

PART C

GUIDELINES FOR SUBSTANTIVE EXAMINATION

PART C

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CHAPTER I**INTRODUCTION****1. General remark**

In this Part C of the Guidelines the term "examiner" is used to mean the examiner entrusted with substantive examination forming part of the Examining Division, which is responsible for the final decision. Art. 18

2. Work of an examiner

The attitude of the examiner is very important. He should always try to be constructive and helpful. While it would of course be quite wrong for an examiner to overlook any major deficiency in an application, he should have a sense of proportion and not pursue unimportant objections. He should bear in mind that, subject to the requirements of the EPC, the drafting of the description and claims of a European application is the responsibility of the applicant or his authorised representative.

The attention of the examiner is particularly directed to the instruction in paragraph 4.3 of the General Part of the Guidelines. This applies not only in relation to other departments of the EPO. It also means, for example, that the other members of an Examining Division should not attempt to repeat the work of the primary examiner (see VI, 7.4).

3. Overview

In the remainder of Part C of the Guidelines, an attempt has been made to deal with the requirements of the application in Chapters I-V and to concentrate matters of procedure in Chapter VI. However, it has not always proved practicable to draw a clear line between these two aspects of the work.

CHAPTER II**CONTENT OF A EUROPEAN PATENT APPLICATION
(OTHER THAN CLAIMS)****1. General**

The requirements for a European patent application are set out in Art. 78. The application must contain:

- | | | |
|-------|--|---------------|
| (i) | a request for the grant of a European patent; | Art. 78(1)(a) |
| (ii) | a description of the invention; | Art. 78(1)(b) |
| (iii) | one or more claims; | Art. 78(1)(c) |
| (iv) | any drawings referred to in the description or the claims; and | Art. 78(1)(d) |
| (v) | an abstract. | Art. 78(1)(e) |

This Chapter deals with all these requirements, insofar as they are the concern of the examiner, with the exception of item (iii) which is the subject of Chapter III. Item (v) is dealt with first.

2. Abstract

The general considerations relating to the abstract are set out in B-XI. The abstract relates to the application as filed and published and its final form for publication is determined by the Search Division. It is not necessary to bring it into conformity with the content of the published patent even if this should differ in substance from that of the application, since the patent specification does not contain an abstract. The examiner should therefore not seek any amendment of the abstract. He should, however, note that the abstract has no legal effect on the application containing it; for instance, it cannot be used to interpret the scope of protection or to justify the addition to the description of new subject-matter.

3. Request for grant – the title

The items making up this request are dealt with in A-III, 4. They do not normally concern the examiner, with the exception of the title.

The title should clearly and concisely state the technical designation of the invention and should exclude all fancy names. While any obvious failures to meet these requirements are likely to be noted during the formalities examination, the examiner should review the title in the light of his reading of the description and claims and any amendments thereto, to make sure that the title, as well as being concise, gives a clear and adequate indication of the subject of the invention. Thus, if amendments are made which change the categories of claims, the examiner should check whether a corresponding amendment is needed in the title.

4. Description

4.1 General remarks

Art. 83
Rule 42

The application must disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

The "person skilled in the art" for this purpose is considered to be the ordinary practitioner aware not only of the teaching of the application itself and the references therein, but also of what was common general knowledge in the art at the date of filing the application. He is assumed to have had at his disposal the means and the capacity for routine work and experimentation, which are normal for the technical field in question. As "common general knowledge" can generally be considered the information contained in basic handbooks, monographs and textbooks on the subject in question (see T 171/84, OJ 4/1986, 95). As an exception, it can also be the information contained in patent specifications or scientific publications, if the invention lies in a field of research which is so new that the relevant technical knowledge is not yet available from textbooks (see T 51/87, OJ 3/1991, 177). Sufficiency of disclosure must be assessed on the basis of the application as a whole, including the description, claims and drawings, if any. The provisions relating to the content of the description are set out in Rule 42. The purpose of the provisions of Art. 83 and Rule 42 is:

- (i) to ensure that the application contains sufficient technical information to enable a skilled person to put the invention as claimed into practice; and
- (ii) to enable the reader to understand the contribution to the art which the invention as claimed has made.

4.2 Technical field

Rule 42(1)(a)

The invention should be placed in its setting by specifying the technical field to which it relates.

4.3 Background art

Rule 42(1)(b)
Art. 123(2)

The description should also mention any background art of which the applicant is aware, and which can be regarded as useful for understanding the invention and its relationship to the prior art; identification of documents reflecting such art, especially patent specifications, should preferably be included. This applies in particular to the background art corresponding to the first or "prior art" portion of the independent claim or claims (see III, 2.2).

The insertion into the statement of prior art of references to documents identified subsequently, for example by the search report, should be required, where necessary, to put the invention into proper perspective (T 11/82, OJ 12/1983, 479). For instance, while the originally filed description of prior art may give the impression that the inventor has developed the invention from a certain point, the cited documents may show that certain stages in, or aspects of, this alleged development were already known. In such a case the examiner should require a reference to these documents and a brief summary of the relevant contents. The subsequent inclusion of such a summary in the description does not contravene Art. 123(2). The latter merely lays down that, if the application is amended, for example by limiting it in the light of additional information on the background art, its subject-matter must not extend beyond the content of the application as filed. But the subject-matter of the European patent application within the meaning of Art. 123(2) is to be understood – starting

off from the prior art – as comprising those features which, in the framework of the disclosure required by Art. 83, relate to the invention (see also VI, 5.3).

References to the prior art introduced after filing must be purely factual. Any alleged advantages of the invention must be adjusted if necessary in the light of the prior art.

New statements of advantage are permissible provided that they do not introduce into the description matter which could not have been deduced from the application as originally filed (see VI, 5.3.4).

If the relevant prior art consists of another European patent application falling within the terms of Art. 54(3), this relevant prior document belongs to the state of the art for all Contracting States. This is the case even if the two applications do not share any commonly designated State, or the designation of commonly designated States has been dropped. (see IV, 8). The fact that this document falls under Art. 54(3) must be explicitly acknowledged. Thus the public is informed that the document is not relevant to the question of inventive step (see IV, 11.2). According to Rule 165, the above also applies to international applications designating EP, for which the filing fee pursuant to Rule 159(1)(c) has been validly paid and, where applicable, the translation into one of the official languages has been filed (Art. 153(3) and (4)) (see IV, 7.2).

Art. 54(3)

For transitional provisions concerning the applicability of Art. 54(4) EPC 1973, see III, 8.1.

Art. 54(4) EPC 1973

4.4 Irrelevant matter

Since the reader is presumed to have the general technical background knowledge appropriate to the art, the examiner should not require the applicant to insert anything in the nature of a treatise or research report or explanatory matter which is obtainable from textbooks or is otherwise well-known. Likewise the examiner should not require a detailed description of the content of cited prior documents. It is sufficient that the reason for the inclusion of the reference is indicated, unless in a particular case a more detailed description is necessary for a full understanding of the invention of the application (see also II, 4.19 and III, 2.3.1).

Rule 48(1)(c)

A list of several reference documents relating to the same feature or aspect of the prior art is not required; only the most appropriate need be referred to. On the other hand, the examiner should not insist upon the excision of any such unnecessary matter, except when it is very extensive (see II, 7.4).

4.5 Technical problem and its solution

The invention as claimed should be disclosed in such a way that the technical problem, or problems, with which it deals can be appreciated and the solution can be understood. To meet this requirement, only such details should be included as are necessary for elucidating the invention.

Rule 42(1)(c)
Rule 48(1)(b)

In cases where the subject-matter of a dependent claim can be understood either by the wording of the claim itself or by the description of a way of performing the invention, no additional explanation of this subject-matter will be necessary. A mention in the description that a particular embodiment of the invention is set out in the dependent claim will then be sufficient.

When there is doubt, however, as to whether certain details are necessary, the examiner should not insist on their excision. It is not necessary, moreover, that the invention be presented explicitly in problem-and-solution

form. Any advantageous effects which the applicant considers the invention to have in relation to the prior art should be stated, but this should not be done in such a way as to disparage any particular prior product or process. Furthermore, neither the prior art nor the applicant's invention should be referred to in a manner likely to mislead. This might be done e.g. by an ambiguous presentation which gives the impression that the prior art had solved less of the problem than was actually the case. Fair comment as referred to in II, 7.3 is, however, permitted. Regarding amendment to, or addition of, a statement of problem, see VI, 5.3.7.

4.6 Rule 42(1)(c) vs. Art. 52(1)

Rule 42(1)(c)

If it is decided that an independent claim defines a patentable invention within the meaning of Art. 52(1), it must be possible to derive a technical problem from the application. In this case the requirement of Rule 42(1)(c) is fulfilled (see T 26/81, OJ 6/1982, 211).

4.7 Drawings

Rule 42(1)(d)

If drawings are included they should first be briefly described, in a manner such as: "Figure 1 is a plan view of the transformer housing; Figure 2 is a side elevation of the housing; Figure 3 is an end elevation looking in the direction of the arrow X of Figure 2; Figure 4 is a cross-section taken through AA of Figure 1." When it is necessary to refer in the description to elements of the drawings, the name of the element should be referred to as well as its number, i.e. the reference should not be in the form: "3 is connected to 5 via 4" but, "resistor 3 is connected to capacitor 5 via switch 4".

4.8 Reference signs

Rule 46(2)(i)

The description and drawings should be consistent with one another, especially in the matter of reference numbers and other signs, and each number or sign must be explained. However, where as a result of amendments to the description whole passages are deleted, it may be tedious to delete all superfluous references from the drawings and in such a case the examiner should not pursue an objection under Rule 46(2)(i), as to consistency, too rigorously. The reverse situation should never occur, i.e. all reference numbers or signs used in the description or claims must also appear on the drawings.

4.9 Sufficiency of disclosure

Rule 42(1)(e) Art. 83

A detailed description of at least one way of carrying out the invention must be given. Since the application is addressed to the person skilled in the art, it is neither necessary nor desirable that details of well-known ancillary features should be given, but the description must disclose any feature essential for carrying out the invention in sufficient detail to render it apparent to the skilled person how to put the invention into practice. A single example may suffice, but where the claims cover a broad field, the application should not usually be regarded as satisfying the requirements of Art. 83 unless the description gives a number of examples or describes alternative embodiments or variations extending over the area protected by the claims. However, regard must be had to the facts of the particular case. There are some instances where even a very broad field is sufficiently exemplified by a limited number of examples or even one example (see also III, 6.3). In these latter cases the application must contain, in addition to the examples, sufficient information to allow the person skilled in the art, using his common general knowledge, to perform the invention over the whole area claimed without undue burden and without needing inventive skill (see T 727/95, OJ 1/2001, 1). If the Examining Division is able to make

out a reasoned case that the application lacks sufficient disclosure, the onus of establishing that the invention may be performed and repeated over substantially the whole of the claimed range lies with the applicant (see VI, 2.3).

For the requirements of Art. 83 and of Rule 42(1)(c) and (e) to be fully satisfied, it is necessary that the invention is described not only in terms of its structure but also in terms of its function, unless the functions of the various parts are immediately apparent. Indeed in some technical fields (e.g. computers), a clear description of function may be much more appropriate than an over-detailed description of structure.

Art. 83
Rule 42(1)(c) and (e)

4.10 Art. 83 vs. Art. 123(2)

It is the responsibility of the applicant to ensure that he supplies, on filing his application, a sufficient disclosure, i.e. one that meets the requirements of Art. 83 in respect of the invention as claimed in all of the claims. If the claims define the invention, or a feature thereof, in terms of parameters (see III, 4.11), the application as filed must include a clear description of the methods used to determine the parameter values, unless a person skilled in the art would know what method to use or unless all methods would yield the same result (see III, 4.18). If the disclosure is seriously insufficient, such a deficiency cannot be cured subsequently by adding further examples or features without offending against Art. 123(2), which requires that amendments may not result in the introduction of subject-matter which extends beyond the content of the application as filed (see VI, 5.3). Therefore, in such circumstances, the application must normally be refused. If, however, the deficiency arises only in respect of some embodiments of the invention and not others, it could be remedied by restricting the claims to correspond to the sufficiently described embodiments only, the description of the remaining embodiments being deleted.

Art. 83
Art. 123(2)

4.11 Insufficient disclosure

Occasionally applications are filed in which there is a fundamental insufficiency in the invention in the sense that it cannot be carried out by a person skilled in the art; there is then a failure to satisfy the requirements of Art. 83 which is essentially irreparable. Two instances deserve special mention. The first is where the successful performance of the invention is dependent on chance. That is to say, the skilled person, in following the instructions for carrying out the invention, finds either that the alleged results of the invention are unrepeatable or that success in obtaining these results is achieved in a totally unreliable way. An example where this may arise is a microbiological process involving mutations. Such a case should be distinguished from one where repeated success is assured even though accompanied by a proportion of failures, as can arise e.g. in the manufacture of small magnetic cores or electronic components. In this latter case, provided the satisfactory parts can be readily sorted by a non-destructive testing procedure, no objection arises under Art. 83. The second instance is where successful performance of the invention is inherently impossible because it would be contrary to well-established physical laws – this applies e.g. to a perpetual motion machine. If the claims for such a machine are directed to its function, and not merely to its structure, an objection arises not only under Art. 83 but also under Art. 52(1) in that the invention is not "susceptible of industrial application" (see IV, 5.1).

Art. 83

4.12 Industrial application

Rule 42(1)(f)
Art. 52(1)
Art. 57

The description should indicate explicitly the way in which the invention is capable of exploitation in industry, if this is not obvious from the description or from the nature of the invention. The expression "capable of exploitation in industry" means the same as "susceptible of industrial application", and indeed identical expressions are used in the French and German texts of the EPC. In view of the broad meaning given to the latter expression by Art. 57 (see IV, 5.1), it is to be expected that, in most cases, the way in which the invention can be exploited in industry will be self-evident, so that no more explicit description on this point will be required; but there may be a few instances, e.g. in relation to methods of testing, where the manner of industrial exploitation is not apparent and must therefore be explicitly indicated.

Rule 29(3)

Also, in relation to certain biotechnological inventions, i.e. sequences and partial sequences of genes, the industrial application is not self-evident. The industrial application of such sequences must be disclosed in the patent application (see IV, 5.4).

4.13 Manner and order of presentation

Rule 42(2)

The manner and order of presentation of the description should be that specified in Rule 42(1), i.e. as set out above, unless, because of the nature of the invention, a different manner or a different order would afford a better understanding and a more economic presentation. Since the responsibility for clearly and completely describing the invention lies with the applicant, the examiner should not object to the presentation unless satisfied that such an objection would be a proper exercise of his discretion.

Some departure from the requirements of Rule 42(1) is acceptable, provided the description is clear and orderly and all the requisite information is present. For example, the requirements of Rule 42(1)(c) may be waived where the invention is based on a fortuitous discovery, the practical application of which is recognised as being useful, or where the invention breaks entirely new ground. Also, certain technically simple inventions may be fully comprehensible with the minimum of description and only slight reference to prior art.

4.14 Terminology

Rule 49(11)

Although the description should be clear and straightforward with avoidance of unnecessary technical jargon, the use of recognised terms of art is acceptable, and will often be desirable. Little-known or specially-formulated technical terms may be allowed provided that they are adequately defined and that there is no generally recognised equivalent. This discretion may be extended to foreign terms when there is no equivalent in the language of the proceedings. Terms already having an established meaning should not be allowed to be used to mean something different if this is likely to cause confusion. There may, however, be circumstances where a term may legitimately be borrowed from an analogous art. Terminology and signs must be consistent throughout the application.

4.15 Computer programs

In the particular case of inventions in the computer field, program listings in programming languages cannot be relied on as the sole disclosure of the invention. The description, as in other technical fields, should be written

substantially in normal language, possibly accompanied by flow diagrams or other aids to understanding, so that the invention may be understood by a person skilled in the art who is deemed not to be a specialist in any specific programming language, but does have general programming skills. Short excerpts from programs written in commonly used programming languages can be accepted if they serve to illustrate an embodiment of the invention.

4.16 Physical values, units

When the properties of a material are referred to, the relevant units should be specified if quantitative considerations are involved. If this is done by reference to a published standard (e.g. a standard of sieve sizes) and such standard is referred to by a set of initials or similar abbreviation, it should be adequately identified in the description.

Physical values must be expressed in the units recognised in international practice, which is generally in the metric system, using SI units and the other units referred to in Chapter I of the Annex to EEC Directive 80/181/EEC of 20 December 1979, as amended by EEC Directives 85/1/EEC of 18 December 1984, 89/617/EEC of 27 November 1989 and 1999/103/EC of 24 January 2000 (see the Annex to this Chapter). Any values not meeting this requirement must also be expressed in the units recognised in international practice. Values in the inch/pound system, in general, do not meet the criterion "recognised in international practice".

Rule 49(10)

As Rule 49(10) indicates, for mathematical formulae the symbols in general use must be employed. For chemical formulae, the symbols, atomic weights and molecular formulae in general use must be employed.

In general, use should be made of the technical terms, signs and symbols generally accepted in the field in question.

4.17 Proper names, trademarks and trade names

The use of proper names, trademarks or trade names or similar words to refer to materials or articles is undesirable insofar as such words merely denote origin or where they may relate to a range of different products. If such a word is used, then, where it is necessary in order to satisfy the requirements of Art. 83, the product must be sufficiently identified, without reliance upon the word, to enable the invention to be carried out by the skilled person at the date of filing. However, where such words have become internationally accepted as standard descriptive terms and have acquired a precise meaning (e.g. "Bowden" cable, "Belleville" washer, "Panhard" rod, "teflon" layer, "caterpillar" belt) they may be allowed without further identification of the product to which they relate.

4.18 Registered trademarks

It is the applicant's responsibility to ensure that registered trademarks are acknowledged as such in the description.

4.19 Reference documents

References in European patent applications to other documents may relate either to the background art or to part of the disclosure of the invention.

Where the reference document relates to the background art, it may be in the application as originally filed or introduced at a later date (see II, 4.3 and 4.4).

Art. 65

Where the reference document relates directly to the disclosure of the invention (e.g. details of one of the components of a claimed apparatus), then the examiner should first consider whether knowing what is in the reference document is in fact essential for carrying out the invention as meant by Art. 83:

If not essential, the usual expression "which is hereby incorporated by reference", or any expression of the same kind, should be deleted from the description.

If matter in the document referred to is essential to satisfy the requirements of Art. 83, the examiner should require the deletion of the above-mentioned expression and that, instead, the matter is expressly incorporated into the description, because the patent specification should, regarding the essential features of the invention, be self-contained, i.e. capable of being understood without reference to any other document. One should also bear in mind that reference documents are not part of the text to be translated pursuant to Art. 65.

Such incorporation of essential matter or essential features is, however, subject to the following restrictions:

- (i) it must not contravene Art. 123(2) (see also T 689/90, OJ 10/93, 616) in the sense that the description of the invention as originally filed leaves a skilled reader in no doubt that:
 - (a) protection is or may be sought for such features;
 - (b) such features contribute to solving the technical problem underlying the invention;
 - (c) such features at least implicitly clearly belong to the description of the invention contained in the application (Art. 78(1)(b)) and thus to the content of the application as filed (Art. 123(2)); and
 - (d) such features are precisely defined and identifiable within the total technical information in the reference document.
- (ii) if the reference document was not available to the public on the date of filing of the application, it can only be considered if (see T 737/90, not published in OJ):
 - (a) a copy of the document was available to the EPO on or before the date of filing of the application; and
 - (b) the document was made available to the public no later than on the date of publication of the application under Art. 93 (e.g. by being present in the application dossier and therefore made public under Art. 128(4)).

