

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

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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.

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

Contents

Foreword	V
Abbreviations	XVII

I. The procedure for grant of a patent	1
A. The patent grant procedure before the EPO	2
1. Overview	2
2. Procedure up to the publication of the application	4
a) Examination on filing	4
b) Formalities examination	4
c) Drawing up the search report	5
3. Unity of the invention	5
a) Procedural aspects	5
b) Material aspects	6
c) Summary	10
4. Publication of the application	11
5. Examination proceedings	12
a) Examination request	12
b) Course of the substantive examination proceedings	13
c) Amendments of the application in the examination proceedings	15
6. National requirements	18
a) Translation requirements	18
b) Separate sets of claims	18
7. Overview of important terms and costs	19
a) Terms for European first filings	19
b) Terms for European convention filings	20
c) Costs of an application	20
B. The patent grant procedure before the GPO	22
1. Overview	22
2. Course of the proceedings	23
a) Examination as to obvious deficiencies	23
b) Laying-open of the application	24
c) Examination on request, in particular substantive examination	25
(1) Examination request	25
(2) Course of the substantive examination procedure	25

(3) Amendments to the application during the application procedure	26
(4) Grant	26
(5) Refusal	27
3. Unity of the invention	27
a) Legal basis	27
b) Practical handling	27
(1) Generalities	27
(2) Intermediate products	30
(3) Disclaimers	31
c) Summary	32
4. Separated/Divisional applications	32
a) Divisional applications	34
b) Separated applications	34
5. Overview of important terms and costs	35
a) Terms	35
b) Costs of an application	35
C. The PCT procedure	36
1. General overview	36
2. International phase	37
a) Initial and formal examination	37
b) International search	37
c) Unity	38
d) Publication	39
e) International preliminary examination	39
3. National/Regional phase	39
4. Costs	40
D. Comparison of the possibilities for filing	41
E. Utility model protection	44
II. On disclosure and novelty	49
A. Introduction	49
B. Requirements of disclosure	50
1. Sufficiency	50
a) Introduction and legal principles	50
b) General chemical inventions	51
c) Biochemical inventions	62

2. Clarity of the claims	70
a) Functional features in the claim	71
b) Concentration and substituent data in the claim	72
c) Product-by-process claims	74
d) Other parameters in the claim	79
C. Problems of novelty	82
1. Introduction – the “state of the art”	82
2. Formal aspects	83
a) Prior documentary publication	83
b) Disclosure through public prior use	83
(1) Problems of confidence	84
(2) Problems of disclosure	86
(a) Processes and uses	86
(b) Compounds and compositions	86
c) Disclosure by oral description	90
d) Earlier, post-published applications and patents	91
e) Applications with the same priority	92
f) Non-prejudicial disclosure	94
3. Aspects of content	95
a) Inclusion of non- <i>expressis verbis</i> disclosure	96
(1) Decisions of the European Patent Office	97
(2) Decisions of the Federal Supreme Court and Federal Patent Court	98
b) Novelty of specific subject-matter	101
(1) Compounds	101
(2) Compositions	103
(3) Natural products	108
(4) Polymorphic forms	112
(5) Enantiomers	113
(a) Situation before the EPO	114
(b) Case Law of the Federal Patent Court and Federal Supreme Court	114
(c) Disclosure and novelty	115
(6) Genetic engineering inventions	118
(7) Use inventions	119
c) Selection inventions	125
(1) Selection from a range	127
(2) Compound selection	134
(a) Decisions of the Federal Supreme Court and Federal Patent Court	134
(b) Decisions of the European Patent Office	141
(3) Summary	147
d) Parameter relationships	148
e) Mosaic-type prior disclosure	149

