Patent” produced by the EPO, 9th ed., 1992
“PCT Applicant’s Guide” produced by WIPO, Geneva
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the application as well as the compiling and publication of an international search report. The international substantive examination is however only optional and is not binding on the national and regional Patent Offices.

All of the above grant procedures require the filing of a patent application at a Patent Office, and in the case of filing a PCT application which designates the EPO or GPO, these Offices become active as PCT Receiving Offices. The requirements of form and content of a patent application are set out differently under each patent system; however the documents to be filed in an allowed language at the Patent Office must at least contain a request for the grant of a patent, which enables the applicant to be identified, and a disclosure of the invention. According to world-wide consensus, these are the minimum requirements which need to be met in order that documents received at the Patent Office are treated as a “patent application”. Further requirements may also be added to these, see below.

Only from the point in time at which the filed documents fulfil all of the minimum requirements at the relevant Patent Office, can they be treated as a patent application and can a filing date be accorded. The filing date represents the decisive date governing the priority of the application in case of a first filing; from it calculation is made of the effective life of a patent to be granted on the basis of the application and the dates on which payment of the annuity fees is due.

A. The patent grant procedure before the EPO

1. Overview

The patent grant procedure before the EPO is an examination procedure with an initial formal examination prior to an obligatory search. The procedure up to grant of a European patent is basically divided into two phases. The first phase comprises an examination on filing, the formalities examination and the drawing up of the European search report, as well as the publication of the application and the search report. This is carried out in the branch of the EPO in The Hague and the Berlin Sub-Office. The Receiving Section and one of the Search Divisions in The Hague are substantially responsible for this.

On the provision of the search report, under the European system the applicant is made to take note of the state of the art which it documents. Within a regular period of 6 months after the date of the publication of the European search report he has the possibility to enter into the second phase of the European patent grant procedure, through the filing of an examination request, or as the case may be through the confirmation of a previously filed examination request.

The Examining Divisions in Munich are responsible for this second phase in the procedure, which includes the substantive examination leading to the grant of a patent or the refusal of the application.

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2 The national Patent Offices in Vienna and Stockholm are also entrusted with search activities to a smaller extent.
A separate opposition procedure may follow the patent grant procedure. According to Art. 99 EPC, any person has the possibility to file an opposition against the granted European patent within 9 months after the publication of the mention of the grant. A decision in regard to the opposition is taken by an Opposition Division in Munich, which is composed of three, or in exceptional circumstances of four members. In each case, the Opposition Division comprises three Examiners of the EPO, knowledgeable in the technical area of the granted patent. In more than two-thirds of all cases, the Primary Examiner who was involved with the grant of the European patent in the application proceedings, is a member of the Opposition Division.

The Opposition Division examines whether the grounds for opposition enunciated in Art. 100 EPC prejudice the maintenance of the European patent. The Division comes to a decision – in the majority of cases at the end of an oral hearing – wherein the patent is either revoked or the opposition is refused, or they render an interlocutory decision that the patent, and the invention described in it, fulfil the requirements of the EPC in the light of amendments carried out by the patent proprietor (maintenance in amended form).

The appeals procedure constitutes a special procedural phase (Arts. 106-112, Rules 64-67 EPC). An appeal can be filed against final decisions of the Receiving Section, the Examining Divisions, the Opposition Divisions and the Legal Division, as well as against interlocutory decisions if separate appeal is allowed therein. However, no appeal is possible against communications from the Search Division. A technical or legal Appeal Board makes a decision regarding an appeal. In ex parte proceedings, the Department whose decision is contested can allow the appeal and rectify its decision within 1 month after the filing of the grounds of appeal; otherwise the appeal should be forwarded to the Appeal Board without delay (Art. 109 EPC). If further parties are taking part in the proceedings (especially in opposition proceedings) such a rectification is not possible. The appeal must be filed in writing within 2 months from the date of notification of the contested decision, and within 4 months the grounds must be filed in writing (Art. 108 EPC). The Appeal Board makes a decision regarding the appeal requests in the final instance.