It may be that the Search Division has requested the applicant to furnish the document referred to, in order to be able to carry out a meaningful search (see B-IV, 1.3).

If, for the disclosure of the invention, a document is referred to in an application as originally filed, the relevant content of the reference document is to be considered as forming part of the content of the application for the purpose of citing the application under Art. 54(3) against later applications. For reference documents not available to the public

before the filing date of the application this applies only if conditions (ii)(a) and (ii)(b) above are fulfilled.

Because of this effect under Art. 54(3), it is very important that, where a reference is directed only to a particular part of the document referred to, that part should be clearly identified in the reference.

5. Drawings

5.1 Form and content

The requirements relating to the form and content of drawings are set down in Rule 46. Most of these are formal (see A-X), but the examiner may sometimes need to consider the requirements of Rule 46(2)(f), (h), (i) and (j). Of these, the only question likely to cause difficulty is whether the textual matter included on the drawings is absolutely indispensable. In the case of circuit diagrams, block schematics and flow sheets, identifying catchwords for functional integers of complex systems (e.g. "magnetic core store", "speed integrator") may be regarded as indispensable from a practical point of view if they are necessary to enable a diagram to be interpreted rapidly and clearly.

Rule 46
Rule 46(2)(j)

5.2 Printing quality

The examiner has also to check whether the drawings in the printing copy ("Druckexemplar") are suitable for printing. If necessary, a copy of the original drawings must be prepared as the printing copy. If, however, the quality of the original drawings is also insufficient, then the examiner must request the applicant to present drawings of sufficient quality for printing. He should, however, beware of any extension of subject-matter (Art. 123(2)).

5.3 Photographs

The EPC makes no express provision for photographs. They are nevertheless allowed where it is impossible to present in a drawing what is to be shown and provided that they are in black and white, directly reproducible and fulfil the applicable requirements for drawings (e.g. paper size, margins, etc.). Colour photographs are not accepted. In case of photographs of insufficient original quality for printing, the examiner should not request filing of better photographs, as the risk of infringing Art. 123(2) is obvious. In that case, the insufficient quality is accepted for reproduction.

6. Inventions relating to biological material

6.1 Biological material

Rule 26(3)
Rule 31(1)

Applications relating to biological material are subject to the special provisions set out in Rule 31. In accordance with Rule 26(3), the term "biological material" means any material containing genetic information and capable of reproducing itself or being reproduced in a biological system. If an invention involves the use of or concerns biological material which is not available to the public and which cannot be described in the European patent application in such a manner as to enable the invention to be carried out by a person skilled in the art, the disclosure is not considered to have satisfied the requirements of Art. 83 unless the requirements of Rule 31(1), (2), first and second sentences, and Rule 33(1), first sentence, have been met.

6.2 Public availability of biological material

The examiner must form an opinion as to whether or not the biological material is available to the public. There are several possibilities. The biological material may be known to be readily available to those skilled in the art, e.g. baker's yeast or *Bacillus natto*, which is commercially available, it may be a standard preserved strain, or other biological material which the examiner knows to have been preserved in a recognised depository and to be available to the public. Alternatively, the applicant may have given in the description sufficient information as to the identifying characteristics of the biological material and as to the prior availability in a depository institution recognised for the purposes of Rule 33(6) to satisfy the examiner. In any of these cases no further action is called for. If, however, the applicant has given no or insufficient information on public availability and the biological material is a particular strain not falling within the known categories such as those already mentioned, then the examiner must assume that the biological material is not available to the public. He must also examine whether the biological material could be described in the European patent application in such a manner as to enable the invention to be carried out by a person skilled in the art (see, in particular, II, 4.11 and IV, 4.7).

6.3 Deposit of biological material

If the biological material is not available to the public and if it cannot be described in the application in such a manner as to enable the invention to be carried out by a person skilled in the art, the examiner must check:

Rule 31(1) and (2)

- (i) whether the application as filed gives such relevant information as is available to the applicant on the characteristics of the biological material. The relevant information under this provision concerns the classification of the biological material and significant differences from known biological material. For this purpose, the applicant must, to the extent available to him, indicate morphological and biochemical characteristics and the proposed taxonomic description.

The information on the biological material in question which is generally known to the skilled person on the date of filing is as a rule presumed to be available to the applicant and must therefore be provided by him. If necessary, it has to be provided through experiments in accordance with the relevant standard literature.

For characterising bacteria, for example, the relevant standard work would be R.E. Buchanan, N.E. Gibbons: *Bergey's Manual of Determinative Bacteriology*.

Against this background, information should then be given on every further specific morphological or physiological characteristic relevant for recognition and propagation of the biological material, e.g. suitable media (composition of ingredients), in particular where the latter are modified.

Abbreviations for biological material or media are often less well known than the applicant assumes and should therefore be avoided or written in full at least once.

If biological material is deposited that cannot replicate itself but must be replicated in a biological system (e.g. viruses, bacteriophages, plasmids, vectors or free DNA or RNA), the above-mentioned information is also required for such biological system. If, for example, other biological material is required, such as host cells or helper viruses, that cannot be sufficiently described or is not available to the public, this material must also be deposited and characterised accordingly. In addition, the process for producing the biological material within this biological system must be indicated.

In many cases the above required information will already have been given to the depositary institution (see Rule 6.1(a)(iii) and 6.1(b) Budapest Treaty) and need only be incorporated into the application;

- (ii) whether the name of the depositary institution and the accession number of the deposit were supplied at the date of filing. If the name of the depositary institution and the accession number of the deposit were submitted later, it should be checked whether they were filed within the relevant period under Rule 31(2). If that is the case, it should then further be checked whether on the filing date any reference was supplied which enables the deposit to be related to the later filed accession number. Normally the identification reference which the depositor himself gave to his deposit is used in the application documents. The relevant document for later filing the data pursuant to Rule 31(1)(c) could be a letter containing the name of the depositary institution, the accession number and the above-mentioned identification reference or, alternatively, the deposit receipt, which contains all these data (see also G 2/93, OJ 5/1995, 275 and A-IV, 4.2); and
- (iii) whether the deposit was made by a person other than the applicant and, if so, whether the name and the address of the depositor are stated in the application or were supplied within the relevant period under Rule 31(2). In such a case, the examiner must also check whether the document fulfilling the requirements mentioned in Rule 31(1)(d) was submitted to the EPO within the same time limit.

The examiner, in addition to the checks referred to under (i) to (iii) above, asks for the deposit receipt issued by the depositary institution (see Rule 7.1 Budapest Treaty) or for equivalent proof of the deposit of a biological material if such proof has not been filed before (see (ii) above and A-IV, 4.2). This is to provide evidence for the indications made by the applicant pursuant to Rule 31(1)(c).

If this deposit receipt has already been filed within the relevant time period according to Rule 31(2), this document on its own is regarded as submission of the information according to Rule 31(1)(c).

Rule 33(6) In addition, the depositary institution named must be one of the recognised institutions listed in the Official Journal of the EPO. An up-to-date list is regularly published in the Official Journal.

If any of these requirements is not satisfied, the biological material in question cannot be considered as having been disclosed pursuant to Art. 83 by way of reference to the deposit.

Rule 31
Rule 40(1)(c)
Rule 56(2) and (3) Moreover, there are two situations in which the applicant can file information concerning the deposit which is required under Rule 31(1)(c), and where applicable also under Rule 31(1)(d), in a document filed after the accorded filing date and within the relevant time limit for filing that document, but after the expiry of one of the time limits under Rule 31(2)(a)-(c). As in the preceding paragraph, the consequence of the information being filed after the relevant time limit under Rule 31(2) is that the biological material is deemed not to have been disclosed pursuant to Art. 83 by way of reference to the deposit. These situations are those in which the information concerning the deposit is contained in either:

- (i) a previously filed application to which reference is made under Rule 40(1)(c), the copy of that application being filed within either the two-month period under Rule 40(3) or that under Rule 55; or
- (ii) missing parts of the description filed later, within the two-month period under Rule 56(2), when the requirements of Rule 56(3) are satisfied, so that the application is not re-dated.

7. Prohibited matter

7.1 Categories

Rule 48 There are three categories of specifically prohibited matter, these being defined in sub-paragraphs (a) to (c) of Rule 48(1) (see also IV, 4).

7.2 Matter contrary to "ordre public" or morality

Rule 48(1)(a) It should be noted that the omission, from the publication of the application, is mandatory for the first category. Examples of the kind of matter coming within this category are: incitement to riot or to acts of disorder; incitement to criminal acts; racial, religious or similar discriminatory propaganda; and grossly obscene matter.

7.3 Disparaging statements

Rule 48(1)(b) It is necessary to discriminate in the second category between libellous or similarly disparaging statements, which are not allowed, and fair comment, e.g. in relation to obvious or generally recognised disadvantages, or disadvantages stated to have been found and substantiated by the applicant, which, if relevant, is permitted.

7.4 Irrelevant matter

Rule 48(1)(c) The third category is irrelevant matter. It should be noted, however, that such matter is specifically prohibited under Rule 48(1)(c) only if it is "obviously irrelevant or unnecessary", for instance, if it has no bearing on the subject-matter of the invention or its background of relevant prior art (see also II, 4.4). The matter to be removed may already be obviously irrelevant or unnecessary in the original description. It may, however, be matter which has become obviously irrelevant or unnecessary only in the course of the examination proceedings, e.g. owing to a limitation of the

claims of the patent to one of originally several alternatives. When matter is removed from the description, it must not be incorporated into the patent specification by reference to the corresponding matter in the published application or in any other document (see also II, 4.19).

7.5 Omission of matter from publication

Generally, the Receiving Section will deal with matter falling under category 1(a) and may have dealt with matter obviously falling within category 1(b), but if any such matter has not been so recognised and has therefore not been omitted from the publication of the application, it should be required to be removed during examination of the application together with any other prohibited matter. The applicant should be informed of the category under which matter is required to be removed.

CHAPTER II – Annex**UNITS RECOGNISED IN INTERNATIONAL PRACTICE AND COMPLYING WITH RULE 49(11)
(see II, 4.16)*****LIST OF CONTENTS**

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4. Units and names of units permitted in specialised fields only
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1. SI units and their decimal multiples and submultiples**1.1 SI base units**

Quantity	Unit	
	Name	Symbol
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Amount of substance	mole	mol
Luminous intensity	candela	cd

Definitions of SI base units:

– Unit of length

The metre is the length of the path travelled in a vacuum by light during $1/299792458$ seconds.

– Unit of mass

The kilogram is the unit of mass; it is equal to the mass of the international prototype of the kilogram.

– Unit of time

The second is the duration of 9 192 631 770 periods of the radiation corresponding to the transition between the two hyperfine levels of the ground state of the caesium 133 atom.

* Based on Chapter I of the Annex to EEC Directive 80/181/EEC of 20.12.1979, as amended by EEC Directives 85/1/EEC of 18.12.1984, 89/617/EEC of 27.11.1989 and 1999/103/EC of 24.01.2000.

– Unit of electric current

The ampere is that constant current which if maintained in two straight parallel conductors of infinite length, of negligible circular cross-section and placed one metre apart in a vacuum, would produce between these conductors a force equal to 2×10^{-7} newton per metre of length.

– Unit of thermodynamic temperature

The kelvin, unit of thermodynamic temperature, is the fraction $1/273.16$ of the thermodynamic temperature of the triple point of water.

– Unit of amount of substance

The mole is the amount of substance of a system which contains as many elementary entities as there are atoms in 0.012 kg of carbon 12. When the mole is used, the elementary entities must be specified and may be atoms, molecules, ions, electrons, other particles or specified groups of such particles.

– Unit of luminous intensity

The candela is the luminous intensity, in a given direction, of a source that emits monochromatic rays with a frequency of 540×10^{12} hertz and that has a radiant intensity in that direction of $1/683$ watt per steradian.

1.1.1 Special name and symbol of the SI unit of temperature for expressing Celsius temperature

Quantity	Unit	
	Name	Symbol
Celsius temperature	degree Celsius	° C

Celsius temperature t is defined as the difference $t = T - T_0$ between the two thermodynamic temperatures T and T_0 where $T_0 = 273.15$ K. An interval of or difference in temperature may be expressed either in kelvins or in degrees Celsius. The unit of 'degree Celsius' is equal to the unit 'kelvin'.

1.2 Other SI units

1.2.1 Supplementary SI units

Quantity	Unit	
	Name	Symbol
Plane angle	radian	rad
Solid angle	steradian	sr

Definitions of supplementary SI units:

– Plane angle unit

The radian is the plane angle between two radii of a circle which cut off on the circumference an arc equal in length to the radius.

– Solid angle unit

The steradian is the solid angle of a cone which, having its vertex in the centre of a sphere, cuts off on the surface of the sphere an area equal to that of a square with sides equal to the radius of the sphere.

1.2.2 Derived SI units

Units derived coherently from SI base units and supplementary SI units are given as algebraic expressions in the form of products of powers of the SI base units and/or supplementary SI units with a numerical factor equal to 1.

1.2.3 Derived SI units having names and symbols

Quantity	Unit		Expression	
	Name	Symbol	In other SI units	In terms of base or supplementary SI units
Frequency	hertz	Hz		s^{-1}
Force	newton	N		$m.kg.s^{-2}$
Pressure, stress	pascal	Pa	$N.m^{-2}$	$m^{-1}.kg.s^{-2}$
Energy, work; quantity of heat	joule	J	$N.m$	$m^2.kg.s^{-2}$
Power ⁽¹⁾ , radiant flux	watt	W	$J.s^{-1}$	$m^2.kg.s^{-3}$
Quantity of electricity, electric charge	coulomb	C		$s.A$
Electric potential, potential difference, electromotive force	volt	V	$W.A^{-1}$	$m^2.kg.s^{-3}.A^{-1}$
Electric resistance	ohm	Ω	$V.A^{-1}$	$m^2.kg.s^{-3}.A^{-2}$
Conductance	siemens	S		$m^2.kg^{-1}.s^3.A^2$
Capacitance	farad	F	$A.V^{-1}$	$m^{-2}.kg^{-1}.s^4.A^2$
Magnetic flux	weber	Wb	$C.V^{-1}$	$m^2.kg.s^{-2}.A^{-1}$
Magnetic flux density	tesla	T		$kg.s^{-2}.A^{-1}$
Inductance	henry	H	$V.s$	$m^2.kg.s^{-2}.A^{-2}$
Luminous flux	lumen	lm	$Wb.m^{-2}$	$cd.sr$
Illuminance	lux	lx	$Wb.A^{-1}$	$m^{-2}.cd.sr$
Activity (of a radionuclide)	becquerel	Bq	$lm.m^{-2}$	s^{-1}
Absorbed dose, specific energy imparted, kerma, absorbed dose index	gray	Gy	$J.kg^{-1}$	$m^2.s^{-2}$
Dose equivalent	sievert	Sv	$J.kg^{-1}$	$m^2.s^{-2}$

⁽¹⁾ Special names for the unit of power: the name volt-ampere (symbol 'VA') is used to express the apparent power of alternating electric current, and var (symbol 'var') is used to express reactive electric power.

Units derived from SI base units or supplementary units may be expressed in terms of the units listed in this annex.

In particular, derived SI units may be expressed by the special names and symbols given in the above table. For example, the SI unit of dynamic viscosity may be expressed as $m^{-1}.kg.s^{-1}$ or $N.s.m^{-2}$ or $Pa.s$.

1.3 Prefixes and their symbols used to designate certain decimal multiples and submultiples

Factor	Prefix	Symbol	Factor	Prefix	Symbol
10^{24}	yotta	Y	10^{-1}	deci	d
10^{21}	zetta	Z	10^{-2}	centi	c
10^{18}	exa	E	10^{-3}	milli	m
10^{15}	peta	P	10^{-6}	micro	μ
10^{12}	tera	T	10^{-9}	nano	n
10^9	giga	G	10^{-12}	pico	p
10^6	mega	M	10^{-15}	femto	f
10^3	kilo	k	10^{-18}	atto	a
10^2	hecto	h	10^{-21}	zepto	z
10^1	deca	da	10^{-24}	yocto	y

The names and symbols of the decimal multiples and submultiples of the unit of mass are formed by attaching prefixes to the word 'gram' and their symbols to the symbol 'g'.

Where a derived unit is expressed as a fraction, its decimal multiples and submultiples may be designated by attaching a prefix to units in the numerator or the denominator, or in both these parts.

Compound prefixes, that is to say prefixes formed by the juxtaposition of several of the above prefixes, may not be used.

1.4 Special authorised names and symbols of decimal multiples and submultiples of SI units

Quantity	Unit		
	Name	Symbol	Value
Volume	litre	l or L ⁽¹⁾	1 l = 1 dm ³ = 10 ⁻³ m ³
Mass	tonne	t	1 t = 1 Mg = 10 ³ kg
Pressure, stress	bar	bar	1 bar = 10 ⁵ Pa

⁽¹⁾ The two symbols 'l' and 'L' may be used for the litre unit.

The prefixes and their symbols listed in 1.3 may be used in conjunction with the units and symbols contained in this table.

2. Units which are defined on the basis of SI units but are not decimal multiples or submultiples thereof

Quantity	Unit		
	Name	Symbol	Value
Plane angle	revolution ^(a)		1 revolution = 2 π rad
	grade or gon	gon	1 gon = π / 200 rad
	degree	°	1° = π / 180 rad
	minute of angle	'	1' = π / 10 800 rad
	second of angle	"	1" = π / 648 000 rad
Time	minute	min	1 min = 60 s
	hour	h	1 h = 3 600 s
	day	d	1 d = 86 400 s

^(a) No international symbol exists

The prefixes listed in 1.3 may only be used in conjunction with the names 'grade' or 'gon' and the symbols only with the symbol 'gon'.

3. Units used with the SI, and whose values in SI are obtained experimentally

The unified atomic mass unit is 1/12 of the mass of an atom of the nuclide ¹²C.

The electronvolt is the kinetic energy acquired by an electron passing through a potential difference of 1 volt in a vacuum.

Quantity	Unit		
	Name	Symbol	Value
Mass	unified atomic mass unit	u	1 u \approx 1,6605655 x 10 ⁻²⁷ kg
Energy	electronvolt	eV	1 eV \approx 1,6021892 x 10 ⁻¹⁹ J

The value of these units, expressed in SI units, is not known exactly.

The prefixes and their symbols listed in 1.3 may be used in conjunction with these two units and with their symbols.

4. Units and names of units permitted in specialised fields only

Quantity	Unit		
	Name	Symbol	Value
Vergency of optical systems	Dioptre		1 dioptre = 1 m^{-1}
Mass of precious stones	metric carat		1 metric carat = $2 \times 10^{-4} \text{ kg}$
Area of farmland and building land	are	a	1 a = 10^2 m^2
Mass per unit length of textile yarns and threads	tex	tex	1 tex = $10^{-6} \text{ kg.m}^{-1}$
Blood pressure and pressure of other body fluids	millimetre of mercury	mm Hg	1 mm Hg = 133,322 Pa
Effective cross-sectional area	Barn	b	1b = 10^{-28} m^2

The prefixes and their symbols listed in 1.3 may be used in conjunction with the above units and symbols, with the exception of the millimetre of mercury and its symbol. The multiple of 10^2 a is, however, called a "hectare".

5. Compound units

Combinations of the units listed in this annex form compound units.

CHAPTER III**CLAIMS****1. General**

The application must contain "one or more claims".