f) Implicit disclosure	152
g) Mistakes and shortcomings in the state of the art	154
D. Amendments and corrections	156
1. Genuine amendments	156
a) Decisions of the Federal Supreme Court and Federal Patent Court	156
(1) Amendments in other languages	156
(2) Amendments through limitation to one alternative	157
(3) Amendment of ranges	160
(4) Lack of essentiality of the amended feature	163
(5) Amendments and waivers	163
(6) Amendments after the publication or the grant	165
(a) Amendments and divisional applications	167
(b) Amendments through change in category	168
b) Decisions of the European Patent Office	170
(1) Amendments through limitation to alternatives	170
(2) Amendment of ranges	173
(3) Lack of essentiality of the amended feature	174
(4) Amendments after grant	175
(a) General	175
(b) Change in category	176
2. Disclaimers	177
a) under European Law	177
b) under German Law	180
3. Corrections	181
a) under European Law	181
b) under German Law	184
E. The priority claim	186
III. Inventive step	193
A. Legal basis	193
B. The problem-solution approach at the EPO	194
1. Closest prior art	195
2. The objective problem to be solved	197
a) Establishing the problem	197
b) Solving the problem by the teaching in the claims	198
3. Obviousness due to further prior art	201
4. Example	201

C. Indicia of inventive step (“non-obviousness”)	203
1. Technical progress	204
2. Numerous choices – random success – “obvious to try”	211
a) German Case Law	211
b) EPO Case Law	213
c) UK Case Law	214
d) US Case Law	215
3. Long-standing need	216
4. Simplicity	217
5. Extensive imitation; market superiority; economic success	217
6. General prejudice	218
D. The inventive step of particular subject-matter	220
1. Analogy processes and products	220
2. Multi-stage processes	225
3. General combination inventions	228
4. Selection inventions	230
a) Enantiomers	230
(1) EPO Case Law	230
(2) German Case Law	231
(3) Special patentable cases	232
b) Selection from general formulae or lists	233
5. Intermediate products	234
6. Biochemical inventions	240
E. The average skilled person	244
IV. Industrial applicability	249
A. Legal basis	249
B. Product inventions	249
C. Treatments and diagnostic methods	250
1. The Law according to PatG 1968	250
2. State of the Law according to PatG 1978 or 1981 and EPC	251
a) Methods of treatment	251
b) Diagnostic methods	254
3. First indication	255

4. Second indication	256
V. The peculiarities of biochemical inventions	265
A. Plants, plant varieties and plant breeding methods	265
1. Protectability	265
2. Ethical questions	270
B. Animals and animal breeding methods	273
1. Protectability	273
2. Ethical questions	276
C. Microorganisms	278
1. Written disclosure	279
2. Deposition by the applicant	280
3. Deposition by third parties	287
4. Deposition and enablement	288
5. Peculiarities of monoclonal antibodies	289
a) the antigen is new	289
b) the antigen is known	290
D. Nucleotides and peptides	290
VI. The Supplementary Protection Certificate	293
A. General	293
B. Application and examination	295
C. Duration and scope of protection	296
D. Particular problems	298
1. SPC application shortly before the expiry of the term of the patent	299
2. The “salt problem”	299
a) regarding Art. 3(b) EC Regulation 1768/92 (pharmaceuticals)	299
b) regarding Art. 3(a) EC Regulation 1768/92 (pharmaceuticals)	300
3. No disclosure of a relevant use in the basic patent	301
4. Problems regarding the “first authorisation as a pharmaceutical” .	301