In exceptional cases, for example if uniform application of the Law should be ensured or if an important point of Law arises, the Appeal Board can call on the Enlarged Board of Appeal (EBA), should this be deemed necessary (Art. 112(1)a) EPC). In this case, the Appeal Board is bound by the decision of the EBA for the proceedings. Furthermore, the President of the European Patent Office may put a legal question before the Enlarged Board of Appeal when two Appeal Boards have reached

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3 The Enlarged Board of Appeal now takes the view on this question, in abandoning earlier legal interpretation (G 1/84), that opposition by the patent proprietor to his own patent is not allowed: “Opposition by patent proprietor/Peugeot and Citroen” – G 9/93 of 6.7.1994, OJ 1994, 891
4 According to Art. 19 EPC, the Opposition Division can call in a legally qualified fourth Examiner.
5 The binding effect is not applicable insofar as the Appeal Board has to decide again on the same legal question in different procedural stages (1. an ex parte decision before the grant of the patent – 2. a decision in opposition proceedings). According to “Nimodipin II/Bayer” (T 297/88 of 5.12.1989) renewed referral to the Enlarged Board of Appeal is also possible.
conflicting decisions on this question. The parties to the proceedings cannot call on the Enlarged Board of Appeal directly, but may only suggest that a legal question be dealt with.

2. Procedure up to the publication of the application

a) Examination on filing

After the receipt of the filed documents, the Receiving Section initially checks whether a filing date can be given according to Art. 90 EPC. For this, according to Art. 80 EPC, the application must contain at least one claim and designate at least one EPC Contracting State. In addition an indication that a European patent is sought (request for grant) and a description (the minimum requirements of an application under the EPC) must be present.

If an application date cannot be accorded, the Receiving Section will give the applicant the opportunity to remedy the established deficiencies. If the deficiencies are not remedied within the given time period, the documents are not treated as a European patent application. If a filing date is accorded, the Receiving Section checks whether the filing and search fees have been paid in time. If necessary, it also examines whether a translation of the application in one of the three official languages of the EPO (German, English and French) has been filed according to Art. 14(2) EPC (if the application is drafted in a different language). If the fees have not been paid in time, nor within the extra time limit provided under Rule 85a with payment of an additional fee, or if the translation has not been filed in time, the European patent application is deemed to be withdrawn.

b) Formalities examination

At this subsequent stage, the Receiving Section examines whether a series of further formal requirements is fulfilled, including the following ones:
- the regulations regarding representation (Arts. 133 and 134 EPC)
- the requirements of form (Arts. 84 and 85 and Rules 27-35 EPC)
- the filing of an abstract (Art. 78(1)c) EPC)
- the correct drafting of the request for grant (Rule 26 EPC)
- the formal validity of the claimed priority (Art. 88, Rules 26(2)g) and 38 EPC)
- the designation of inventor (Art. 81, Rule 17 EPC) and
- if necessary, the filing of drawings (regulations as to form in Rule 32 EPC).

If the Receiving Section establishes any rectifiable deficiencies, the applicant is requested to deal with these within a specified time period. Non-observation of this request leads to legal consequences provided for under the EPC, namely that the application is deemed withdrawn, or is refused, or specific designations are deemed withdrawn. Deficiencies relating to the claiming of priority which are not rectifiable, 6 see Guidelines for Examination in the European Patent Office (1994) A II and also “Identity of applicant/Warheit” – J 25/86 of 14.11.1986, OJ 1987, 475
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or have not been dealt with by the applicant despite an official invitation, lead to the loss of the claim to priority (Art. 91). Failure to provide a declaration regarding the date(s) and the territory of the earlier application(s) when filing a European patent application is deemed a deficiency which cannot be rectified.

c) Drawing up the search report

At the same time as the formal examination by the Receiving Section is in process, a search is carried out by the Search Division. The European search report is drafted on the basis of the patent claims with due consideration being given to the description and any drawings. The search report is forwarded to the applicant together with copies of all of the cited documents (Art. 92, Rule 44 EPC). The European search report does not contain reasons and represents no opinion as to the patentability of the invention applied for. However, the Search Examiner regularly provides the applicant and also the Substantive Examiner with his view as to the relevance of the cited documents, by classifying them in particular categories. The Substantive Examiner is not bound by such classification.