Art. 78(1)(c)

These must:

Art. 84

- (i) "define the matter for which protection is sought";
- (ii) "be clear and concise"; and
- (iii) "be supported by the description".

Since the extent of the protection conferred by a European patent or application is determined by the claims (interpreted with the help of the description and the drawings), clarity of claim is of the utmost importance (see also III, 4).

Art. 69(1)

2. Form and content of claims**2.1 Technical features**

The claims must be drafted in terms of the "technical features of the invention". This means that claims should not contain any statements relating, for example, to commercial advantages or other non-technical matters, but statements of purpose should be allowed if they assist in defining the invention.

Rule 43(1)

It is not necessary that every feature should be expressed in terms of a structural limitation. Functional features may be included provided that a skilled person would have no difficulty in providing some means of performing this function without exercising inventive skill (see III, 6.5). For the specific case of a functional definition of a pathological condition, see III, 4.22.

Claims to the use of the invention, in the sense of the technical application thereof, are allowable.

2.2 Two-part form

Rule 43(1)(a) and (b) define the two-part form which a claim should have "wherever appropriate". The first part should contain a statement indicating "the designation of the subject-matter of the invention" i.e. the general technical class of apparatus, process, etc. to which the invention relates, followed by a statement of "those technical features which are necessary for the definition of the claimed subject-matter but which, in combination, are part of the prior art". This statement of prior-art features is applicable only to independent claims and not to dependent claims (see III, 3.4). It is clear from the wording of Rule 43 that it is necessary only to refer to those prior-art features which are relevant to the invention. For example, if the invention relates to a photographic camera but the inventive step relates entirely to the shutter, it would be sufficient for the first part of the claim to read: "A photographic camera including a focal plane shutter" and there is no need to refer also to the other known features of a camera such as the lens and view-finder. The second part or "characterising portion" should state the features which the invention adds to the prior art, i.e. the technical

Rule 43(1)

features for which, in combination with the features stated in sub-paragraph (a) (the first part), protection is sought.

If a single document in the state of the art according to Art. 54(2), e.g. cited in the search report, reveals that one or more features in the second part of the claim were already known in combination with all the features in the first part of the claim and in that combination have the same effect as they have in the full combination according to the invention, the examiner should require that such feature or features be transferred to the first part. Where, however, a claim relates to a novel combination, and where the division of the features of the claim between the prior-art part and the characterising part could be made in more than one way without inaccuracy, the applicant should not be pressed, unless there are very substantial reasons, to adopt a different division of the features from that which he has chosen, if his version is not incorrect.

2.3 Two-part form unsuitable

Subject to what is stated in 2.3.2, final sentence, the applicant should be required to follow the above two-part formulation in his independent claim or claims, where, for example, it is clear that his invention resides in a distinct improvement in an old combination of parts or steps. However, as is indicated by Rule 43, this form need be used only in appropriate cases. The nature of the invention may be such that this form of claim is unsuitable, e.g. because it would give a distorted or misleading picture of the invention or the prior art. Examples of the kind of invention which may require a different presentation are:

- (i) the combination of known integers of equal status, the inventive step lying solely in the combination;
- (ii) the modification of, as distinct from addition to, a known chemical process e.g. by omitting one substance or substituting one substance for another; and
- (iii) a complex system of functionally inter-related parts, the inventive step concerning changes in several of these or in their inter-relationships.

In examples (i) and (ii), the Rule 43 form of claim may be artificial and inappropriate, whilst in example (iii) it might lead to an inordinately lengthy and involved claim. Another example in which the Rule 43 form of claim may be inappropriate is where the invention is a new chemical compound or group of compounds. It is likely also that other cases will arise in which the applicant is able to adduce convincing reasons for formulating the claim in a different form.

2.3.1 No two-part form

Art. 54(3)

There is a special instance in which the Rule 43 form of claim should be avoided. This is when the only relevant prior art is another European patent application falling within the terms of Art. 54(3). Such prior art should however be clearly acknowledged in the description (see II, 4.3, penultimate paragraph, and 4.4).

2.3.2 Two-part form "wherever appropriate"

When examining whether or not a claim is to be put in the form provided for in Rule 43(1), second sentence, it is important to assess whether this form is "appropriate". In this respect it should be borne in mind that the purpose of the two-part form is to allow the reader to see clearly which features necessary for the definition of the claimed subject-matter are, in

combination, part of the prior art. If this is sufficiently clear from the indication of prior art made in the description, to meet the requirement of Rule 42(1)(b), the two-part form should not be insisted upon.

2.4 Formulae and tables

The claims, as well as the description, may contain chemical or mathematical formulae but not drawings. The claims may contain tables but "only if their subject-matter makes the use of tables desirable". In view of the use of the word "desirable" in this Rule, the examiner should not object to the use of tables in claims where this form is convenient.

Rule 49(9)

3. Kinds of claim

3.1 Categories

The EPC refers to different "categories" of claim ("products, process, apparatus or use"). For many inventions, claims in more than one category are needed for full protection. In fact, there are only two basic kinds of claim, viz. claims to a physical entity (product, apparatus) and claims to an activity (process, use). The first basic kind of claim ("product claim") includes a substance or compositions (e.g. chemical compound or a mixture of compounds) as well as any physical entity (e.g. object, article, apparatus, machine, or system of co-operating apparatus) which is produced by a person's technical skill. Examples are: "a steering mechanism incorporating an automatic feed-back circuit ..."; "a woven garment comprising ..."; "an insecticide consisting of X, Y, Z"; or "a communication system comprising a plurality of transmitting and receiving stations". The second basic kind of claim ("process claim") is applicable to all kinds of activities in which the use of some material product for effecting the process is implied; the activity may be exercised upon material products, upon energy, upon other processes (as in control processes) or upon living things (see, however, IV, 4.6 and 4.8).

Rule 43(2)

3.2 Number of independent claims

According to Rule 43(2), as applicable to all European patent applications in respect of which a communication under Rule 51(4) EPC 1973 (corresponding to Rule 71(3) EPC 2000) was not issued by 2 January 2002, the number of independent claims is limited to one independent claim in each category.

Rule 43(2)

Exceptions from this rule can only be admitted in the specific circumstances defined in sub-paragraphs (a), (b) or (c) of this rule, provided the requirement of Art. 82 with regard to unity is met (see III, 7).

The following are examples of typical situations falling within the scope of the exceptions from the principle of one independent claim per category:

- (i) examples of a plurality of inter-related products (Rule 43(2)(a)):
 - plug and socket;
 - transmitter – receiver;
 - intermediate(s) and final chemical product;
 - gene – gene construct – host – protein – medicament;

- (ii) example of a plurality of different inventive uses of a product or device (Rule 43(2)(b)):
 - claims directed to second or further medical uses when a first medical use is known (see IV, 4.8);
- (iii) examples of alternative solutions to a particular problem (Rule 43(2)(c)):
 - a group of chemical compounds;
 - two or more processes for the manufacture of such compounds.

3.3 Objection under Rule 43(2)

Rule 43(2)

When an objection under Rule 43(2) arises, the applicant is invited to amend the claims appropriately.

If in reply to the reasoned objection the additional independent claims are maintained and no convincing arguments are presented that one of the situations referred to in sub-paragraphs (a) to (c) of Rule 43(2) applies, the application may be refused under Art. 97(2).

3.4 Independent and dependent claims

Rule 43(3) and (4)

All applications will contain one or more "independent" claims directed to the essential features of the invention. Any such claim may be followed by one or more claims concerning "particular embodiments" of that invention. It is evident that any claim relating to a particular embodiment must effectively include also the essential features of the invention, and hence must include all the features of at least one independent claim. The term "particular embodiment" should be construed broadly as meaning any more specific disclosure of the invention than that set out in the independent claim or claims.

Rule 43(4)

Any claim which includes all the features of any other claim is termed a "dependent claim". Such a claim must contain, if possible at the beginning, a reference to the other claim, all features of which it includes (see, however, III, 3.8 for claims in different categories). Since a dependent claim does not by itself define all the characterising features of the subject-matter which it claims, expressions such as "characterised in that" or "characterised by" are not necessary in such a claim but are nevertheless permissible. A claim defining further particulars of an invention may include all the features of another dependent claim and should then refer back to that claim. Also, in some cases, a dependent claim may define a particular feature or features which may appropriately be added to more than one previous claim (independent or dependent). It follows that there are several possibilities: a dependent claim may refer back to one or more independent claims, to one or more dependent claims, or to both independent and dependent claims.

3.5 Arrangement of claims

Rule 43(4)

All dependent claims referring back to a single previous claim and those referring back to several previous claims must be grouped together to the extent and in the most appropriate way possible. The arrangement must therefore be one which enables the association of related claims to be readily determined and their meaning in association to be readily construed. The examiner should object if the arrangement of claims is such as to create obscurity in the definition of the subject-matter to be protected. In general, however, when the corresponding independent claim is

allowable, the examiner should not concern himself unduly with the subject-matter of dependent claims, provided he is satisfied that they are truly dependent and thus in no way extend the scope of protection of the invention defined in the corresponding independent claim (see also III, 3.8).

3.6 Subject-matter of a dependent claim

If the two-part form is used for the independent claim(s), dependent claims may relate to further details of features not only of the characterising portion but also of the preamble.

3.7 Alternatives in a claim

A claim, whether independent or dependent, may refer to alternatives, provided that the number and presentation of alternatives in a single claim does not make the claim obscure or difficult to construe and provided that the claim meets the requirements of unity (see also III, 7.4 and 7.8). In case of a claim defining (chemical or non-chemical) alternatives, i.e. a so-called "Markush-grouping", unity of invention should be considered to be present if the alternatives are of a similar nature and can fairly be substituted for one another (see III, 7.4.1).

Art. 84

Art. 82

3.8 Independent claims containing a reference to another claim

A claim may also contain a reference to another claim even if it is not a dependent claim as defined in Rule 43(4). One example of this is a claim referring to a claim of a different category (e.g. "Apparatus for carrying out the process of claim 1 ..." or "Process for the manufacture of the product of claim 1 ..."). Similarly, in a situation like the plug and socket example of III, 3.2(i), a claim to the one part referring to the other co-operating part (e.g. "plug for co-operation with the socket of claim 1 ...") is not a dependent claim. In all these examples, the examiner should carefully consider the extent to which the claim containing the reference necessarily involves the features of the claim referred to and the extent to which it does not.

In the case of a claim for a process which results in the product of a product claim, if the product claim is patentable then no separate examination for the novelty and non-obviousness of the process claim is necessary (see IV, 11.12), provided that all features of the product as defined in the product claim inevitably (cf. IV, 11.12) result from the claimed process (see III, 4.5, and T 169/88, not published in OJ). This also applies in the case of a claim for the use of a product, when the product is patentable and is used with its features as claimed (see T 642/94, not published in OJ). In all other instances, the patentability of the claim referred to does not necessarily imply the patentability of the independent claim containing the reference. It should also be noted that if the process, product and/or use claims have different effective dates (see V, 1 and 2), a separate examination may still be necessary in view of intermediate documents.

4. Clarity and interpretation of claims

4.1 Clarity

The requirement that the claims must be clear applies to individual claims and also to the claims as a whole. The clarity of the claims is of the utmost importance in view of their function in defining the matter for which protection is sought. Therefore, the meaning of the terms of a claim should, as far as possible, be clear for the person skilled in the art from the wording of the claim alone (see also III, 4.2). In view of the differences in the scope of protection

Art. 84

which may be attached to the various categories of claims, the examiner should ensure that the wording of a claim leaves no doubt as to its category.

4.2 Interpretation

Art. 14(6)

Each claim should be read giving the words the meaning and scope which they normally have in the relevant art, unless in particular cases the description gives the words a special meaning, by explicit definition or otherwise. Moreover, if such a special meaning applies, the examiner should, so far as possible, require the claim to be amended whereby the meaning is clear from the wording of the claim alone. This is important because it is only the claims of the European patent, not the description, which will be published in all the official languages of the EPO. The claim should also be read with an attempt to make technical sense out of it. Such a reading may involve a departure from the strict literal meaning of the wording of the claims.

4.3 Inconsistencies

Any inconsistency between the description and the claims should be avoided if, having regard to Art. 69(1), second sentence, it may throw doubt on the extent of protection and therefore render the claim unclear or unsupported under Art. 84, second sentence or, alternatively, render the claim objectionable under Art. 84, first sentence. Such inconsistency can be of the following kinds:

(i) simple verbal inconsistency

For example, there is a statement in the description which suggests that the invention is limited to a particular feature but the claims are not thus limited; also, the description places no particular emphasis on this feature and there is no reason for believing that the feature is essential for the performance of the invention. In such a case, the inconsistency can be removed either by broadening the description or by limiting the claims. Similarly, if the claims are more limited than the description, the claims may be broadened or the description may be limited.

(ii) inconsistency regarding apparently essential features

For example, it may appear, either from general technical knowledge or from what is stated or implied in the description, that a certain described technical feature not mentioned in an independent claim is essential to the performance of the invention, or, in other words, is necessary for the solution of the problem to which the invention relates. In such a case, the claim does not meet the requirements of Art. 84, because Art. 84, first sentence, when read in conjunction with Rule 43(1) and (3), has to be interpreted as meaning not only that an independent claim must be comprehensible from a technical point of view but also that it must clearly define the subject-matter of the invention, that is to say indicate all the essential features thereof (see T 32/82, OJ 8/1984, 354). If, in response to this objection, the applicant shows convincingly, e.g. by means of additional documents or other evidence, that the feature is in fact not essential, he may be allowed to retain the unamended claim and, where necessary, to amend the description instead. The opposite situation in which an independent claim includes features which do not seem essential for the performance of the invention is not objectionable. This is a matter of the applicant's choice. The examiner should therefore not suggest that a claim be broadened by the omission of apparently inessential features;

- (iii) part of the subject-matter of the description and/or drawings is not covered by the claims

For example, the claims all specify an electric circuit employing semiconductor devices but one of the embodiments in the description and drawings employs electronic tubes instead. In such a case, the inconsistency can normally be removed either by broadening the claims (assuming that the description and drawings as a whole provide adequate support for such broadening) or by removing the "excess" subject-matter from the description and drawings. However, if examples in the description and/or drawings which are not covered by the claims are presented not as embodiments of the invention but as background art or examples which are useful for understanding the invention, the retention of these examples may be allowed.

4.4 General statements, "spirit" of invention

General statements in the description which imply that the extent of protection may be expanded in some vague and not precisely defined way should be objected to. In particular, objection should be raised to any statement which refers to the extent of protection being expanded to cover the "spirit" of the invention. Objection should likewise be raised, in the case where the claims are directed to a combination of features, to any statement which seems to imply that protection is nevertheless sought not only for the combination as a whole but also for individual features or sub-combinations thereof.

4.5 Essential features

An independent claim should specify explicitly all of the essential features needed to define the invention except insofar as such features are implied by the generic terms used, e.g. a claim to a "bicycle" does not need to mention the presence of wheels.

If a claim is to a process for producing the product of the invention, then the process as claimed should be one which, when carried out in a manner which would seem reasonable to a person skilled in the art, necessarily has as its end result that particular product; otherwise there is an internal inconsistency and therefore lack of clarity in the claim.

In the case of a product claim, if the product is of a well-known kind and the invention lies in modifying it in certain respects, it is sufficient that the claim clearly identifies the product and specifies what is modified and in what way. Similar considerations apply to claims for an apparatus.

Where patentability depends on a technical effect, the claims must be so drafted as to include all the technical features of the invention which are essential for the technical effect (see T 32/82, OJ 8/1984, 354).

4.6 Relative terms

It is preferable not to use a relative or similar term such as "thin", "wide" or "strong" in a claim unless the term has a well-recognised meaning in the particular art, e.g. "high-frequency" in relation to an amplifier, and this is the meaning intended. Where the term has no well-recognised meaning it should, if possible, be replaced by a more precise wording found elsewhere in the original disclosure. Where there is no basis in the disclosure for a clear definition and the term is not essential having regard to the invention, it should normally be retained in the claim, because to excise it would

generally lead to an extension of the subject-matter beyond the content of the application as filed - in contravention of Art. 123(2). However, an unclear term cannot be allowed in a claim if the term is essential having regard to the invention. Equally, an unclear term cannot be used by the applicant to distinguish his invention from the prior art.

4.7 Terms like "about" and "approximately"

Particular attention is required whenever the word "about" or similar terms such as "approximately" are used. Such a word may be applied, for example, to a particular value (e.g. "about 200°C") or to a range (e.g. "about x to about y"). In each case, the examiner should use his judgment as to whether the meaning is sufficiently clear in the context of the application read as a whole. However, the word can only be permitted if its presence does not prevent the invention from being unambiguously distinguished from the prior art with respect to novelty and inventive step.

4.8 Trademarks

The use of trade marks and similar expressions in claims should not be allowed as it may not be guaranteed that the product or feature referred to is not modified while maintaining its name during the term of the patent. They may be allowed exceptionally if their use is unavoidable and they are generally recognised as having a precise meaning (see also II, 4.17 and 4.18).

4.9 Optional features

Expressions like "preferably", "for example", "such as" or "more particularly" should be looked at carefully to ensure that they do not introduce ambiguity. Expressions of this kind have no limiting effect on the scope of a claim; that is to say, the feature following any such expression is to be regarded as entirely optional.

4.10 Result to be achieved

The area defined by the claims must be as precise as the invention allows. As a general rule, claims which attempt to define the invention by a result to be achieved should not be allowed, in particular if they only amount to claiming the underlying technical problem. However, they may be allowed if the invention either can only be defined in such terms or cannot otherwise be defined more precisely without unduly restricting the scope of the claims and if the result is one which can be directly and positively verified by tests or procedures adequately specified in the description or known to the person skilled in the art and which do not require undue experimentation (see T 68/85, OJ 6/1987, 228). For example, the invention may relate to an ashtray in which a smouldering cigarette end will be automatically extinguished due to the shape and relative dimensions of the ashtray. The latter may vary considerably in a manner difficult to define whilst still providing the desired effect. So long as the claim specifies the construction and shape of the ashtray as clearly as possible, it may define the relative dimensions by reference to the result to be achieved, provided that the specification includes adequate directions to enable the reader to determine the required dimensions by routine test procedures (see II, 4.9 to 4.11).

It should be noted that the above-mentioned requirements for allowing a definition of subject-matter in terms of a result to be achieved differ from

those for allowing a definition of subject-matter in terms of functional features (cf. III, 4.22 and 6.5).

4.11 Parameters

Where the invention relates to a product, it may be defined in a claim in various ways, viz. as a chemical product by its chemical formula, as a product of a process (if no clearer definition is possible; see also III, 4.12) or, exceptionally, by its parameters.

Parameters are characteristic values, which may be values of directly measurable properties (e.g. the melting point of a substance, the flexural strength of a steel, the resistance of an electrical conductor) or may be defined as more or less complicated mathematical combinations of several variables in the form of formulae.

Characterisation of a product mainly by its parameters should only be allowed in those cases where the invention cannot be adequately defined in any other way, provided that those parameters can be clearly and reliably determined either by indications in the description or by objective procedures which are usual in the art (see T 94/82, OJ 2/1984, 75). The same applies to a process-related feature which is defined by parameters. Cases in which unusual parameters are employed or a non-accessible apparatus for measuring the parameter(s) is used are *prima facie* objectionable on grounds of lack of clarity, as no meaningful comparison with the prior art can be made. Such cases might also disguise lack of novelty (see IV, 9.6).

Whether the method of and the means for measurement of the parameters need also be in the claim is dealt with in III, 4.18.