5. SPC problems with licensed patents	302
6. Several basic patents	303
VII. Protective scope and special embodiments	305
A. On protective scope	305
1. Under the old Law (PatG 1968 and forerunners)	305
a) Legal basis	305
b) Case Law on equivalence	305
2. Under the present Law	312
a) Legal basis	312
b) General Case Law on equivalence	313
(1) "Formstein"	313
(2) Further decisions subsequent to "Formstein"	314
(3) Limitations to the protective scope	316
(a) Free state of the art	316
(b) Waiver and limitation	317
(c) The infringing embodiment is associated with an inventive step	318
(d) A particular feature is missing ("sub-combination")	320
(e) Different technical problem	321
(f) Rights of prior use and continued use	322
3. Specific Case Law on equivalent protective scope	323
a) Product claims	323
(1) General considerations	323
(2) Case Law in Biochemistry	326
b) Purpose-oriented product claims (composition claims)	329
(1) Structural deviation	329
(2) Deviation in purpose	330
(3) Other modifications	333
(4) Protective scope and disclosure	335
c) Process claims	338
d) Use claims	339
e) Product-by-process claims	340
B. Special embodiments	342
1. Pro-drugs/metabolites	342
2. Intermediate products	345
3. Clinical trials/field trials	347
a) according to the old Law (PatG 1968)	347
b) according to the new Law (PatG 1981)	348
c) The legal situation in other EPC States	350
d) The legal situation before patent grant	351

4. Further preparatory acts	351
5. Claims with numerical boundary values	353
6. Direct products of a process	356
VIII. Infringement, nullity and compulsory licence proceedings	361
A. Introduction	361
B. Infringement proceedings	361
1. Place of jurisdiction	361
a) National infringement proceedings	361
b) Crossborder infringement proceedings	364
(1) Jurisdiction of the defendant's residence ("forum rei")	365
(2) Jurisdiction of one of a number of co-defendants	367
(3) Jurisdiction where the harmful event occurred ("forum delicti")	370
2. Nullity defence in infringement proceedings	372
3. Peculiarities of the international infringement proceedings	373
a) Related actions	374
b) Recognition and enforcement	375
c) Appeals	375
4. Questions of evidence	376
a) Burden of proof and reversal of burden of proof	376
b) Possibilities for presenting evidence or facilitating proof	377
(1) Claim for inspection under § 809 BGB	377
(2) Seizure and border seizure	379
(a) Border seizure	379
(b) Seizure of infringing products which have already entered the Federal Republic of Germany	382
(3) <i>Prima facie</i> evidence	383
(4) Proceedings to secure evidence	383
(5) Discovery proceedings	384
(6) Saisie (seizure) proceedings	385
c) Expert evidence	386
5. Costs	387
6. Claims and the basis for claims	389
a) Claim for injunction	389
b) Claim for damages and claim for remuneration	391
c) Claim for information or rendering of accounts	392
7. Enforcement	392
a) Claim for injunction	393
b) Claim for information or rendering of accounts	394

c) Claim for destruction	395
d) Suit for establishing damages	395
e) Liability	396
f) Protective measures regarding enforcement	396
C. Nullity proceedings	397
1. General	397
2. Place of jurisdiction	398
3. Fundamentals of the proceedings	398
a) Party hierarchy	398
b) Official investigation	399
4. Material grounds	400
5. Costs	401
D. Compulsory licence procedure	402
1. General	402
2. International framework	402
a) Paris Convention	402
b) TRIPS	403
3. Germany	404
4. The rest of Europe	406
E. Preliminary injunction	408
1. General	408
2. Individual cases	409
a) Use of a patented product	409
b) Advertising with reference to patents	410
c) Granting of rights	411
d) Measures available around the expiration of the patent protection	411
3. Legal consequences and costs	412
F. Patent litigation in Europe – comparative view	413
1. Choosing the right forum	413
2. Comparison of selected countries	414
3. Preliminary injunctions in various European countries	416

IX. On the exhaustion of patents	419
A. Type of exhaustion	419
B. Legal basis	420
1. Germany	420
2. The EC Treaty	420
3. The CPC (presently not yet in force)	420
C. General Case Law	421
1. Bringing onto the market with the agreement of the patent proprietor	421
2. Bringing onto the market without the agreement of the patent proprietor	422
D. Special problems	424
1. Compulsory licences	424
2. Prior use	425
3. The problem of the “same product” or the “same category”	425
4. Obligations to market product	427
Annex	429
Index	473