After receipt of the search report, the applicant can withdraw the application if he believes that further prosecution would not be likely to meet with success. Should the applicant decide to proceed further with the patent grant procedure, he may now amend the application taking into account the results of the search. Before receiving the European search report, amendments to the description, claims or drawings of the application are not allowed unless they are merely corrections of obvious mistakes according to Rule 88 EPC.

Simultaneously with the drawing up of the European search report, the Search Division decides on the title in all of the official languages and the final content of the abstract, and forwards it to the applicant together with the search report (Rule 47 EPC).

3. Unity of the invention

a) Procedural aspects

According to Art. 82 EPC, a European patent application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept. Insofar as the application satisfies the unity requirements, it may contain several independent and dependent claims of the same or different categories. The number of claims may, however, be limited by the requirement of conciseness (Art. 84 EPC) in special cases.

If the Search Division is of the opinion that the application does not fulfil the unity requirements of Art. 82 EPC, a European search report is drafted only for that part of the application which is first referred to in the claims. The applicant is informed that for each further invention, a further search fee is to be paid within a particular time period if the European search report is to cover this invention (Rule 46(1) EPC). If the applicant does not conform with this request, he may not proceed further in this
application with subject-matter for which a search fee has not been paid\(^7\). Such subject-matter may however be incorporated in a divisional application. The applicant has no legal remedies against the demand for payment of further search fees, because such a demand does not represent an appealable decision in the sense of Art.106 EPC. Should the applicant deem the request of the Search Division unjustified, it remains only for him to pay the necessary further search fee(s), and to reclaim same in the course of the substantive examination proceedings pursuant to Rule 46(2) EPC. Should it result that the request of the Search Division for the payment of these fees were not justified, the excess fee(s) will be refunded. However, should the Examining Division maintain the objections on grounds of lack of unity, it reaches an intermediate decision stating the lack of a general inventive concept\(^8\), and refuses the request for repayment of the fees. This decision may be appealed. To avoid a refusal of the application, the applicant must then restrict it and file one or, if necessary, several divisional applications regarding the non-unitary subject-matter. According to Rule 25 EPC, the applicant may file a divisional application up to the time of the approval of the text in which the European patent is to be granted, in accordance with Rule 51(4) EPC. After the provision of the (last\(^9\)) declaration of approval, a divisional application can no longer be filed\(^10\). Like any procedural statement, a declaration of approval according to Rule 51(4) EPC may be withdrawn provided that the Law allows this. This does, however, mean that the applicant who withdraws approval then acquires the right to file a divisional application\(^11\).

b) Material aspects

This section deals with the Case Law of the Technical Appeal Boards of the EPO, relating to the interpretation of Art.82 EPC for chemical inventions, in order to provide the applicant with guidelines for the handling of applications when unity objections arise, e.g. upon the issuance of a communication according to Rule 46(1) EPC. Under the EPC, Art.82 is titled “Unity of invention” which is perhaps a little misleading because one invention cannot itself exhibit non-unity. In fact Art.82 refers to “a single invention” as well as “a group of inventions”. If the application claims a group of inventions, according to Art.82 these inventions must be linked so as to form a single general inventive concept. Rule 30 EPC demands, in interpretation of Art.82, the existence of a technical relationship between inventions involving one or more of the same or corresponding special technical features. The term “special technical fe-

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\(^8\) T 390/91 of 14.5.1992

\(^9\) Several declarations of approval can be required, when for example the Examining Division reopens proceedings after the first approval has been given, and suggests further amendments.


\(^11\) On the retractability and binding effect of the declaration of approval see also “Late amendments/ Whitby” – G 7/93 of 13.5.1994, OJ 1994, 775
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atures” covers those features which define a contribution which each of the claimed inventions considered as a whole makes over the prior art. Thus several patent claims can exhibit non-unity as well as a single patent claim that includes different alternatives.

A lack of unity can occur in an application *a priori* and also *a posteriori*. These concepts are illustrated by way of both of the following examples:

An application cannot claim simultaneously an aircraft, an azo-dye, and a piano mechanism; such an application would lack unity from the outset (*a priori*). This type of lack of unity would be discernible directly from the application, without considering the relevant state of the art.