4.12 Product-by-process claim

Claims for products defined in terms of a process of manufacture are allowable only if the products as such fulfil the requirements for patentability, i.e. *inter alia* that they are new and inventive. A product is not rendered novel merely by the fact that it is produced by means of a new process (see T 150/82, OJ 7/1984, 309). A claim defining a product in terms of a process is to be construed as a claim to the product as such. The claim may for instance take the form "Product X obtainable by process Y". Irrespective of whether the term "obtainable", "obtained", "directly obtained" or an equivalent wording is used in the product-by-process claim, it is still directed to the product *per se* and confers absolute protection upon the product (see T 20/94, not published in OJ).

According to Art. 64(2), if the subject-matter of a European patent is a process, the protection conferred by the patent extends to the products directly obtained by such process. The provisions of this Article are understood to apply to processes producing products completely different from the starting materials as well as to the processes producing only superficial changes (e.g. painting, polishing).

Art. 64(2)

4.13 "Apparatus for ...", "Method for ...", etc.

If a claim commences with such words as: "Apparatus for carrying out the process etc..." this must be construed as meaning merely apparatus suitable for carrying out the process. Apparatus which otherwise possesses all of the features specified in the claims but which would be unsuitable for the stated purpose or would require modification to enable it to be so used, should normally not be considered as anticipating the claim.

Similar considerations apply to a claim for a product for a particular use. For example, if a claim refers to a "mold for molten steel", this implies certain limitations for the mold. Therefore, a plastic ice cube tray with a melting point much lower than that of steel would not come within the claim. Similarly, a claim to a substance or composition for a particular use should be construed as meaning a substance or composition which is in fact suitable for the stated use; a known product which *prima facie* is the same as the substance or composition defined in the claim, but which is in a form which would render it unsuitable for the stated use, would not deprive the claim of novelty. However, if the known product is in a form in which it is in fact suitable for the stated use, though it has never been described for that use, it would deprive the claim of novelty. An exception to this general principle of interpretation is where the claim is to a known substance or composition for use in a surgical, therapeutic or diagnostic method (see IV, 4.8).

In contrast to an apparatus or product claim, in case of a method claim commencing with such words as: "Method for remelting galvanic layers" the part "for remelting ..." should not be understood as meaning that the process is merely suitable for remelting galvanic layers, but rather as a functional feature concerning the remelting of galvanic layers and, hence, defining one of the method steps of the claimed method (see T 848/93, not published in OJ).

4.14 Definition by reference to use or another entity

Where a claim in respect of a physical entity (product, apparatus) seeks to define the invention by reference to features relating to the entity's use, a lack of clarity can result. This is particularly the case where the claim not only defines the entity itself but also specifies its relationship to a second entity which is not part of the claimed entity (for example, a cylinder head for an engine, where the former is defined by features of its location in the latter). Before considering a restriction to the combination of the two entities, it should always be remembered that the applicant is normally entitled to independent protection of the first entity *per se*, even if it was initially defined by its relationship to the second entity. Since the first entity can often be produced and marketed independently of the second entity, it will usually be possible to obtain independent protection by wording the claims appropriately (for example, by substituting "connectable" for "connected"). If it is not possible to give a clear definition of the first entity *per se*, then the claim should be directed to a combination of the first and second entities (for example, "engine with a cylinder head" or "engine comprising a cylinder head").

It may also be allowable to define the dimensions and/or shape of a first entity in an independent claim by general reference to the dimensions and/or corresponding shape of a second entity which is not part of the claimed first entity but is related to it through use. This particularly applies where the size of the second entity is in some way standardised (for example, in the case of a mounting bracket for a vehicle number-plate, where the bracket frame and fixing elements are defined in relation to the outer shape of the number-plate). However, references to second entities which cannot be seen as subject to standardisation may also be sufficiently clear in cases where the skilled person would have little difficulty in inferring the resultant restriction of the scope of protection for the first entity (for example, in the case of a covering sheet for an agricultural round bale, where the length and breadth of the covering sheet and how it is folded are defined by reference to the bale's circumference, width and diameter, see T 455/92, not published in OJ). It is neither necessary for such claims to contain the exact dimensions of

the second entity, nor do they have to refer to a combination of the first and second entities. Specifying the length, width and/or height of the first entity without reference to the second would lead to an unwarranted restriction of the scope of protection.

4.15 The expression "in"

To avoid ambiguity, particular care should be exercised when assessing claims which employ the word "in" to define a relationship between different physical entities (product, apparatus), or between entities and activities (process, use), or between different activities. Examples of claims worded in this way include the following:

- (i) Cylinder head in a four-stroke engine;
- (ii) In a telephone apparatus with an automatic dialler, dial tone detector and feature controller, the dial tone detector comprising...;
- (iii) In a process using an electrode feeding means of an arc-welding apparatus, a method for controlling the arc welding current and voltage comprising the following steps: ...; and
- (iv) In a process/system/apparatus etc. ... the improvement consisting of...

In examples (i) to (iii) the emphasis is on the fully functioning sub-units (cylinder head, dial tone detector, method for controlling the arc welding current and voltage) rather than the complete unit within which the sub-unit is contained (four-stroke engine, telephone, process). This can make it unclear whether the protection sought is limited to the sub-unit per se, or whether the unit as a whole is to be protected. For the sake of clarity, claims of this kind should be directed either to "a unit with (or comprising) a sub-unit" (e.g. "four-stroke engine with a cylinder head"), or to the sub-unit per se, specifying its purpose (for example, "cylinder head for a four-stroke engine"). The latter course may be followed only at the applicant's express wish and only if there is a basis for it in the application as filed, in accordance with Art. 123(2).

With claims of the type indicated by example (iv), the use of the word "in" sometimes makes it unclear whether protection is sought for the improvement only or for all the features defined in the claim. Here, too, it is essential to ensure that the wording is clear.

However, claims such as "use of a substance ... as an anticorrosive ingredient in a paint or lacquer composition" are acceptable on the basis of second non-medical use (see IV, 9.7, second paragraph).

4.16 Use claims

For the purposes of examination, a "use" claim in a form such as "the use of substance X as an insecticide" should be regarded as equivalent to a "process" claim of the form "a process of killing insects using substance X". Thus a claim in the form indicated should not be interpreted as directed to the substance X recognisable (e.g. by further additives) as intended for use as an insecticide. Similarly, a claim for "the use of a transistor in an amplifying circuit" would be equivalent to a process claim for the process of amplifying using a circuit containing the transistor and should not be interpreted as being directed to "an amplifying circuit in which the transistor is used", nor to "the process of using the transistor in building such a circuit".

4.17 References to the description or drawings

Rule 43(6)

The claims must not, in respect of the technical features of the invention, rely on references to the description or drawings "except where absolutely necessary". In particular they must not normally rely on such references as "as described in part ... of the description", or "as illustrated in Figure 2 of the drawings". The emphatic wording of the excepting clause should be noted. The onus is upon the applicant to show that it is "absolutely necessary" to rely on reference to the description or drawings in appropriate cases (see T 150/82, OJ 7/1984, 309). An example of an allowable exception would be that in which the invention involves some peculiar shape, illustrated in the drawings, but which cannot be readily defined either in words or by a simple mathematical formula. Another special case is that in which the invention relates to chemical products some of whose features can be defined only by means of graphs or diagrams.

4.18 Method of and means for measuring parameters referred to in claims

A further special case is where the invention is characterised by parameters. Provided that the conditions for defining the invention in this way are met (see III, 4.11), the definition of the invention should appear completely in the claim itself whenever this is reasonably practicable. In principle the method of measurement is necessary for the unambiguous definition of the parameter. The method of and means for measurement of the parameter values need not however be in the claims when:

- (i) the description of the method is so long that its inclusion would make the claim unclear through lack of conciseness or difficult to understand; in that case the claim should include a reference to the description, in accordance with Rule 43(6);
- (ii) a person skilled in the art would know which method to employ, e.g. because there is only one method, or because a particular method is commonly used; or
- (iii) all known methods yield the same result (within the limits of measurement accuracy).

However, in all other cases the method of and means for measurement should be included in the claims as the claims define the matter for which protection is sought (Art. 84).

4.19 Reference signs

Rule 43(7)

If the application contains drawings, and the comprehension of the claims would be improved by establishing the connection between the features mentioned in the claims and the corresponding reference signs in the drawings, then appropriate reference signs should be placed in parentheses after the features mentioned in the claims. If there is a large number of different embodiments, only the reference signs of the most important embodiments need be incorporated in the independent claim(s). Where claims are drafted in the two-part form set out in Rule 43(1), the reference signs should be inserted not only in the characterising part but also in the preamble of the claims. Reference signs should not however be seen as limiting the extent of the matter protected by the claims; their sole function is to make claims easier to understand. A comment to that effect in the description is acceptable (see T 237/84, OJ 7/1987, 309).

If text is added to reference signs in parentheses in the claims, lack of clarity can arise (Art. 84). Expressions such as "securing means (screw 13,

nail 14)" or "valve assembly (valve seat 23, valve element 27, valve seat 28)" are not reference signs in the sense of Rule 43(7) but are special features, to which the last sentence of Rule 43(7) is not applicable. Consequently, it is unclear whether the features added to the reference signs are limiting or not. Accordingly, such bracketed features are generally not permissible. However, additional references to those figures where particular reference signs are to be found, such as "(13 - Figure 3; 14 - Figure 4)", are unobjectionable.

A lack of clarity can also arise with bracketed expressions that do not include reference signs, e.g. "(concrete) moulded brick". In contrast, bracketed expressions with a generally accepted meaning are allowable, e.g. "(meth)acrylate" which is known as an abbreviation for "acrylate and methacrylate". The use of brackets in chemical or mathematical formulae is also unobjectionable.

4.20 Negative limitations (e.g. disclaimers)

A claim's subject-matter is normally defined in terms of positive features indicating that certain technical elements are present. Exceptionally, however, the subject-matter may be restricted using a negative limitation expressly stating that particular features are absent. This may be done e.g. to remove non-patentable embodiments disclosed in the application as filed (see T 4/80, OJ 4/1982, 149) or if the absence of a feature can be deduced from the application as filed (see T 278/88, not published in OJ).

Negative limitations such as disclaimers may be used only if adding positive features to the claim either would not define more clearly and concisely the subject-matter still protectable (see T 4/80, OJ 4/1982, 149) or would unduly limit the scope of the claim (see T 1050/93, not published in OJ).

With respect to the allowability of a disclaimer not disclosed in the application as filed, see VI, 5.3.11.

4.21 "Comprising" vs. "consisting"

While in everyday language the word "comprise" may have both the meaning "include", "contain" or "comprehend" and "consist of", in drafting patent claims legal certainty normally requires it to be interpreted by the broader meaning "include", "contain" or "comprehend". On the other hand, if a claim for a chemical compound refers to it as "consisting of components A, B and C" by their proportions expressed in percentages, the presence of any additional component is excluded and therefore the percentages should add up to 100% (see T 759/91 and T 711/90, both not published in OJ).

4.22 Functional definition of a pathological condition

When a claim is directed to a further therapeutic application of a medicament and the condition to be treated is defined in functional terms, e.g. "any condition susceptible of being improved or prevented by selective occupation of a specific receptor", the claim can be regarded as clear only if instructions, in the form of experimental tests or testable criteria, are available from the patent documents or from the common general knowledge allowing the skilled person to recognise which conditions fall within the functional definition and accordingly within the scope of the claim (T 241/95, OJ 2/2001, 103) (see also IV, 4.8).

5. Conciseness, number of claims

Art. 84
Rule 43(5)

The requirement that the claims must be concise refers to the claims in their entirety as well as to the individual claims. The number of claims must be considered in relation to the nature of the invention the applicant seeks to protect. Undue repetition of wording, e.g. between one claim and another, should be avoided by the use of the dependent form. Regarding independent claims in the same category see III, 3.2 and 3.3. As for dependent claims, while there is no objection to a reasonable number of such claims directed to particular preferred features of the invention, the examiner should object to a multiplicity of claims of a trivial nature. What is or what is not a reasonable number of claims depends on the facts and circumstances of each particular case. The interests of the relevant public must also be borne in mind. The presentation of the claims should not make it unduly burdensome to determine the matter for which protection is sought (T 79/91 and T 246/91, not published in OJ). Objection may also arise where there is a multiplicity of alternatives within a single claim, if this renders it unduly burdensome to determine the matter for which protection is sought.

6. Support in description

6.1 General remarks

Art. 84

The claims must be supported by the description. This means that there must be a basis in the description for the subject-matter of every claim and that the scope of the claims must not be broader than is justified by the extent of the description and drawings and also the contribution to the art (T 409/91, OJ 9/1994, 653). Regarding the support of dependent claims by the description, see III, 6.6.

6.2 Extent of generalisation

Most claims are generalisations from one or more particular examples. The extent of generalisation permissible is a matter which the examiner must judge in each particular case in the light of the relevant prior art. Thus an invention which opens up a whole new field is entitled to more generality in the claims than one which is concerned with advances in a known technology. A fair statement of claim is one which is not so broad that it goes beyond the invention nor yet so narrow as to deprive the applicant of a just reward for the disclosure of his invention. The applicant should be allowed to cover all obvious modifications of, equivalents to and uses of that which he has described. In particular, if it is reasonable to predict that all the variants covered by the claims have the properties or uses the applicant ascribes to them in the description, he should be allowed to draw his claims accordingly. After the date of filing, however, he should be allowed to do so only if this does not contravene Art. 123(2).

6.3 Objection of lack of support

As a general rule, a claim should be regarded as supported by the description unless there are well-founded reasons for believing that the skilled person would be unable, on the basis of the information given in the application as filed, to extend the particular teaching of the description to the whole of the field claimed by using routine methods of experimentation or analysis. Support must, however, be of a technical character; vague statements or assertions having no technical content provide no basis.

The examiner should raise an objection of lack of support only if he has well-founded reasons. Once the examiner has set out a reasoned case

that, for example, a broad claim is not supported over the whole of its breadth, the onus of demonstrating that the claim is fully supported lies with the applicant (see VI, 2.3). Where an objection is raised, the reasons should, where possible, be supported specifically by a published document.

A claim in generic form, i.e. relating to a whole class, e.g. of materials or machines, may be acceptable even if of broad scope, if there is fair support in the description and there is no reason to suppose that the invention cannot be worked through the whole of the field claimed. Where the information given appears insufficient to enable a person skilled in the art to extend the teaching of the description to parts of the field claimed but not explicitly described by using routine methods of experimentation or analysis, the examiner should raise a reasoned objection, and invite the applicant to establish, by suitable response, that the invention can in fact be readily applied on the basis of the information given over the whole field claimed or, failing this, to restrict the claim accordingly.

The question of support is illustrated by the following examples:

- (i) a claim relates to a process for treating all kinds of "plant seedlings" by subjecting them to a controlled cold shock so as to produce specified results, whereas the description discloses the process applied to one kind of plant only. Since it is well-known that plants vary widely in their properties, there are well-founded reasons for believing that the process is not applicable to all plant seedlings. Unless the applicant can provide convincing evidence that the process is nevertheless generally applicable, he must restrict his claim to the particular kind of plant referred to in the description. A mere assertion that the process is applicable to all plant seedlings is not sufficient;
- (ii) a claim relates to a specified method of treating "synthetic resin mouldings" to obtain certain changes in physical characteristics. All the examples described relate to thermoplastic resins and the method is such as to appear inappropriate to thermosetting resins. Unless the applicant can provide evidence that the method is nevertheless applicable to thermosetting resins, he must restrict his claim to thermoplastic resins;
- (iii) a claim relates to improved fuel oil compositions which have a given desired property. The description provides support for one way of obtaining fuel oils having this property, which is by the presence of defined amounts of a certain additive. No other ways of obtaining fuel oils having the desired property are disclosed. The claim makes no mention of the additive. The claim is not supported over the whole of its breadth and objection arises.

6.4 Lack of support vs. insufficient disclosure

It should be noted that, although an objection of lack of support is an objection under Art. 84, it can often, as in the above examples, also be considered as an objection of insufficient disclosure of the invention under Art. 83 (see II, 4.9 to 4.11), the objection being that the disclosure is insufficient to enable the skilled person to carry out the "invention" over the whole of the broad field claimed (although sufficient in respect of a narrow "invention"). Both requirements are designed to reflect the principle that the terms of a claim should be commensurate with, or be justified by, the invention. Whether the objection is raised as lack of support or as insufficiency is unimportant in examination proceedings; but it is important in opposition proceedings since there only the latter ground is available (see D-III, 5).

Art. 83

Art. 84

6.5 Definition in terms of function

A claim may broadly define a feature in terms of its function, i.e. as a functional feature, even where only one example of the feature has been given in the description, if the skilled reader would appreciate that other means could be used for the same function (see also III, 2.1 and III, 4.10). For example, "terminal position detecting means" in a claim might be supported by a single example comprising a limit switch, it being evident to the skilled person that e.g. a photoelectric cell or a strain gauge could be used instead. In general, however, if the entire contents of the application are such as to convey the impression that a function is to be carried out in a particular way, with no intimation that alternative means are envisaged, and a claim is formulated in such a way as to embrace other means, or all means, of performing the function, then objection arises. Furthermore, it may not be sufficient if the description merely states in vague terms that other means may be adopted, if it is not reasonably clear what they might be or how they might be used.

6.6 Support for dependent claims

Where certain subject-matter is clearly disclosed in a claim of the application as filed, but is not mentioned anywhere in the description, it is permissible to amend the description so that it includes this subject-matter. Where the claim is dependent, it may suffice if it is mentioned in the description that the claim sets out a particular embodiment of the invention (see II, 4.5).

7. Unity of invention

7.1 General remarks

Art. 82
Rule 43(2)

A European application must "relate to one invention only or to a group of inventions so linked as to form a single general inventive concept". The second of these alternatives, i.e. the single-concept linked group, may give rise to a plurality of independent claims in the same category provided these claims comply with Rule 43(2) (see III, 3.2 and 3.3), but the more usual case is a plurality of independent claims in different categories.

7.2 Special technical features

Rule 44(1)

Rule 44(1) indicates how one determines whether or not the requirement of Art. 82 is fulfilled when more than one invention appears to be present. The link between the inventions required by Art. 82 must be a technical relationship which finds expression in the claims in terms of the same or corresponding special technical features. The expression "special technical features" means, in any one claim, the particular technical feature or features that define a contribution that the claimed invention considered as a whole makes over the prior art. Once the special technical features of each invention have been identified, one must determine whether or not there is a technical relationship between the inventions and, furthermore, whether or not this relationship involves these special technical features. It is not necessary that the special technical features in each invention be the same. Rule 44(1) makes clear that the required relationship may be found between corresponding technical features. An example of this correspondence is the following: in one claim the special technical feature which provides resilience is a metal spring, whereas in another claim it is a block of rubber.

A plurality of independent claims in different categories may constitute a group of inventions so linked as to form a single general inventive concept. In particular, Rule 44(1) should be construed as permitting the inclusion of any one of the following combinations of claims of different categories in the same application:

- (i) in addition to an independent claim for a given product, an independent claim for a process specially adapted for the manufacture of the said product, and an independent claim for a use of the said product; or
- (ii) in addition to an independent claim for a given process, an independent claim for an apparatus or means specifically designed for carrying out the said process; or
- (iii) in addition to an independent claim for a given product, an independent claim for a process specially adapted for the manufacture of the said product and an independent claim for an apparatus or means specifically designed for carrying out the said process.