Abbreviations

Art.	Article
Benkard	Benkard: Patentgesetz, Gebrauchsmustergesetz, 9. Aufl., C.H. Beck'sche Verlagsbuchhandlung, München 1993
BGB	Bürgerliches Gesetzbuch (Civil Code)
BGHZ	Entscheidungen des BGH in Zivilsachen
BPatGE	Decisions of the Federal Patent Court
CPC	Community Patent Convention
DNA	Deoxyribonucleic acid
EBA	Enlarged Board of Appeal of the European Patent Office
EC	European Community
ECJ	European Court of Justice
ed.	edition
EEC	European Economic Community
EIPR	European Industrial Property Review
EPC	European Patent Convention
epi	European Institute of Professional Representatives
EPO	European Patent Office
EPOR	European Patent Office Reports
EU	European Union
EuZW	Europäische Zeitschrift für Wettbewerbsrecht
FN	footnote
FPC	Bundespatentgericht (Federal Patent Court)
FSC	Bundesgerichtshof (Federal Supreme Court)
GebrMG	Gebrauchsmustergesetz (Utility Model Law)
GG	Grundgesetz (German Constitution)
GKG	Gerichtskostengesetz (Act on Court Fees)
GPatG	Gemeinschaftspatentgesetz (Community Patent Act)
GPO	German Patent Office
GRUR	Gewerblicher Rechtsschutz und Urheberrecht
GRUR Int.	Gewerblicher Rechtsschutz und Urheberrecht, international part
GVG	Gerichtsverfassungsgesetz (Court Act)
IIC	International Review of Industrial Property and Copyright Law
IntPatÜG	Act on International Patent Conventions
JBer. BPatG	Annual Report of the Federal Patent Court
JZ	Juristenzeitung
LG	Landgericht (Regional Court)
Mitt.	Mitteilungen der deutschen Patentanwälte
MO	Microorganism

XVIII *Abbreviations*

NJW	Neue Juristische Wochenschrift
OJ	Official Journal of the European Patent Office
OLG	Oberlandesgericht (Higher Regional Court)
PatAnmVO	Patentanmeldeverordnung (Rules on Patent Applications)
PatG	Patentgesetz (German Patent Act)
PatGebG	Patentgebührengesetz (Act on Patent Fees)
PCT	Patent Cooperation Treaty
PMZ	Blatt für Patent-, Muster- und Zeichenwesen
RG	Reichsgericht (Court of the Reich)
RIW	Recht der Internationalen Wirtschaft
RNA	Ribonucleic acid
Schulte	Schulte, Rainer: Patentgesetz mit Europäischem Patentübereinkommen, Kommentar auf d. Grundlage d. dt. und europ. Rechtsprechung, 5. Aufl. – Köln, Berlin, Bonn, München: Heymann 1994
SortSG	Sortenschutzgesetz (Plant Variety Protection Law)
SPC	Supplementary Protection Certificate
TBA	Technical Board of Appeal of the European Patent Office
UPOV-C	International Convention for the Protection of New Varieties of Plants
VGH	Verwaltungsgerichtshof (Higher Administrative Court)
WRP	Wettbewerb in Recht und Praxis
ZPO	Zivilprozeßordnung (Code of Civil Procedure)

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 commentaries¹.

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

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
G. Gall: Die europäische Patentanmeldung und der PCT in Frage und Antwort (The European patent application and the PCT in question and answer), Heymann, Köln, 4th ed., 1997
"PCT Applicant's Guide" produced by WIPO, Geneva
Bernhardt/Kraßer: Lehrbuch des Patentrechts (Textbook on Patent Law), C.H. Beck, München, 4th ed., 1984
Case Law of the Boards of Appeal of the European Patent Office, EPO, München 1996

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-Office². 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.

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 person³ 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 circumstances⁴ 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 proceedings⁵. 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

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 State⁶. 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)e) 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

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 paid⁷. 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 concept⁸, 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 (last⁹) declaration of approval, a divisional application can no longer be filed¹⁰. 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 application¹¹.