However this is different, if for example a synergistic herbicide mixture is claimed in an application, consisting of a known herbicide X and a group of also known herbicides Y. One dependent claim might refer, for example, to a combination of X and a specific herbicide A, and another to X and a specific herbicide B etc., such that they more clearly define the nature of Y (Y = A,B,C,D ....). This is depicted schematically in the following Figure:

![Figure 1: Example of *a posteriori* non-unity](image)

An application such as this would fulfil the unity requirements if the linking general concept (synergistic herbicide mixture consisting of X and Y) was new and inventive. If however the Search Examiner locates prior art, in which for example a synergistic herbicide composition of compound X and herbicide C is disclosed, the broad main claim 1 would lack novelty and the general inventive concept would no longer be new. The application would then split into a series of alternative solutions, for example compound X plus herbicide A, compound X plus herbicide B, compound X plus herbicide D which are individually new and possibly inventive. However, these solutions are no longer linked by a general inventive concept unless the herbicides A, B and D have the same or corresponding “special technical features”, such as a very similar structure. Generally it can be said that several independent solutions in an application can be handled without contravention of Art. 82 EPC if a problem as such is new.

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12 In EP application 93 106 801, the Search Examiner established the presence of 91 inventions in an analogous case.

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and has been solved for the first time by the invention. If however the problem is
known and already solved, the solutions described in an application must involve the
same principle of solution and this principle must provide an inventive contribution to
the state of the art.

The question of unity in chemical inventions has played a certain role in the past
for synthetic chemical processes in which new intermediate products were claimed in
addition to the final products and the process itself. In the decision “Copolycarbon-
ates/Bayer”¹⁴ which related to new high molecular copolycarbonates, a process for
their production and the use of a low molecular weight carboxylic ester therein, the
unity of such an application was confirmed. In this case the subject-matter was held to
belong to a single collective concept by virtue of the aim therein, namely producing
the final products. In the view of the Appeal Board, the idea associated with the inter-
mediate products, i.e. providing building components for the end products, could not
remain out of consideration. The Appeal Board pragmatically included starting mate-
rials for a process for the production of end products in the legal definition “inter-
mediate products”, provided these themselves are products of a process which is dis-
closed but not expressly claimed. In fact nowadays patentable intermediates, i.e.
“starting materials” of the last synthesis step, normally are the products of a chemical
synthesis. The above-mentioned decision was expanded in T 110/82¹⁵ to cover low
molecular end products as well as their production from the use of low molecular
intermediate products. However, it was required that a sufficiently narrow technical
connection between the intermediate products and the final products should be pre-
sent, for example through contributing an essential structural element into the final
products. Also due consideration must be given to the purpose of Art. 82 EPC (prohi-
bition of unjustified saving of fees, improving comprehensibility). In “Hydroxy-pyra-
zoles/BASF”¹⁶ the problem arose that in the same structural part of the final products
and the intermediate products, the substituents did not completely correspond,
because a certain intermediate product was already known. However, this did not pre-
vent the Appeal Board from acknowledging unity; they ruled that if a single final pro-
duct, for which no corresponding intermediate product can be claimed, had to be pur-
sued in a separate application this would not be consistent with the regulatory purpose
of Art. 82 and would lead to a dismemberment of technically connected subject-mat-
ter. These principles were further confirmed and developed through the decision
“Unity/ICI”¹⁷, which referred to end products of the following general formula:

![Diagram](image)

¹⁶ “Hydroxy-pyrazoles/BASF” – T 35/87 of 27.4.1987, OJ 1988, 134
They are obtainable through the reaction of two claimed intermediate products, wherein one intermediate possesses the structural feature of a trifluoromethylphenyl group and the second contains the pyridyl structural unit. The application was initially refused by the Examining Division on the basis of a lack of unity, with the grounds that the intermediate products and end products did not display a structural feature which was common to both. The Appeal Board decided however, that this did not preclude the presence of a single general inventive concept, because through the aim of producing the end products from the intermediates, the individual contributions of the intermediate products all helped to solve a common problem. Further decisions in which the unity of an application was confirmed, have been concerned with amongst other things:

- a process for the coloration of oxide layers on aluminium with an acidic Sn(II) containing electrolyte, which is stabilised through a compound of general formula I / an electrolyte for the colouring of oxide layers on aluminium, which contains specific representatives of compounds of formula I\(^1\)\(^8\)

- a five-stage process for the production of aluminium sulphates / a piston pump for the extraction of thick, dirty and corrosive pastes especially suited for use in a process for the production of aluminium sulphate\(^1\)\(^9\)

- a process for the catalytic removal of ammonia from waste gases by means of a specific mixed oxide catalyst / a device for carrying out this process characterised (amongst other things) by a mixed oxide catalyst / a process for the production of a mixed oxide catalyst\(^2\); the Board confirmed the validity of Rule 30 in the form valid until 31 May 1991, its applicability depending on the application date; the allowed combinations enumerated therein were not exhaustive and Rule 30 (old) did not establish how many independent claims could be contained in an application

- different non-human interferons of animal origin / a process for their production / genetic precursors (DNA) / a process for the identification and isolation of this DNA / expression vectors and transformed cells with this DNA\(^3\); the Appeal Board held it not to be established that the general inventive concept of the claims was destroyed through lack of novelty or inventive step, as had been decided by the Examining Division

In a case involving a print filter in the form of a tube filter or a plate filter press, the Appeal Board indicated that the inventive concept should be determined on the basis of the claims, giving due consideration to the description and the drawings. It should

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18 T 479/92 of 19.11.1993
19 T 861/92 of 1.2.1993
20 “a priori unity/Siemens” – T 290/92 of 7.7.1993
21 “Animal interferons/Genentech” – T 711/89 of 4.2.1992
not automatically be identified with the features of the claim or with a particular claim combination. The unity a posteriori was confirmed because it could not be shown that the general inventive concept completely lacked novelty or inventive step22.

Whilst the widely predominating number of Appeal Board decisions of the EPO involves results confirming unity (applicant-friendly), an example to the contrary exists in which a reactor fuel element and a partitioning grid for the core of a nuclear reactor were claimed23. The Board indicated that it is stipulated in Rule 29 EPC that for subject-matter of independent claims in the same category the requirements of unity must be rigorously fulfilled, i.e. the linking inventive concept must be clearly derivable from these claims.

Although unity represents a requirement which a European patent application must fulfil in order to be granted, a lack of unity is not a valid ground for opposition to a granted European patent according to Art. 100 EPC. This is also true, when in the course of the opposition proceedings a patent is amended, and the Opposition Division must examine whether, according to Art. 102(3) and Rule 61a EPC, the European patent and the invention to which it refers satisfy the requirements of the EPC. The Enlarged Board of Appeal has decided24 that the requirements which a patent must fulfil according to the EPC can be different (and in this case actually are different) from those which a patent application must satisfy. In the Board’s view it is the aim (”ratio legis”) of the opposition procedure to give competitors an opportunity to oppose unjustified protective rights. However, this does not include that they should have the possibility to attack a patent on lack of compliance with formality requirements; particularly a lack of unity does not preclude patent protection per se and would at best result in two or more patents. Furthermore, the systematic legal argument below seems especially convincing:

As long as unity is a requirement to be met under the patent law procedure, there must also be the possibility of establishing the required unity, either through partial surrender or division. Where division is no longer possible, lack of unity can have no further legal significance. The European patent law system does not provide for division once the patent has been granted. So even though Art. 102(3) and Rule 61a EPC may leave some doubts as to the importance of unity at the opposition stage, the lack of the legal institution of division shows that unity can no longer have any importance for the opposition or in opposition proceedings.

c) Summary

Taken as a whole, the present handling of unity questions at the EPO can be described as quite liberal. Through the amendment of Rule 30 EPC in 1991 no legally significant essential changes have resulted, and if at all the amendment has led to a further liberalisation: from the Examination Guidelines it is clear that the new Rule

23 T 702/93 of 10.2.1994