However, while a single set of independent claims according to any one of the combinations (i), (ii) or (iii) above is always permissible, a plurality of such sets of independent claims in one European patent application can only be allowed if the specific circumstances defined in Rule 43(2)(a)-(c) apply and the requirements of Art. 82 and Art. 84 are met. The proliferation of independent claims arising out of a combined effect of this kind may therefore be allowed only exceptionally.

Moreover, it is essential that a single general inventive concept links the claims in the various categories. The presence in each claim of expressions such as "specially adapted" or "specifically designed" does not necessarily imply that a single general inventive concept is present.

In combination (i) above, the process is specially adapted for the manufacture of the product if the claimed process results in the claimed product, i.e. if the process is actually suited to making the claimed product accessible and thereby defines a technical relationship as defined in Rule 44(1) between the claimed product and the claimed process (see W 11/99, OJ 4/2000, 186). A manufacturing process and its product may not be regarded as lacking unity simply by virtue of the fact that the manufacturing process is not restricted to the manufacture of the claimed product.

In combination (ii) above, the apparatus or means is specifically designed for carrying out the process if the apparatus or means is suitable for carrying out the process and thereby defines a technical relationship as defined in Rule 44(1) between the claimed apparatus or means and the claimed process. It is not sufficient for unity that the apparatus or means is merely capable of being used in carrying out the process. On the other hand, it is of no importance whether or not the apparatus or means could also be used for carrying out another process or the process could also be carried out using an alternative apparatus or means.

7.3 Intermediate and final products

Unity of invention should be considered to be present in the context of intermediate and final products where:

- (i) the intermediate and final products have the same essential structural element, i.e. their basic chemical structures are the same or their chemical structures are technically closely inter-related, the

intermediate incorporating an **essential** structural element into the final product, and

- (ii) the intermediate and final products are technically inter-related, i.e. the final product is manufactured directly from the intermediate or is separated from it by a small number of intermediates all containing the same **essential** structural element.

Unity of invention may also be present between intermediate and final products of which the structures are not known – for example, as between an intermediate having a known structure and a final product with unknown structure or as between an intermediate of unknown structure and a final product of unknown structure. In such cases, there should be sufficient evidence to lead one to conclude that the intermediate and final products are technically closely inter-related as, for example, when the intermediate contains the same essential element as the final product or incorporates an essential element into the final product.

Different intermediate products used in different processes for the preparation of the final product may be claimed provided that they have the same essential structural element. The intermediate and final products should not be separated, in the process leading from one to the other, by an intermediate which is not new. Where different intermediates for different structural parts of the final product are claimed, unity should not be regarded as being present between the intermediates. If the intermediate and final products are families of compounds, each intermediate compound should correspond to a compound claimed in the family of the final products. However, some of the final products may have no corresponding compound in the family of the intermediate products, so the two families need not be absolutely congruent.

The mere fact that, besides the ability to be used to produce final products, the intermediates also exhibit other possible effects or activities should not prejudice unity of invention.

7.4 Alternatives

Rule 44(2)

Alternative forms of an invention may be claimed either in a plurality of independent claims, as indicated in III, 7.1, or in a single claim (but see III, 3.7). In the latter case the presence of the two alternatives as independent forms may not be immediately apparent. In either case, however, the same criteria should be applied in deciding whether or not there is unity of invention, and lack of unity of invention may then also exist within a single claim.

7.4.1 Markush grouping

Where a single claim defines (chemical or non-chemical) alternatives, i.e. a so-called "Markush grouping", unity of invention should be considered to be present if the alternatives are of a similar nature (see III, 3.7).

When the Markush grouping is for alternatives of chemical compounds, they should be regarded as being of a similar nature where:

- (i) all alternatives have a common property or activity, and
- (ii) a common structure is present, i.e. a significant structural element is shared by all of the alternatives, or all alternatives belong to a recognised class of chemical compounds in the art to which the invention pertains.

A "significant structural element is shared by all of the alternatives" where the compounds share a common chemical structure which occupies a large portion of their structures, or, in case the compounds have in common only a small portion of their structures, the commonly shared structure constitutes a structurally distinctive portion in view of existing prior art. The structural element may be a single component or a combination of individual components linked together. The alternatives belong to a "recognised class of chemical compounds" if there is an expectation from the knowledge in the art that members of the class will behave in the same way in the context of the claimed invention, i.e. that each member could be substituted one for the other, with the expectation that the same intended result would be achieved. If it can be shown that at least one Markush alternative is not novel, unity of invention should be reconsidered.

7.5 Individual features in a claim

Objection of lack of unity does not arise because of one claim containing a number of individual features, where these features do not present a technical inter-relationship (i.e. a combination), but merely a juxtaposition (see IV, 11.5).

7.6 Lack of unity "a priori" or "a posteriori"

Lack of unity may be directly evident a priori, i.e. before considering the claims in relation to the prior art, or may only become apparent a posteriori, i.e. after taking the prior art into consideration - e.g. a document within the state of the art as defined in Art. 54(2) shows that there is lack of novelty or inventive step in an independent claim, thus leaving two or more dependent claims without a common inventive concept (see III, 7.8).

7.7 Examiner's approach

Although lack of unity may arise a posteriori as well as a priori, it should be remembered that lack of unity is not a ground of revocation in later proceedings. Therefore, although the objection should certainly be made and amendment insisted upon in clear cases, it should neither be raised nor persisted in on the basis of a narrow, literal or academic approach. This is particularly so where the possible lack of unity does not necessitate a further search. There should be a broad, practical consideration of the degree of interdependence of the alternatives presented, in relation to the state of the art as revealed by the search report. If the common matter of the independent claims is well-known, and the remaining subject-matter of each claim differs from that of the others without there being any unifying novel concept common to all, then clearly there is lack of unity. If, on the other hand, there is a common concept or principle which is novel and inventive, then objection of lack of unity does not arise. For determining what is allowable between these two extremes, rigid rules cannot be given and each case should be considered on its merits, the benefit of any doubt being given to the applicant. For the particular case of claims for a known substance for a number of distinct medical uses, see IV, 4.8.

7.8 Dependent claims

No objection on account of lack of unity a priori is justified in respect of a dependent claim and the claim on which it depends, on the ground that the general concept they have in common is the subject-matter of the independent claim, which is also contained in the dependent claim. For example, suppose claim 1 claims a turbine rotor blade shaped in a specified manner, while claim 2 is for a "turbine rotor blade as claimed in claim 1 and produced from alloy Z". The common general concept linking the

dependent with the independent claim is "turbine rotor blade shaped in a specified manner".

If, however, the independent claim appears not to be patentable, then the question whether there is still an inventive link between all the claims dependent on that claim needs to be carefully considered (see III, 7.6, non-unity "a posteriori"). It may be that the "special technical features" of one claim dependent on this non-patentable independent claim are not present in the same or corresponding form in another claim dependent on that claim (see also VI, 3.6).

7.9 Lack of unity during search

Rule 64(1) and (2)

In many and probably most instances, lack of unity will have been noted and reported upon by the Search Division which will have drawn up a partial search report based on those parts of the application relating to the invention, or unified linked group of inventions, first mentioned in the claims. The Search Division may neither refuse the application for lack of unity nor require limitation of the claims, but must inform the applicant that, if the search report is to be drawn up to cover those inventions present other than the first mentioned, then further search fees must be paid within a stipulated period.

7.10 Lack of unity during substantive examination

The final responsibility for establishing whether the application meets the requirement of unity of invention ultimately rests with the Examining Division (see T 631/97, OJ 1/2001, 13; see also VI, 3.4). For Euro-PCT applications which have entered the European phase, see III, 7.11.

Insofar as it finds that unity of invention is given, if the applicant has paid the further search fee(s) and requested a full or partial refund thereof, the Examining Division will order refund of the relevant further search fee(s).

If the applicant has not availed himself of the opportunity to have the search results on the other inventions included in the search report, he will be taken to have elected that the application should proceed on the basis of the invention which has been searched (see G 2/92, OJ 10/1993, 591). The Examining Division will normally initially uphold the position taken in the search opinion (see B-XII, 1.2) and will then require deletion of all the inventions other than that which has been searched. If the Examining Division is convinced, e.g. by arguments from the applicant, that the opinion on unity at the search stage was incorrect, then an additional search is performed for that part of the subject-matter which is judged to be unitary with an invention which was searched (see B-II, 4.2(iii)) and the examination is carried out on those claims which comply with the requirement of unity of invention.

If the applicant has taken the opportunity to have other inventions searched, then he may determine that the application is to proceed on the basis of any of these, the other(s) being deleted. If the applicant has not yet done so, the examiner should at the beginning of substantive examination, if he maintains the objection of lack of unity, invite the applicant to state on which invention the prosecution of the application should be based and to limit the application accordingly by excising those parts belonging to the other inventions. For the latter inventions, the applicant may file divisional applications (see VI, 9.1, and A-IV, 1).

Whether or not the question of unity of invention has been raised by the Search Division, it must always be considered by the Examining Division. Whenever unity is found to be lacking, the applicant should be required to limit his claims in such a way as to overcome the objection. Excision or amendment of parts of the description may also be necessary (see II, 7.4). One or more divisional applications, covering matter removed to meet this objection, may be filed (see VI, 9.1).

Rule 48(1)(c)
Rule 36(1)

7.10.1 Amended claims

For the situation where the applicant submits new claims directed to subject-matter which has not been searched e.g. because it was only contained in the description and at the search stage it was not found to be appropriate to extend the search to this subject-matter, see VI, 5.2(ii), and B-III, 3.5.

Rule 137(4)

7.11 Euro-PCT applications

7.11.1 International applications without supplementary search

As indicated in B-4.3, for certain international applications entering the European phase with an international search report, no supplementary search is carried out. The following situations may then be distinguished during substantive examination:

Art. 153(7)

- (i) if, during the international search, an objection of lack of unity has been raised and the applicant has not taken the opportunity to have the other invention(s) searched by paying additional search fees for them, but has taken the opportunity to amend the claims after receipt of the international search report so that they are limited to the invention searched and has indicated that examination is to be carried out on these amended claims, the examiner proceeds on the basis of these claims.
- (ii) if, during the international search, an objection of lack of unity has been raised and the applicant has **neither** taken the opportunity to have the other invention(s) searched by paying additional search fees for them, **nor** amended the claims so that they are limited to the invention searched, **and** the examiner agrees with the objection of the ISA, he will then proceed to issue a communication under Rule 71(1) and (2), dealing exclusively with the subject-matter of the one and only invention which has been searched.
- (iii) if the applicant has paid additional search fees during the international phase, he may determine that the application is to proceed on the basis of any of the searched inventions, the other(s) being deleted, if the examiner agrees with the objection of the ISA. Where the applicant has not yet taken that decision, the examiner will, at the beginning of substantive examination, invite him to do so.
- (iv) if the claims to be examined relate to an invention which differs from any of the originally claimed inventions and which does not combine with these inventions to form a single inventive concept, an objection under Rule 137(4) should be raised in the first communication pursuant to Art. 94(3) and Rule 71(1) and (2) (see also VI, 5.2(ii)).
- (v) if the applicant has not paid additional search fees during the international phase and the examiner does not agree with the objection of the ISA, an additional search will be performed (see B-II, 4.2(iii)) and the examination will be carried out on all claims.

Rule 164(2)

Rule 137(4)

Rule 36(1) In cases (i) to (iv), the applicant may file divisional applications for the inventions deleted to meet the objection of non-unity (see VI, 9, and A-IV, 1).

7.11.2 International applications with supplementary search

Art. 153(7)
Rule 164(1) For international applications entering the European phase with an international search report established by an ISA other than the EPO, a supplementary search is carried out by the Search Division in the cases listed in B-II, 4.3. If the Search Division, during the supplementary search, notes a lack of unity, B-VII, 2.4 applies.

The procedure before the Examining Division in such cases is described in E-IX, 5.7.

7.11.3 International preliminary examination report (IPER)

For international applications entering the European phase with an international preliminary examination report, the examiner should carefully take into account the position taken in that IPER before deviating from it. This may be necessary where the claims have been changed or the interpretation of the rules regarding unity of invention was erroneous; see further III, 7.11.1 and 7.11.2 above.

7.11.4 Restricted IPER

Art. 76
Rule 164(2) If the EPO has established an IPER on the application and the applicant wishes to obtain protection pertaining to claims which were not the subject of this IPER because they were not searched during the international phase in consequence of an objection of lack of unity, he will have to file one or more divisional applications for the inventions not searched.

8. Different texts of the patent application in respect of different Contracting States (see also D-VII, 4)

8.1 Different text in respect of the state of the art according to Art. 54(3)

If the EPO notes that in respect of one or more of the designated Contracting States the content of an earlier European patent application forms part of the state of the art pursuant to Art. 54(3), two situations could arise:

- (i) the filing date of the application or patent under examination is before the date of entry into force of the EPC 2000. Art. 54(4) EPC 1973 is still transitionally applicable (see Art. 1, Decision of the Administrative Council of 28 June 2001, OJ EPO 2003 Special edition No. 1, 202). Here, if conflicting prior art gives rise to different texts of the claims, different sets of claims for the Contracting States concerned may be filed. Different descriptions and drawings will only be required if it is not possible to set out clearly in a common description which subject-matter is to be protected in the different Contracting States, having regard to the appropriate prior art (see also II, 4.3, IV, 7.3 and VI, 5.5).
- (ii) the filing date of the application or patent under examination is on or after the date of entry into force of the EPC 2000. As Art 54(4) EPC 1973 has been deleted, the conflicting prior art belongs to the state of the art for all Contracting States, irrespective of the effected designations. Likewise, it is irrelevant if the designation fee(s) for the earlier European patent application has/have been paid, since there is no provision in the EPC 2000 corresponding to Rule 23a EPC 1973. Consequently, the possibility of having different texts for

different Contracting States on the basis of Art. 54(3) no longer exists.

8.2 Different text where a partial transfer of right has taken place pursuant to Art. 61

If by a final decision pursuant to Art. 61 it is adjudged that a third party is entitled to the grant of a European patent in respect of only part of the matter disclosed in the European patent application, the original European patent application must contain, "where appropriate", for the designated Contracting States in which the decision was taken or recognised, claims, a description and drawings which are different from those for the other designated Contracting States (see also VI, 5.5 and 9.2).

Art. 61(1)(b)
Rule 17
Rule 18(1) and (2)

8.3 Different text where a reservation has been entered in accordance with Art. 167(2)(a) EPC 1973

Where a Contracting State has entered reservations in accordance with Art. 167(2)(a) EPC 1973, patent applications and patents seeking protection for chemical, pharmaceutical or food products as such may include different sets of claims for that State and for the other designated States respectively. Such reservations were made by Austria, Greece and Spain. Without prejudice to Art. 167(5) EPC 1973, the reservation for Austria ceased to have effect after 7 October 1987, those for Greece and Spain after 7 October 1992 (for Spain, see Notice from the EPO dated 18 June 2007, OJ 7/2007, 439).

Art. 167(2)(a)
EPC 1973

Normally, a common description should be sufficient for all sets of claims.

8.4 Different text where national rights of earlier date exist

National rights of earlier date are not comprised in the state of the art (Art. 54) for the purposes of the EPO examination for patentability. Consequently, a specific search for national rights of earlier date is not made, although any documents found are mentioned in the search report (see B-VI, 4.2). However, under Art. 139(2), national rights of earlier date can be invoked, after the grant of the European patent, in national proceedings as a ground for revocation. These rights represent exceptions to the uniformity of European substantive patent law. Where national rights exist, therefore, the applicant has a legitimate interest in submitting separate claims to ensure that the patent granted will not be partly revoked in some Contracting States. The filing of separate claims should, however, neither be required nor suggested.

Art. 139(2)

If an applicant produces evidence in examination proceedings of the existence of pertinent national rights of earlier date in a particular designated State, it is appropriate to allow the submission of separate claims for the Contracting State in question (see VI, 4.9 and 4.10). The evidence must be in the form of a printed specification or, where applicable, a copy of the utility model or utility certificate or of the application for it (cf. Art. 140); this is necessary to prevent unjustified deviation from the unity of the European patent.

The effect of the national right of earlier date is determined by the relevant national provisions. The examiner does not have to decide whether the applicant has, by means of separate claims, limited the scope of his application to the extent required. That is the responsibility of the applicant.

The examiner must check that the separate claims do not contravene Art. 123(2) and that they meet the other requirements of the EPC.

In contrast to European rights of earlier date, national rights of earlier date are not comprised in the state of the art, so there is no justification for a separate description. However, at a suitable point in the preamble to the description, preferably in a separate paragraph following the information pursuant to Rule 42(1)(a), a reference to this situation must be made, for example along the following lines:

"With reference to ... (e.g. earlier application No. ... in ...), the applicant has voluntarily limited the scope of the present application, and submitted separate claims for ... (Contracting State)."

8.5 Calculation of claims fees

The claims fees are calculated in accordance with VI, 14.1.

CHAPTER IV

PATENTABILITY

1. General

1.1 Basic requirements

There are four basic requirements for patentability:

- (i) there must be an "invention", belonging to any field of technology; Art. 52(1)
- (ii) the invention must be "susceptible of industrial application";
- (iii) the invention must be "new"; and
- (iv) the invention must involve an "inventive step".

These requirements will be dealt with in turn in IV, 2, 3 and 4, IV, 5, IV, 6 to 10 and IV, 11, respectively.

1.2 Further requirements

In addition to these four basic requirements, the examiner should be aware of the following two requirements that are implicitly contained in the EPC:

- (i) the invention must be such that it can be carried out by a person skilled in the art (after proper instruction by the application); this follows from Art. 83. Instances where the invention fails to satisfy this requirement are given in II, 4.11; and Art. 83
- (ii) the invention must be of "technical character" to the extent that it must relate to a technical field (Rule 42(1)(a)), must be concerned with a technical problem (Rule 42(1)(c)), and must have technical features in terms of which the matter for which protection is sought can be defined in the claim (Rule 43(1)) (see III, 2.1). Rule 42(1)(a) and (c)
Rule 43(1)

1.3 Technical progress, advantageous effects

The EPC does not require explicitly or implicitly that an invention, to be patentable, must entail some technical progress or even any useful effect. Nevertheless, advantageous effects, if any, with respect to the state of the art should be stated in the description (Rule 42(1)(c)), and any such effects are often important in determining "inventive step" (see IV, 11).

2. Inventions

2.1 Exclusions

The EPC does **not** define what is meant by "invention", but Art. 52(2) contains a non-exhaustive list of things which are not regarded as inventions. It will be noted that the items on this list are all either abstract (e.g. discoveries, scientific theories, etc.) and/or non-technical (e.g. aesthetic creations or presentations of information). In contrast to this, an "invention" within the meaning of Art. 52(1) must be of both a concrete and a technical character (see IV, 1.2(ii)). It may be in any field of technology. Art. 52(2)

2.2 Examination practice

Art. 52(3)

In considering whether the subject-matter of an application is an invention within the meaning of Art. 52(1), there are two general points the examiner must bear in mind. Firstly, any exclusion from patentability under Art. 52(2) applies only to the extent to which the application relates to the excluded subject-matter **as such**. Secondly, the examiner should disregard the form or kind of claim and concentrate on its content in order to identify whether the claimed subject-matter, considered as a whole, has a technical character. If it does not, there is no invention within the meaning of Art. 52(1).

It must also be borne in mind that the basic test of whether there is an invention within the meaning of Art. 52(1) is separate and distinct from the questions whether the subject-matter is susceptible of industrial application, is new and involves an inventive step.