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 fea-

7 This was decided by the Enlarged Board of Appeal in “Non-payment of further search fees” – G 2/92 of 6.7.1993, OJ 1993, 591 after the preceding controversial decisions T 87/88 of 29.11.1991, OJ 1993, 430 and T 178/84 of 7.12.1987, OJ 1989, 157

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.

10 “Divisional application” – EBA in G 10/92 of 28.4.1994, OJ 1994, 633; see presentation in OJ 1993, 6; in disapproval of the argumentation of decisions “Deadline for filing divisional application/ Dow” – J 11/91 and J 16/91 of 5.8.1992, OJ 1994, 28. In connection with this also refer to “Divisional Application/Universite Laval” – J 27/94 of 27.2.1995, OJ 1995, 831

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

tures” 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 ($Y = A, B, C, D \dots$). This is depicted schematically in the following Figure:

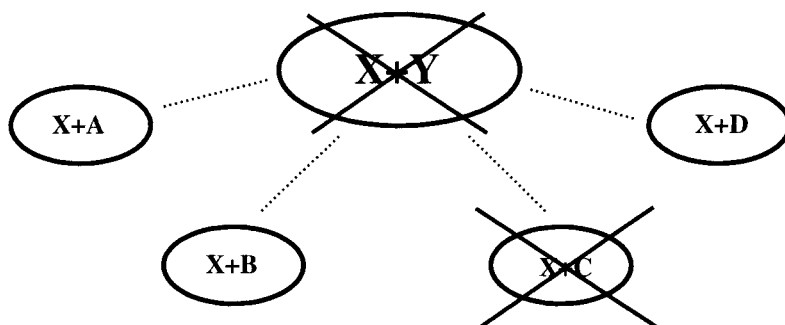


Figure 1: Example of *a posteriori* non-unity

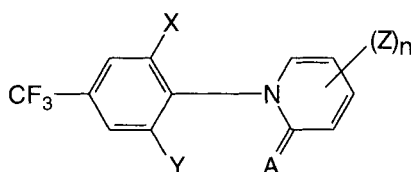
An application such as this would fulfil the unity requirements if the linking general concept (synergistic herbicide mixture consisting of X and Y) was new and inventive. If however the Search Examiner locates prior art, in which for example a synergistic herbicide composition of compound X and herbicide 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 solutions¹², 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 structure¹³. 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

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

13 Guidelines for Examination in the European Patent Office (1994) C III 7

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 “Copolycarbonates/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 intermediate products, i.e. providing building components for the end products, could not remain out of consideration. The Appeal Board pragmatically included starting materials for a process for the production of end products in the legal definition “intermediate products”, provided these themselves are products of a process which is disclosed 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 T110/82¹⁵ 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 present, 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 (prohibition of unjustified saving of fees, improving comprehensibility). In “Hydroxy-pyrazoles/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 prevent the Appeal Board from acknowledging unity; they ruled that if a single final product, for which no corresponding intermediate product can be claimed, had to be pursued 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-matter. These principles were further confirmed and developed through the decision “Unity/ICI”¹⁷, which referred to end products of the following general formula:



14 “Copolycarbonates/Bayer” – T 57/82 of 29.4.1982, OJ 1982, 306

15 “Benzyl esters/Bayer” – T 110/82 of 8.3.1983, OJ 1983, 274

16 “Hydroxy-pyrazoles/BASF” – T 35/87 of 27.4.1987, OJ 1988, 134

17 “Unity/ICI” – T 470/91 of 11.5.1992, OJ 1993, 680

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 I¹⁸
- 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 sulphate¹⁹
- 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 catalyst²⁰; 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 DNA²¹; 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

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

22 “Pressure filters/ECC” – T 94/91 of 9.9.1991

23 T 702/93 of 10.2.1994

24 “Unity/Siemens” – G 1/91 of 9.12.1991, OJ 1992, 253