2.3 List of exclusions

The items on the list in Art. 52(2) will now be dealt with in turn, and further examples will be given in order better to clarify the distinction between what is patentable and what is not.

2.3.1 Discoveries

If a new property of a known material or article is found out, that is mere discovery and unpatentable because discovery as such has no technical effect and is therefore not an invention within the meaning of Art. 52(1). If, however, that property is put to practical use, then this constitutes an invention which may be patentable. For example, the discovery that a particular known material is able to withstand mechanical shock would not be patentable, but a railway sleeper made from that material could well be patentable. To find a previously unrecognised substance occurring in nature is also mere discovery and therefore unpatentable. However, if a substance found in nature can be shown to produce a technical effect, it may be patentable. An example of such a case is that of a substance occurring in nature which is found to have an antibiotic effect. In addition, if a microorganism is discovered to exist in nature and to produce an antibiotic, the microorganism itself may also be patentable as one aspect of the invention. Similarly, a gene which is discovered to exist in nature may be patentable if a technical effect is revealed, e.g. its use in making a certain polypeptide or in gene therapy.

For further specific issues concerning biotechnological inventions see IV, 3, 4.5 to 4.8 and 5.4.

2.3.2 Scientific theories

These are a more generalised form of discoveries, and the same principle as set out in IV, 2.3.1 applies. For example, the physical theory of semiconductivity would not be patentable. However, new semiconductor devices and processes for manufacturing these may be patentable.

2.3.3 Mathematical methods

These are a particular example of the principle that purely abstract or intellectual methods are not patentable. For example, a shortcut method of division would not be patentable but a calculating machine constructed to operate accordingly may well be patentable. A mathematical method for designing electrical filters is not patentable; nevertheless filters designed

according to this method would not be excluded from patentability by Art. 52(2) and (3).

2.3.4 Aesthetic creations

An aesthetic creation relates by definition to an article (e.g. a painting or sculpture) having aspects which are other than technical and the appreciation of which is essentially subjective. If, however, the article happens also to have technical features, it might be patentable, a tyre tread being an example of this. The aesthetic effect itself is not patentable, neither in a product nor in a process claim. For example, a book claimed solely in terms of the aesthetic or artistic effect of its information content, of its layout or of its letterfont, would not be patentable, and neither would a painting defined by the aesthetic effect of its subject or by the arrangement of colours, or by the artistic (e.g. Impressionist) style. Nevertheless, if an aesthetic effect is obtained by a technical structure or other technical means, although the aesthetic effect itself is not patentable, the means of obtaining it may be. For example, a fabric may be provided with an attractive appearance by means of a layered structure not previously used for this purpose, in which case a fabric incorporating such structure might be patentable. Similarly, a book defined by a technical feature of the binding or pasting of the back may be patentable, even though it has an aesthetic effect too, similarly also a painting defined by the kind of cloth, or by the dyes or binders used. Also a process of producing an aesthetic creation may comprise a technical innovation and thus be patentable. For example, a diamond may have a particularly beautiful shape (not of itself patentable) produced by a new technical process. In this case, the process may be patentable. Similarly, a new printing technique for a book resulting in a particular layout with aesthetic effect may well be patentable, together with the book as a product of that process. Again, a substance or composition defined by technical features serving to produce a special effect with regard to scent or flavour, e.g. to maintain a scent or flavour for a prolonged period or to accentuate it, may well be patentable.

2.3.5 Schemes, rules and methods for performing mental acts, playing games or doing business

These are further examples of items of an abstract or intellectual character. In particular, a scheme for learning a language, a method of solving crossword puzzles, a game (as an abstract entity defined by its rules) or a scheme for organising a commercial operation would not be patentable. However, if the claimed subject-matter specifies an apparatus or technical process for carrying out at least some part of the scheme, that scheme and the apparatus or process have to be examined as a whole. In particular, if the claim specifies computers, computer networks or other conventional programmable apparatus, or a program therefor, for carrying out at least some steps of a scheme, it is to be examined as a "computer-implemented invention" (see below).

2.3.6 Programs for computers

Programs for computers are a form of "computer-implemented invention", an expression intended to cover claims which involve computers, computer networks or other programmable apparatus whereby *prima facie* one or more of the features of the claimed invention are realised by means of a program or programs. Such claims may e.g. take the form of a method of operating said apparatus, the apparatus set up to execute the method, or, following T 1173/97 (OJ 10/1999, 609), the program itself. Insofar as the scheme for examination is concerned, no distinctions are made on the

basis of the overall purpose of the invention, i.e. whether it is intended to fill a business niche, to provide some new entertainment, etc.

The basic patentability considerations in respect of claims for computer programs are in principle the same as for other subject-matter. While "programs for computers" are included among the items listed in Art. 52(2), if the claimed subject-matter has a technical character it is not excluded from patentability by the provisions of Art. 52(2) and (3). Moreover, a data-processing operation controlled by a computer program can equally, in theory, be implemented by means of special circuits, and the execution of a program always involves physical effects, e.g. electrical currents. According to T 1173/97, such normal physical effects are not in themselves sufficient to lend a computer program technical character. However, if a computer program is capable of bringing about, when running on a computer, a further technical effect going beyond these normal physical effects, it is not excluded from patentability. This further technical effect may be known in the prior art. A further technical effect which lends technical character to a computer program may be found e.g. in the control of an industrial process or in processing data which represent physical entities or in the internal functioning of the computer itself or its interfaces under the influence of the program and could, for example, affect the efficiency or security of a process, the management of computer resources required or the rate of data transfer in a communication link. As a consequence, a computer program may be considered as an invention within the meaning of Art. 52(1) if the program has the potential to bring about, when running on a computer, a further technical effect which goes beyond the normal physical interactions between the program and the computer. A patent may be granted on such a claim if all the requirements of the EPC are met; see in particular Art. 84, 83, 54 and 56, and IV, 5.3 below. Such claims should not contain program listings (see II, 4.15), but should define all the features which assure patentability of the process which the program is intended to carry out when it is run (see III, 4.5, last sentence).

Moreover, following T 769/92 (OJ 8/1995, 525), the requirement for technical character may be satisfied if technical considerations are required to carry out the invention. Such technical considerations must be reflected in the claimed subject-matter.

Any claimed subject-matter defining or using technical means is an invention within the meaning of Art. 52(1) (T 258/03, OJ 12/2004, 575). If claimed subject-matter does not have a *prima facie* technical character, it should be rejected under Art. 52(2) and (3). If the subject-matter passes this *prima facie* test for technicality, the examiner should then proceed to the questions of novelty and inventive step. In assessing whether there is an inventive step, the examiner must establish an objective technical problem which has been overcome (see IV, 11.7.2). The solution of that problem constitutes the invention's technical contribution to the art. The presence of such a technical contribution establishes that the claimed subject-matter has a technical character and therefore is indeed an invention within the meaning of Art. 52(1). If no such objective technical problem is found, the claimed subject-matter does not satisfy at least the requirement for an inventive step because there can be no technical contribution to the art, and the claim is to be rejected on this ground.

2.3.7 Presentations of information

A representation of information defined solely by the content of the information is not patentable. This applies whether the claim is directed to

the presentation of the information per se (e.g. by acoustical signals, spoken words, visual displays, books defined by their subject, gramophone records defined by the musical piece recorded, traffic signs defined by the warning thereon) or to processes and apparatus for presenting information (e.g. indicators or recorders defined solely by the information indicated or recorded). If, however, the presentation of information has new technical features, there could be patentable subject-matter in the information carrier or in the process or apparatus for presenting the information. The arrangement or manner of representation, as distinct from the information content, may well constitute a patentable technical feature. Examples in which such a technical feature may be present are: a telegraph apparatus or communication system using a particular code to represent the characters (e.g. pulse code modulation); a measuring instrument designed to produce a particular form of graph for representing the measured information; a gramophone record having a particular groove form to allow stereo recordings; a computer data structure (see T 1194/97, OJ 12/2000, 525) defined in terms which inherently comprise the technical features of the program which operates on said data structure (assuming the program itself, in the particular case, to be patentable); and a diapositive with a soundtrack arranged at the side of it.

3. Biotechnological inventions

3.1 General remarks and definitions

"Biotechnological inventions" are inventions which concern a product consisting of or containing biological material or a process by means of which biological material is produced, processed or used. "Biological material" means any material containing genetic information and capable of reproducing itself or being reproduced in a biological system.

Rule 26(2) and (3)

3.2 Patentable biotechnological inventions

In principle, biotechnological inventions are patentable under the EPC. For European patent applications and patents concerning biotechnological inventions, the relevant provisions of the EPC are to be applied and interpreted in accordance with the provisions of Rules 26 to 29. European Union Directive 98/44/EC of 6 July 1998 on the legal protection of biotechnological inventions (OJ 2/1999, 101) is to be used as a supplementary means of interpretation. In particular the recitals (abbreviated as rec.) preceding the provisions of the Directive are also to be taken into account.

Rule 27
Rule 26(1)

Biotechnological inventions are also patentable if they concern an item on the following non-exhaustive list:

- (i) biological material which is **isolated** from its natural environment or produced by means of a technical process even if it previously occurred in nature.

Rule 27(a)

Hence, biological material may be considered patentable even if it already occurs in nature (see also IV, 2.3.1).

Although the human body, at the various stages of its formation and development, and the simple discovery of one of its elements, including the sequence or partial sequence of a gene, cannot constitute patentable inventions (see IV, 4.5), an element isolated from the human body or otherwise produced by means of a technical process, which is susceptible of industrial application, including the sequence or partial sequence of a

Rule 29(1) and (2)

gene, may constitute a patentable invention, even if the structure of that element is identical to that of a natural element. Such an element is not a priori excluded from patentability since it is, for example, the result of technical processes used to identify, purify and classify it and to produce it outside the human body, techniques which human beings alone are capable of putting into practice and which nature is incapable of accomplishing itself (EU Dir. 98/44/EC, rec. 21).

Rule 29(3) The examination of a patent application or a patent for gene sequences or partial sequences should be subject to the same criteria of patentability as in all other areas of technology (EU Dir. 98/44/EC, rec. 22). The industrial application of a sequence or partial sequence must be disclosed in the patent application as filed (see IV, 5.4);

Rule 27(b) (ii) plants or animals if the technical feasibility of the invention is not confined to a particular plant or animal variety;

Inventions which concern plants or animals are patentable provided that the application of the invention is not technically confined to a single plant or animal variety (EU Dir. 98/44/EC, rec. 29).

A claim wherein specific plant varieties are not individually claimed is not excluded from patentability under Art. 53(b) even though it may embrace plant varieties (see G 1/98, OJ 3/2000, 111, and IV, 4.6).

The subject-matter of a claim covering but not identifying plant varieties is not a claim to a variety or varieties (see G 1/98, OJ 3/2000, 111, reasons 3.8). In the absence of the identification of a specific plant variety in a product claim, the subject-matter of the claimed invention is neither limited nor directed to a variety or varieties within the meaning of Art. 53(b) (G 1/98, OJ 3/2000, 111, reasons 3.1 and 3.10); or

Rule 27(c) (iii) a microbiological or other technical process, or a product obtained by means of such a process other than a plant or animal variety.

Rule 26(6) "Microbiological process" means any process involving or performed upon or resulting in microbiological material.

4. Exceptions to patentability

4.1 Matter contrary to "ordre public" or morality

Art. 53(a) Any invention the commercial exploitation of which would be contrary to "ordre public" or morality is specifically excluded from patentability. The purpose of this is to deny protection to inventions likely to induce riot or public disorder, or to lead to criminal or other generally offensive behaviour (see also II, 7.2). Anti-personnel mines are an obvious example. This provision is likely to be invoked only in rare and extreme cases. A fair test to apply is to consider whether it is probable that the public in general would regard the invention as so abhorrent that the grant of patent rights would be inconceivable. If it is clear that this is the case, objection should be raised under Art. 53(a); otherwise not. If difficult legal questions arise in this context, then refer to VI, 7.8.

4.2 Prohibited matter

Art. 53(a) Exploitation is not to be deemed to be contrary to "ordre public" or morality merely because it is prohibited by law or regulation in some or all of the Contracting States. One reason for this is that a product could still be

manufactured under a European patent for export to States in which its use is not prohibited.

4.3 Offensive and non-offensive use

In some cases refusal of a patent application may be unjustified. This may result when the invention has both an offensive and a non-offensive use, e.g. a process for breaking open locked safes, the use by a burglar being offensive but the use by a locksmith in the case of emergency non-offensive. In such a case, no objection arises under Art. 53(a). Similarly, if a claimed invention defines a copying machine with features resulting in an improved precision of reproduction and an embodiment of this apparatus could comprise further features (not claimed but apparent to the skilled person) the only purpose of which would be that it should also allow reproduction of security strips in banknotes strikingly similar to those in genuine banknotes, the claimed apparatus would cover an embodiment for producing counterfeit money which could be considered to fall under Art. 53(a). There is, however, no reason to consider the copying machine as claimed to be excluded from patentability, since its improved properties could be used for many acceptable purposes (see G 1/98, OJ 3/2000, 111, reasons 3.3.3). However, if the application contains an explicit reference to a use which is contrary to "ordre public" or morality, deletion of this reference should be required under the terms of Rule 48(1)(a).

4.4 Economic effects

The EPO has not been vested with the task of taking into account the economic effects of the grant of patents in specific areas of technology and of restricting the field of patentable subject-matter accordingly (see G 1/98, OJ 3/2000, 111, reasons 3.9). The standard to apply for an exception under Art. 53(a) is whether the commercial exploitation of the invention is contrary to "ordre public" or morality.

4.5 Biotechnological inventions

In the area of biotechnological inventions, the following list of exceptions to patentability under Art. 53(a) is laid down in Rule 28. The list is illustrative and non-exhaustive and is to be seen as giving concrete form to the concept of "ordre public" and "morality" in this technical field.

Under Art. 53(a), in conjunction with Rule 28, European patents are not to be granted in respect of biotechnological inventions which concern:

Rule 28

- (i) processes for cloning human beings;

Rule 28(a)

For the purpose of this exception, a process for the cloning of human beings may be defined as any process, including techniques of embryo splitting, designed to create a human being with the same nuclear genetic information as another living or deceased human being (EU Dir. 98/44/EC, rec. 41).

- (ii) processes for modifying the germ line genetic identity of human beings;

Rule 28(b)

- (iii) uses of human embryos for industrial or commercial purposes;

Rule 28(c)

The exclusion of the uses of human embryos for industrial or commercial purposes does not affect inventions for therapeutic or diagnostic purposes which are applied to the human embryo and are useful to it (EU Dir. 98/44/EC, rec. 42).

- Rule 28(d) (iv) processes for modifying the genetic identity of animals which are likely to cause them suffering without any substantial medical benefit to man or animal, and also animals resulting from such processes.

The substantial medical benefit referred to above includes any benefit in terms of research, prevention, diagnosis or therapy (EU Dir. 98/44/EC, rec. 45).

- Rule 29(1) In addition, the human body, at the various stages of its formation and development, and the simple discovery of one of its elements, including the sequence or partial sequence of a gene, cannot constitute patentable inventions (see, however, IV, 3.2). Such stages in the formation or development of the human body include germ cells (EU Dir. 98/44/EC, rec. 16).

Also excluded from patentability under Art. 53(a) are processes to produce chimeras from germ cells or totipotent cells of humans and animals (EU Dir. 98/44/EC, rec. 38).

4.6 Plant and animal varieties, processes for the production of plants or animals

- Art. 53(b) The list of exceptions to patentability under Art. 53(b) also includes "plant or animal varieties or essentially biological processes for the production of plants or animals".

4.6.1 Plant varieties

- Rule 26(4) The term "plant variety" is defined in Rule 26(4). A patent is not to be granted if the claimed subject-matter is directed to a specific plant variety or specific plant varieties. However, if the invention concerns plants and animals and if the technical feasibility of the invention is not confined to a particular plant or animal variety, the invention is patentable (see IV, 3.2).
- Rule 27(b)

When a claim to a process for the production of a plant variety is examined, Art. 64(2) is not to be taken into consideration (see G 1/98, OJ 3/2000, 111). Hence, a process claim for the production of a plant variety (or plant varieties) is not a priori excluded from patentability merely because the resulting product constitutes or may constitute a plant variety.

4.6.2 Processes for the production of plants or animals

- Rule 26(5) A process for the production of plants or animals is essentially biological if it consists entirely of natural phenomena such as crossing or selection. To take some examples, a method of crossing, inter-breeding, or selectively breeding, say, horses involving merely selecting for breeding and bringing together those animals having certain characteristics would be essentially biological and therefore unpatentable. On the other hand, a process of treating a plant or animal to improve its properties or yield or to promote or suppress its growth e.g. a method of pruning a tree, would not be essentially biological since although a biological process is involved the essence of the invention is technical; the same could apply to a method of treating a plant characterised by the application of a growth-stimulating substance or radiation. The treatment of soil by technical means to suppress or promote the growth of plants is also not excluded from patentability (see also IV, 4.8.1).

4.7 Microbiological processes

4.7.1 General remarks

As expressly stated in Art. 53(b), second half-sentence, the exception referred to in the first half-sentence does not apply to microbiological processes or the products thereof.

Art. 53(b)
Rule 26(6)

"Microbiological process" means any process involving or performed upon or resulting in microbiological material. Hence, the term "microbiological process" is to be interpreted as covering not only processes performed upon microbiological material or resulting in such, e.g. by genetic engineering, but also processes which as claimed include both microbiological and non-microbiological steps.

The product of a microbiological process may also be patentable per se (product claim). Propagation of the microorganism itself is to be construed as a microbiological process for the purposes of Art. 53(b). Consequently, the microorganism can be protected per se as it is a product obtained by a microbiological process (see IV, 2.3.1). The term "microorganism" includes bacteria and other generally unicellular organisms with dimensions beneath the limits of vision which can be propagated and manipulated in a laboratory (see T 356/93, OJ 8/1995, 545), including plasmids and viruses and unicellular fungi (including yeasts), algae, protozoa and, moreover, human, animal and plant cells.

Rule 27(c)

On the other hand, product claims for plant or animal varieties cannot be allowed even if the variety is produced by means of a microbiological process (Rule 27(c)). The exception to patentability in Art. 53(b), first half-sentence, applies to plant varieties irrespective of the way in which they are produced. Therefore, plant varieties containing genes introduced into an ancestral plant by recombinant gene technology are excluded from patentability (G 1/98, OJ 3/2000, 111).

4.7.2 Repeatability of results of microbiological processes

In the case of microbiological processes, particular regard should be had to the requirement of repeatability referred to in II, 4.11. As for biological material deposited under the terms of Rule 31, repeatability is assured by the possibility of taking samples (Rule 33(1)), and there is thus no need to indicate another process for the production of the biological material.

Rule 33(1)

4.8 Surgery, therapy and diagnostic methods

European patents are not to be granted in respect of "methods for treatment of the human or animal body by surgery or therapy and diagnostic methods practised on the human or animal body; this provision shall not apply to products, in particular substances or compositions, for use in any of these methods." Hence, patents may be obtained for surgical, therapeutic or diagnostic instruments or apparatuses for use in such methods. The manufacture of prostheses or artificial limbs could be patentable. For instance, a method of manufacturing insoles in order to correct the posture or a method of manufacturing an artificial limb should be patentable. In both cases, taking the imprint of the footplate or a moulding of the stump on which an artificial limb is fitted is clearly not of a surgical nature and does not require the presence of a medically qualified person. Furthermore, the insoles as well as the artificial limb are manufactured outside the body. However, a method of manufacturing an endoprosthesis outside the body, but requiring a surgical step to be carried out for taking

Art. 53(c)

measurements, would be excluded from patentability under Art. 53(c) (see T 1005/98, not published in OJ).

Patents may be obtained for **new** products, particularly substances or compositions, for use in these methods of treatment or diagnosis. According to Art. 54(4), where the substance or composition is known, it may only be patented for use in these methods if the known substance or composition was not previously disclosed for use in surgery, therapy or diagnostic methods practised on the human or animal body ("**first medical use**"). A claim to a known substance or composition for the first use in surgical, therapeutic and/or diagnostic methods should be in a form such as: "Substance or composition X" followed by the indication of the use, for instance "... for use as a medicament", "... as an antibacterial agent " or "... for curing disease Y".

Art. 54(5)

Where a substance or composition is already known to have been used in a "first medical use", it may still be patentable under Art. 54(5) for any second or further use in a method according to Art. 53(c), provided that said use is novel and inventive.

Art. 54(4) and (5) thus provide for an exception from the general principle that product claims can only be obtained for (absolutely) novel products. However, this does not mean that product claims for the first and further medical uses need not fulfil all other requirements of patentability, especially that of inventive step (see T 128/82, OJ 4/1984, 164).

A claim in the form "Use of substance or composition X for the treatment of disease Y..." will be regarded as relating to a method for treatment explicitly excluded from patentability under Art. 53(c) and therefore will not be accepted.

Art. 82

If an application discloses for the first time a number of distinct surgical, therapeutic or diagnostic uses for a known substance or composition, normally in the one application independent claims each directed to the substance or composition for one of the various uses may be allowed; i.e. an a priori objection of lack of unity of invention should not, as a general rule, be raised (see III, 7.6).

A claim in the form "Use of a substance or composition X for the manufacture of a medicament for therapeutic application Z" is allowable for either a first or "subsequent" (second or further) such application ("Swiss-type" claim), if this application is new and inventive (cf. G 5/83, OJ 3/1985, 64). The same applies to claims in the form "Method for manufacturing a medicament intended for therapeutic application Z, characterised in that the substance X is used" or the substantive equivalents thereof (see T 958/94, OJ 6/1997, 241). In cases where an applicant simultaneously discloses more than one "subsequent" therapeutic use, claims of the above type directed to these different uses are allowable in the one application, but only if they form a single general inventive concept (Art. 82). Regarding use or method claims of the above type, it should also be noted that a mere pharmaceutical effect does not necessarily imply a therapeutical application. For instance, the selective occupation of a specific receptor by a given substance cannot be considered in itself as a therapeutic application; indeed, the discovery that a substance selectively binds a receptor, even if representing an important piece of scientific knowledge, still needs to find an application in the form of a **defined, real** treatment of a pathological condition in order to make a technical contribution to the art and to be considered as an invention

eligible for patent protection (see T 241/95, OJ 2/2001, 103). See also III, 4.22, for the functional definition of a pathological condition.

4.8.1 Limitations of exception under Art. 53(c)

It should be noted that the exceptions under Art. 53(c) are confined to methods for treatment of the human or animal body by surgery or therapy and diagnostic methods practised on the human or animal body. It follows that other methods of treatment of live human beings or animals (e.g. treatment of a sheep in order to promote growth, to improve the quality of mutton or to increase the yield of wool) or other methods of measuring or recording characteristics of the human or animal body are patentable, provided that (as would probably be the case) such methods are of a technical and not essentially biological character (see IV, 4.6). For example, an application containing claims directed to the purely cosmetic treatment of a human by administration of a chemical product is considered as being patentable (see T 144/83, OJ 9/1986, 301). A cosmetic treatment involving surgery or therapy would, however, not be patentable (see below).

Art. 53(c)

To be excluded from patentability, a treatment or diagnostic method must actually be carried out on the living human or animal body. A treatment of or diagnostic method practised on a dead human or animal body would therefore not be excluded from patentability by virtue of Art. 53(c). Treatment of body tissues or fluids after they have been removed from the human or animal body, or diagnostic methods applied thereon, are not excluded from patentability insofar as these tissues or fluids are not returned to the same body. Thus the treatment of blood for storage in a blood bank or diagnostic testing of blood samples is not excluded, whereas a treatment of blood by dialysis with the blood being returned to the same body would be excluded.

Regarding methods which are carried out on or in relation to the living human or animal body, it should be borne in mind that the intention of Art. 53(c) is only to free from restraint non-commercial and non-industrial medical and veterinary activities. Interpretation of the provision should avoid the exceptions from going beyond their proper limits (see G 5/83, OJ 3/1985, 64 and G 1/04, OJ 5/2006, 334).

However, in contrast to the subject-matter referred to in Art. 52(2) and (3) which is only excluded from patentability if claimed as such, a method claim is not allowable under Art. 53(c) if it includes at least one feature defining a physical activity or action that constitutes a method step for treatment of the human or animal body by surgery or therapy. In that case, whether or not the claim includes or consists of features directed to a technical operation performed on a technical object is legally irrelevant to the application of Art. 53(c) (see T 820/92, OJ 3/1995, 113, and T 82/93, OJ 5/1996, 274).

Taking the three exceptions in turn:

Surgery defines the nature of the treatment rather than its purpose. Thus, for example, a method of treatment by surgery for cosmetic purposes or for embryo transfer is excluded from patentability, as well as surgical treatment for therapeutic purposes.

Therapy implies the curing of a disease or malfunction of the body and covers prophylactic treatment, e.g. immunisation against a certain disease (see T 19/86, OJ 1-2/1989, 24) or the removal of plaque (see T 290/86, OJ 8/1992, 414). A method for therapeutic purposes concerning the

functioning of an apparatus associated with a living human or animal body is not excluded from patentability if no functional relationship exists between the steps related to the apparatus and the therapeutic effect of the apparatus on the body (see T 245/87, OJ 5/1989, 171).

Diagnostic methods likewise do not cover all methods related to diagnosis. To determine whether a claim is directed to a diagnostic method within the meaning of Art. 53(c), it must first be established whether all of the necessary phases are included in the claim (G 1/04, OJ 5/2006, 334).

The claim must include method steps relating to **all** of the following phases:

- (i) the **examination phase**, involving the collection of data,
- (ii) the **comparison** of these data with standard values,
- (iii) the **finding of any significant deviation**, i.e. a symptom, during the comparison,
- (iv) the attribution of the deviation to a particular clinical picture, i.e. the deductive medical or veterinary **decision phase** (diagnosis for curative purposes stricto sensu).

If features pertaining to any of these phases are missing and are essential for the definition of the invention, then those features are to be included in the independent claim.

It is then necessary to establish which of the method steps have **technical character**. The final phase (iv), for example, is normally a purely intellectual exercise (unless a device capable of reaching the diagnostic conclusions can be used) and therefore not technical in character.

In order to fulfil the "practised on the human or animal body" criterion, **each of the preceding technical method steps relating to phases (i) to (iii) must be performed on a human or animal body**. So, for each technical method step, it must be ascertained whether an interaction with the human or animal body takes place. The type or intensity of the interaction is not decisive: this criterion is fulfilled if the performance of the technical method step in question necessitates the presence of the body. Direct physical contact with the body is not required.

It is noted that a medical or veterinary practitioner does not have to be involved, either by being present or by bearing the overall responsibility, in the procedure.

If all of the above criteria are satisfied, then the claim defines a diagnostic method practised on the human or animal body, and an objection will be raised under Art. 53(c).

Accordingly, methods for merely obtaining information (data, physical quantities) from the living human or animal body (e.g. X-ray investigations, NMR studies, and blood pressure measurements) are not excluded from patentability under Art. 53(c).

5. Industrial application

5.1 General remarks

"An invention shall be considered as susceptible of industrial application if it can be made or used in any kind of industry, including agriculture". "Industry" should be understood in its broad sense as including any physical activity of "technical character" (see IV, 1.2), i.e. an activity which belongs to the useful or practical arts as distinct from the aesthetic arts; it does not necessarily imply the use of a machine or the manufacture of an article and could cover e.g. a process for dispersing fog or for converting energy from one form to another. Thus, Art. 57 excludes from patentability very few "inventions" which are not already excluded by the list in Art. 52(2) (see IV, 2.1). One further class of "invention" which would be excluded, however, would be articles or processes alleged to operate in a manner clearly contrary to well-established physical laws, e.g. a perpetual motion machine. Objection could arise under Art. 57 only insofar as the claim specifies the intended function or purpose of the invention, but if, say, a perpetual motion machine is claimed merely as an article having a particular specified construction then objection should be made under Art. 83 (see II, 4.11).

Art. 57

5.2 Method of testing

Methods of testing generally should be regarded as inventions susceptible of industrial application and therefore patentable if the test is applicable to the improvement or control of a product, apparatus or process which is itself susceptible of industrial application. In particular, the utilisation of test animals for test purposes in industry, e.g. for testing industrial products (for example for ascertaining the absence of pyrogenetic or allergic effects) or phenomena (for example for determining water or air pollution) would be patentable.

5.3 Industrial application vs. exclusion under Art. 52(2)

It should be noted that "susceptibility of industrial application" is not a requirement that overrides the restriction of Art. 52(2), e.g. an administrative method of stock control is not patentable, having regard to Art. 52(2)(c), even though it could be applied to the factory store-room for spare parts. On the other hand, although an invention must be "susceptible of industrial application" and the description must indicate, where this is not apparent, the way in which the invention is thus susceptible (see II, 4.12), the claims need not necessarily be restricted to the industrial application(s).

5.4 Sequences and partial sequences of genes

In general it is required that the description of a European patent application should, where this is not self-evident, indicate the way in which the invention is capable of exploitation in industry. In relation to sequences and partial sequences of genes, this general requirement is given specific form in that the industrial application of a sequence or a partial sequence of a gene must be disclosed in the patent application. A mere nucleic acid sequence without indication of a function is not a patentable invention (EU Dir. 98/44/EC, rec. 23). In cases where a sequence or partial sequence of a gene is used to produce a protein or a part of a protein, it is necessary to specify which protein or part of a protein is produced and what function this protein or part of a protein performs. Alternatively, when a nucleotide sequence is not used to produce a protein or part of a protein, the function

Rule 42(1)(f)
Rule 29(3)

to be indicated could e.g. be that the sequence exhibits a certain transcription promoter activity.

6. State of the art

6.1 General remarks and definition

Art. 54(1) and (2)

An invention is "considered to be new if it does not form part of the state of the art". The "state of the art" is defined as "everything made available to the public by means of a written or oral description, by use, or in any other way, before the date of filing of the European patent application". The width of this definition should be noted. There are no restrictions whatever as to the geographical location where or the language or manner in which the relevant information was made available to the public; also no age limit is stipulated for the documents or other sources of the information. There are, however, certain specific exclusions (see IV, 10). However, since the "state of the art" available to the examiner will mainly consist of the documents listed in the search report, this section 6 deals with the question of public availability only in relation to written description (either alone or in combination with an earlier oral description or use).

The principles to be applied in determining whether other kinds of prior art (which could be introduced into the proceedings e.g. by a third party under Art. 115) have been made available to the public are set out in D-V, 3.

Art. 52(1)

For the examination of the novelty of claimed subject-matter, see IV, 9.

A written description, i.e. a document, should be regarded as made available to the public if, at the relevant date, it was possible for members of the public to gain knowledge of the content of the document and there was no bar of confidentiality restricting the use or dissemination of such knowledge. For instance, German utility models ("Gebrauchsmuster") are already publicly available as of their date of entry in the Register of utility models ("Eintragungstag"), which precedes the date of announcement in the Patent Bulletin ("Bekanntmachung im Patentblatt"). The search report also cites documents in which doubts with regard to the fact of public availability and doubts concerning the precise date of publication of a document have not, or not fully, been removed. If the applicant contests the public availability or assumed date of publication of the document, the examiner should consider whether to investigate the matter further. If the applicant shows sound reasons for doubting whether the document forms part of the "state of the art" in relation to his application and any further investigation does not produce evidence sufficient to remove that doubt, the examiner should not pursue the matter further. The only other problem likely to arise for the examiner is where:

- (i) a document reproduces an oral description (e.g. a public lecture) or gives an account of a prior use (e.g. display at a public exhibition); and
- (ii) only the oral description or lecture was publicly available before the "date of filing" of the European application, the document itself being published on or after this date.

In such cases, the examiner should start with the assumption that the document gives a true account of the earlier lecture, display or other event and should therefore regard the earlier event as forming part of the "state of the art". If, however, the applicant gives sound reasons for contesting the truth of the account given in the document then again the examiner should not pursue the matter further.

6.2 Enabling disclosures

Subject-matter can only be regarded as having been made available to the public, and therefore as comprised in the state of the art pursuant to Art. 54(1), if the information given to the skilled person is sufficient to enable him, at the relevant date (see IV, 9.3), to practise the technical teaching which is the subject of the disclosure, taking into account also the general knowledge at that time in the field to be expected of him (see T 26/85, OJ 1-2/1990, 22, T 206/83, OJ 1/1987, 5 and T 491/99, not published in OJ).

6.3 Date of filing or priority date as effective date

It should be noted that "date of filing" in Art. 54(2) and 54(3) is to be interpreted as meaning the date of priority in appropriate cases (see Chapter V). It should be remembered that different claims, or different alternatives claimed in one claim, may have different effective dates, i.e. the date of filing or (one of) the claimed priority date(s). The question of novelty must be considered against each claim (or part of a claim where a claim specifies a number of alternatives) and the state of the art in relation to one claim or one part of a claim may include matter, e.g. an intermediate document (see B-X, 9.2(iv)), which cannot be cited against another claim or another alternative in the same claim because it has an earlier effective date.

Art. 89

Of course, if all the matter in the state of the art was made available to the public before the date of the earliest priority document, the examiner need not (and should not) concern himself with the allocation of effective dates.

If the applicant files missing parts of the description, or drawings (see A-II, 5.1), late under Rule 56, the accorded date of the application is the date of filing of these missing elements under Rule 56(2) (see A-II, 5.3), unless they are completely contained in the priority document and the requirements given in Rule 56(3) are satisfied (see A-II, 5.4), in which case the original filing date is maintained. The date of the application as a whole is thus either the date of filing of the missing elements or the original filing date.

Rule 56

Claims filed in response to a communication under Rule 58 (see A-III, 15) do not result in a change in the filing date of the application (see A-III, 15), as they are considered as amendments to the application as filed (see VI, 5.3.1).

Rule 58

6.4 Documents in a non-official language

The search report will include a document in a non-official language only if there is strong evidence (e.g.-coming from drawings, an abstract, a corresponding patent in an official language, or a translation produced by the examiner or by a person familiar with the language of the document) that the document is relevant (see B-X, 9.1.2 and 9.1.3). The examiner, in the search opinion or in the communication under Art. 94(3), may cite the document on the basis of the same evidence. If, however, the applicant disputes the relevance of the document and gives specific reasons, the examiner should consider whether, in the light of these reasons and of the other prior art available to him, he is justified in pursuing the matter. If so, he should obtain a translation of the document (or merely the relevant part of it if that can be easily identified). If he remains of the view that the document is relevant, he should send a copy of the translation to the applicant with the next official communication.

7. Conflict with other European applications

7.1 State of the art pursuant to Art. 54(3)

Art. 54(3)
Art. 56
Art. 89
Art. 85

The state of the art also comprises the content of other European applications filed or validly claiming a priority date earlier than – but published under Art. 93 on or after – the date of filing or valid date of priority of the application being examined. Such earlier applications are part of the state of the art only when considering novelty and not when considering inventive step. The "date of filing" referred to in Art. 54(2) and (3) is thus to be interpreted as meaning the date of priority in appropriate cases (see Chapter V). By the "content" of a European application is meant the whole disclosure, i.e. the description, drawings and claims, including:

- (i) any matter explicitly disclaimed (with the exception of disclaimers for unworkable embodiments);
- (ii) any matter for which an allowable reference (see II, 4.19, penultimate paragraph) to other documents is made; and
- (iii) prior art insofar as explicitly described.

However, the "content" does not include any priority document (the purpose of such document being merely to determine to what extent the priority date is valid for the disclosure of the European application (see V, 1.2)) nor, in view of Art. 85, the abstract (see B-XI, 2).

It is important to note that it is the content of the earlier application as filed which is to be considered when applying Art. 54(3). Where an application is filed in a non-official language as permitted by Art. 14(2) (see A-VIII, 1.1), it may happen that matter is erroneously omitted from the translation in the language of the proceedings and not published under Art. 93 in that language. Even in this case, it is the content of the original text which is relevant for the purposes of Art. 54(3).

7.1.1 Requirements

Whether a published European application can be a conflicting application under Art. 54(3) is determined firstly by its filing date and the date of its publication; the former must be before the filing or valid priority date of the application under examination, the latter must be on or after that date. If the published European application claims priority, the priority date replaces the filing date (Art. 89) for that subject-matter in the application which corresponds to the priority application. If a priority claim was abandoned or otherwise lost with effect from a date prior to publication, the filing date and not the priority date is relevant, irrespective of whether or not the priority claim might have conferred a valid priority right.

Further it is required that the conflicting application was still pending at its publication date (see J 5/81, OJ 4/1982, 155). If the application was withdrawn or otherwise lost before the date of publication, but published because the preparations for publication had been completed, the publication has no effect under Art. 54(3), but only under Art. 54(2). Art. 54(3) must be interpreted as referring to the publication of a "valid" application, i.e. a European patent application in existence at its publication date.

Changes taking effect after the date of publication (e.g. withdrawal of a designation or withdrawal of the priority claim or loss of the priority right for other reasons) do not affect the application of Art. 54(3) (see III, 8.1 for transitional provisions concerning Art. 54(4) EPC 1973 and A-III, 11.1 and

11.3 for transitional arrangements concerning non-payment of designation fees for applications filed before 1 April 2009).

7.2 Euro-PCT applications

The above principles also apply to PCT applications designating EP, but with an important difference. Art. 153, in conjunction with Rule 165, makes it clear that a PCT application is not included in the state of the art for the purposes of Art. 54(3) unless the PCT applicant has paid the required filing fee under Rule 159(1)(c) and has supplied the PCT application to the EPO in English, French or German (this means that a translation is required where the PCT application was published in Japanese, Chinese, Spanish, Russian or Arabic).

Art. 153
Rule 165

7.3 Commonly designated States

See C-III, 8.1 for the transitional applicability of Art. 54(4) EPC 1973 to applications which are pending on 13 December 2007 and patents which have already been granted on that date.

7.4 Double patenting

The EPC does not deal explicitly with the case of co-pending European applications of the same effective date. However, it is an accepted principle in most patent systems that two patents cannot be granted to the same applicant for one invention. It is permissible to allow an applicant to proceed with two applications having the same description where the claims are quite distinct in scope and directed to different inventions. However, in the rare case in which there are two or more European applications from the same applicant definitively designating the same State or States (by confirming the designation through payment of the relevant designation fees) and the claims of those applications have the same filing or priority date and relate to the same invention (the claims conflicting in the manner explained in VI, 9.1.6), the applicant should be told that he must either amend one or more of the applications in such a manner that they no longer claim the same invention, or choose which one of those applications he wishes to proceed to grant. Should two applications of the same effective date be received from two different applicants, each must be allowed to proceed as though the other did not exist.

8. Conflict with national rights of earlier date

Where a national right of an earlier date exists in a Contracting State designated in the application, there are several possibilities of amendment open to the applicant. First, he may simply withdraw that designation from his application for the Contracting State of the national right of earlier date. Second, for such State, he may file claims which are different from the claims for the other designated States. Third, the applicant can limit his existing set of claims in such a manner that the national right of earlier date is no longer relevant.

Rule 138

Amendment of the application to take account of prior national rights should be neither required nor suggested (see also III, 8.4). However, if the claims have been amended, then amendment of the description and drawings should be required if necessary to avoid confusion.

9. Novelty

9.1 State of the art pursuant to Art. 54(2)

Art. 54(1)

An invention is considered to be new if it does not form part of the state of the art. For a definition of "state of the art", see IV, 6. It should be noted that in considering novelty (as distinct from inventive step, see IV, 11.8), it is not permissible to combine separate items of prior art together. It is also not permissible to combine separate items belonging to different embodiments described in one and the same document, unless such combination has specifically been suggested (T 305/87, OJ 8/1991, 429).

However, if a document (the "primary" document) refers explicitly to another document as providing more detailed information on certain features, the teaching of the latter is to be regarded as incorporated into the document containing the reference, if the document referred to was available to the public on the publication date of the document containing the reference (see T 153/85, OJ 1-2/1988, 1) (For the state of the art pursuant to Art. 54(3), see IV, 7.1, and II, 4.19, penultimate paragraph). The relevant date for novelty purposes, however, is always the date of the primary document (see IV, 9.3).

Furthermore, any matter explicitly disclaimed (with the exception of disclaimers which exclude unworkable embodiments) and prior art acknowledged in a document, insofar as explicitly described therein, are to be regarded as incorporated in the document.

It is further permissible to use a dictionary or similar document of reference in order to interpret a special term used in a document.

9.2 Implicit features or well-known equivalents

A document takes away the novelty of any claimed subject-matter derivable directly and unambiguously from that document including any features implicit to a person skilled in the art in what is expressly mentioned in the document, e.g. a disclosure of the use of rubber in circumstances where clearly its elastic properties are used even if this is not explicitly stated takes away the novelty of the use of an elastic material. The limitation to subject-matter "derivable directly and unambiguously" from the document is important. Thus, when considering novelty, it is not correct to interpret the teaching of a document as embracing well-known equivalents which are not disclosed in the documents; this is a matter of obviousness.

9.3 Relevant date of a prior document

In determining novelty, a prior document should be read as it would have been read by a person skilled in the art on the relevant date of the document. By "relevant" date is meant the publication date in the case of a previously published document and the date of filing (or priority date, where appropriate) in the case of a document according to Art. 54(3) (see IV, 7.1).

9.4 Enabling disclosure of a prior document

Subject-matter described in a document can only be regarded as having been made available to the public, and therefore as comprised in the state of the art pursuant to Art. 54(1), if the information given therein to the skilled person is sufficient to enable him, at the relevant date of the document (see IV, 9.3), to practise the technical teaching which is the subject of the document, taking into account also the general knowledge at that time in

the field to be expected of him (see T 26/85, OJ 1-2/1990, 22, T 206/83, OJ 1/1987, 5 and T 491/99, not published in OJ).

Similarly, it should be noted that a chemical compound, the name or formula of which is mentioned in a prior-art document, is not thereby considered as known, unless the information in the document, together, where appropriate, with knowledge generally available on the relevant date of the document, enables it to be prepared and separated or, for instance in the case of a product of nature, only to be separated.

9.5 Generic disclosure and specific examples

In considering novelty, it should be borne in mind that a generic disclosure does not usually take away the novelty of any specific example falling within the terms of that disclosure, but that a specific disclosure does take away the novelty of a generic claim embracing that disclosure, e.g. a disclosure of copper takes away the novelty of metal as a generic concept, but not the novelty of any metal other than copper, and one of rivets takes away the novelty of fastening means as a generic concept, but not the novelty of any fastening other than rivets.

9.6 Implicit disclosure and parameters

In the case of a prior document, the lack of novelty may be apparent from what is explicitly stated in the document itself. Alternatively, it may be implicit in the sense that, in carrying out the teaching of the prior document, the skilled person would inevitably arrive at a result falling within the terms of the claim. An objection of lack of novelty of this kind should be raised by the examiner only where there can be no reasonable doubt as to the practical effect of the prior teaching (for a second non-medical use, however, see IV, 9.7). Situations of this kind may also occur when the claims define the invention, or a feature thereof, by parameters (see III, 4.11). It may happen that in the relevant prior art a different parameter, or no parameter at all, is mentioned. If the known and the claimed products are identical in all other respects (which is to be expected if, for example, the starting products and the manufacturing processes are identical), then in the first place an objection of lack of novelty arises. If the applicant is able to show, e.g. by appropriate comparison tests, that differences do exist with respect to the parameters, it is questionable whether the application discloses all the features essential to manufacture products having the parameters specified in the claims (Art. 83).

9.7 Examination of novelty

In determining novelty of the subject-matter of claims, the examiner should have regard to the guidance given in III, 4.5 - 4.21. He should remember that, particularly for claims directed to a physical entity, non-distinctive characteristics of a particular intended use should be disregarded (see III, 4.13). For example, a claim to a substance X for use as a catalyst would not be considered to be novel over the same substance known as a dye, unless the use referred to implies a particular form of the substance (e.g. the presence of certain additives) which distinguishes it from the known form of the substance. That is to say, characteristics not explicitly stated, but implied by the particular use, should be taken into account (see the example of a "mold for molten steel" in III, 4.13). For claims to a first medical use, see IV, 4.8.

It should further be borne in mind that a claim to the use of a known compound for a particular purpose (second non-medical use) which is based on a technical effect should be interpreted as including that technical effect as a functional technical feature, and is accordingly not open to objection under Art. 54(1), provided that such technical feature has not previously been made available to the public (G 2/88, OJ 4/1990, 93, and G 6/88, OJ 4/1990, 114). For claims to a second or further medical use, see IV, 4.8.

9.8 Selection inventions

Selection inventions deal with the selection of individual elements, sub-sets, or sub-ranges, which have not been explicitly mentioned, within a larger known set or range.

- (i) In determining the novelty of a selection, it has to be decided, whether the selected elements are disclosed in an individualised (concrete) form in the prior art (see T 12/81, OJ 8/1982, 296). A selection from a single list of specifically disclosed elements does not confer novelty. However, if a selection from two or more lists of a certain length has to be made in order to arrive at a specific combination of features then the resulting combination of features, not specifically disclosed in the prior art, confers novelty (the “two-lists principle”). Examples of such selections from two or more lists are the selection of:
 - (a) individual chemical compounds from a known generic formula whereby the compound selected results from the selection of specific substituents from two or more “lists” of substituents given in the known generic formula. The same applies to specific mixtures resulting from the selection of individual components from lists of components making up the prior art mixture;
 - (b) starting materials for the manufacture of a final product;
 - (c) sub-ranges of several parameters from corresponding known ranges.
- (ii) A sub-range selected from a broader numerical range of the prior art is considered novel, if each of the following three criteria is satisfied (see T 98/84, OJ 7/1985, 209; T 279/89, not published in the OJ):
 - (a) the selected sub-range is narrow compared to the known range;
 - (b) the selected sub-range is sufficiently far removed from any specific examples disclosed in the prior art and from the end-points of the known range;
 - (c) the selected range is not an arbitrary specimen of the prior art, i.e. not a mere embodiment of the prior art, but another invention (purposive selection, new technical teaching).

An effect occurring only in the claimed sub-range cannot in itself confer novelty on that sub-range. However, such a technical effect occurring in the selected sub-range, but not in the whole of the known range, can confirm that criterion (c) is met, i.e. that the invention is novel and not merely a specimen of the prior art. The meaning of “narrow” and “sufficiently far removed” has to be decided on a case-by-case basis. The new technical effect occurring within the selected range may also be the same effect as that attained with the broader known range, but to a greater extent.

- (iii) In the case of overlapping ranges (e.g. numerical ranges, chemical formulae) of claimed subject-matter and the prior art the same principles apply for the assessment of novelty as in other cases, e.g. selection inventions (see T 666/89 OJ 8/1993, 495). It has to be decided which subject-matter has been made available to the public by a prior art disclosure and thus forms part of the state of the art. In this context, it is not only examples, but the whole content of the prior art document which has to be taken into consideration. As to overlapping ranges or numerical ranges of physical parameters, novelty is destroyed by an explicitly mentioned end-point of the known range, explicitly mentioned intermediate values or a specific example of the prior art in the overlap. It is not sufficient to exclude specific novelty destroying values known from the prior art range, it must also be considered whether the skilled person, in the light of the technical facts and taking into account the general knowledge in the field to be expected from him, would seriously contemplate applying the technical teaching of the prior art document in the range of overlap. If it can be fairly assumed that he would do so, it must be concluded that no novelty exists. In T 26/85, OJ 1-2/1990, 22, the skilled person could not seriously contemplate working in the area of overlap, since the prior art surprisingly contained a reasoned statement clearly dissuading him from choosing said range, although the latter was claimed in said prior art. The criteria mentioned in (ii) above can be applied analogously for assessing the novelty of overlapping numerical ranges (see T 17/85, OJ 12/1986, 406). As far as overlapping chemical formulae are concerned, novelty is acknowledged if the claimed subject-matter is distinguished from the prior art in the range of overlap by a new technical element (new technical teaching), cf. T 12/90, point 2.6 of the reasons, not published in the OJ, for example a specifically selected chemical residue which is covered in general terms by the prior art in the overlapping area, but which is not individualised in the prior art document. If this is not the case, then it must be considered whether the skilled person would seriously contemplate working in the range of overlap and/or would accept that the area of overlap is directly and unambiguously disclosed in an implicit manner in the prior art (see for example T 536/95, not published in the OJ). If the answer is yes, then novelty is lacking.

10. Non-prejudicial disclosures

10.1 General

There are two specific instances (and these are the only two) in which a prior disclosure of the invention is not taken into consideration as part of the state of the art, viz. where the disclosure was due to, or in consequence of:

Art. 55(1)

- (i) an evident abuse in relation to the applicant or his legal predecessor – e.g. the invention was derived from the applicant and disclosed against his wish; or
- (ii) the display of the invention by the applicant or his legal predecessor at an officially recognised international exhibition as defined in Art. 55(1)(b).

Art. 55(1)(a)

Art. 55(1)(b)

10.2 Time limit

An essential condition, in both instances (i) and (ii), is that the disclosure in point must have taken place not earlier than six months preceding the filing of the application. For calculating the six-month period the relevant date is that of the actual filing date of the European patent application, not the priority date (G 3/98, OJ 2/2001, 62, and G 2/99, OJ 2/2001, 83).

10.3 Evident abuse

Regarding instance (i), the disclosure might be made in a published document or in any other way. As a particular instance, the disclosure might be made in a European application of earlier priority date. Thus, for example, a person B who has been told of A's invention in confidence, might himself apply for a patent for this invention. If so, the disclosure resulting from the publication of B's application will not prejudice A's rights provided that A has already made an application, or applies within six months of such publication. In any event, having regard to Art. 61, B may not be entitled to proceed with his application (see VI, 9.2).

For "evident abuse" to be established, there must be, on the part of the person disclosing the invention, either actual intent to cause harm or actual or constructive knowledge that harm would or could ensue from this disclosure (see T 585/92, OJ 3/1996, 129).

10.4 International exhibition

Art. 55(2)
Rule 25

In instance (ii), the application must be filed within six months of the disclosure of the invention at the exhibition if the display is not to prejudice the application. Furthermore, the applicant must state, at the time of filing the application, that the invention has been so displayed, and must also file a supporting certificate within four months, giving the particulars required by Rule 25 (see A-IV, 3). The exhibitions recognised are published in the Official Journal.

11. Inventive step

11.1 General

Art. 56

An invention is considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art. Novelty and inventive step are different criteria. Novelty exists if there is any difference between the invention and the known art. The question – "is there inventive step?" – only arises if there is novelty.

11.2 State of the art; date of filing

The "state of the art" for the purposes of considering inventive step is as defined in Art. 54(2) (see IV, 6). It is to be understood as concerning such kind of information as is relevant to some field of technology (T 172/03, not published in OJ). It does not include later published European applications referred to in Art. 54(3). As mentioned in IV, 6.3, "date of filing" in Art. 54(2), means date of priority where appropriate (see Chapter V).

11.3 Person skilled in the art

The "person skilled in the art" should be presumed to be an ordinary practitioner in a field of technology aware of what was common general knowledge in the art at the relevant date. He should also be presumed to have had access to everything in the "state of the art", in particular the documents cited in the search report, and to have had at his disposal the normal means and capacity for routine work and experimentation. If the problem prompts the person skilled in the art to seek its solution in another technical field, the specialist in that field is the person qualified to solve the problem. The assessment of whether the solution involves an inventive step must therefore be based on that specialist's knowledge and ability (see T 32/81, OJ 6/1982, 225). There may be instances where it is more appropriate to think in terms of a group of persons, e.g. a research or production team, than a single person. This may apply, for example, in certain advanced technologies such as computers or telephone systems

and in highly specialised processes such as the commercial production of integrated circuits or of complex chemical substances.

11.4 Obviousness

Thus the question to consider, in relation to any claim defining the invention, is whether before the filing or priority date valid for that claim, having regard to the art known at the time, it would have been obvious to the person skilled in the art to arrive at something falling within the terms of the claim. If so, the claim is not allowable for lack of inventive step. The term "obvious" means that which does not go beyond the normal progress of technology but merely follows plainly or logically from the prior art, i.e. something which does not involve the exercise of any skill or ability beyond that to be expected of the person skilled in the art. In considering inventive step, as distinct from novelty (see IV, 9.3), it is fair to construe any published document in the light of subsequent knowledge and to have regard to all the knowledge generally available to the person skilled in the art the day before the filing or priority date valid for the claimed invention.

11.5 Combination vs. juxtaposition or aggregation

The invention claimed must normally be considered as a whole. When a claim consists of a **"combination of features"**, it is not correct to argue that the separate features of the combination taken by themselves are known or obvious and that "therefore" the whole subject-matter claimed is obvious. However, where the claim is merely an **"aggregation or juxtaposition of features"** and not a true combination, it is enough to show that the individual features are obvious to prove that the aggregation of features does not involve an inventive step (see IV, 11.7.2, last paragraph). A set of technical features is regarded as a combination of features if the functional interaction between the features achieves a combined technical effect which is different from, e.g. greater than, the sum of the technical effects of the individual features. In other words, the interactions of the individual features must produce a synergistic effect. If no such synergistic effect exists, there is no more than a mere aggregation of features (see T 389/86, OJ 3/1988, 87).

For example, the technical effect of an individual transistor is essentially that of an electronic switch. However, transistors interconnected to form a microprocessor synergically interact to achieve technical effects, such as data processing, which are over and above the sum of their respective individual technical effects (see also IV-Annex, 2).

11.6 Origin of an invention

While the claim should in each case be directed to technical features (and not, for example, merely to an idea), in order to assess whether an inventive step is present it is important for the examiner to bear in mind that there are various ways in which the skilled person may arrive at an invention. An invention may, for example, be based on the following:

- (i) the formulation of a new idea or of a yet unrecognised problem to be solved (the solution being obvious once the problem is clearly stated);

Example: Appropriate tests by the applicant revealed that the effect of a known chemical formulation was no longer satisfactory after prolonged storage, the claimed solution being retrospectively trivial and in itself obvious (see T 2/83, OJ 6/1984, 265).

- (ii) the devising of a solution to a known problem;

Example: the problem of permanently marking farm animals such as cows without causing pain to the animals or damage to the hide has existed since farming began. The solution ("freeze-branding") consists in applying the discovery that the hide can be permanently depigmented by freezing.

- (iii) the arrival at an insight into the cause of an observed phenomenon (the practical use of this phenomenon then being obvious);

Example: the agreeable flavour of butter is found to be caused by minute quantities of a particular compound. As soon as this insight has been arrived at, the technical application comprising adding this compound to margarine is immediately obvious.

Many inventions are of course based on a combination of the above possibilities - e.g. the arrival at an insight and the technical application of that insight may both involve the use of the inventive faculty.

11.7 Problem-and-solution approach

In practice, in order to assess inventive step in an objective and predictable manner, the examiner should normally apply the so-called **"problem-and-solution approach"**.

In the problem-and-solution approach, there are three main stages:

- (i) determining the "closest prior art",
- (ii) establishing the "objective technical problem" to be solved, and
- (iii) considering whether or not the claimed invention, starting from the closest prior art and the objective technical problem, would have been obvious to the skilled person.

11.7.1 Determination of the closest prior art

The closest prior art is that combination of features, disclosed in one single reference, which constitutes the most promising starting point for an obvious development leading to the invention. In selecting the closest prior art, the first consideration is that it should be directed to a similar purpose or effect as the invention or at least belong to the same or a closely related technical field as the claimed invention. In practice, the closest prior art is generally that which corresponds to a similar use and requires the minimum of structural and functional modifications to arrive at the claimed invention (T 606/89, not published in OJ).

The closest prior art must be assessed from the skilled person's point of view on the day before the filing or priority date valid for the claimed invention.

In identifying the closest prior art, account should be taken of what the applicant himself acknowledges in his description and claims to be known. Any such acknowledgement of known art should be regarded by the examiner as being correct, unless the applicant states he has made a mistake (see VI, 8.2).

11.7.2 Formulation of the objective technical problem

In the second stage, one establishes in an objective way the **technical problem** to be solved. To do this one studies the application (or the patent), the closest prior art and the difference (also called "the **distinguishing feature(s)**" of the invention) in terms of features (either structural or functional) between the invention and the closest prior art and then formulates the technical problem.

Features which cannot be seen to make any contribution, either independently or in combination with other features, to the technical character of an invention are not relevant for assessing inventive step (see T 641/00, OJ 7/2003, 352). Such a situation can occur for instance if a feature only contributes to the solution of a non-technical problem, for instance a problem in a field excluded from patentability (see T 931/95, OJ 10/2001, 441).

Where the claim refers to an aim to be achieved in a non-technical field, this aim may legitimately appear in the formulation of the problem as part of the framework of the technical problem to be solved, in particular as a constraint that has to be met (T 641/00, OJ 7/2003, 352 and T 172/03, not published in OJ).

In the context of the problem-and-solution approach, the technical problem means the aim and task of modifying or adapting the closest prior art to provide the technical effects that the invention provides over the closest prior art. The technical problem thus defined is often referred to as the "**objective technical problem**".

The objective technical problem derived in this way may not be what the applicant presented as "the problem" in his application. The latter may require reformulation, since the objective technical problem is based on objectively established facts, in particular appearing in the prior art revealed in the course of the proceedings, which may be different from the prior art of which the applicant was actually aware at the time the application was filed. In particular, the prior art cited in the search report may put the invention in an entirely different perspective from that apparent from reading the application only.

The extent to which such reformulation of the technical problem is possible has to be assessed on the merits of each particular case. As a matter of principle any effect provided by the invention may be used as a basis for the reformulation of the technical problem, as long as said effect is derivable from the application as filed (see T 386/89, not published in OJ). It is also possible to rely on new effects submitted subsequently during the proceedings by the applicant, provided that the skilled person would recognise these effects as implied by or related to the technical problem initially suggested (see IV, 11.10 and T 184/82, OJ 6/1984, 261).

It is noted that the objective technical problem must be so formulated as not to contain pointers to the technical solution, since including part of a technical solution offered by an invention in the statement of the problem must, when the state of the art is assessed in terms of that problem,

necessarily result in an ex post facto view being taken of inventive activity (T 229/85, OJ 6/1987, 237).

The expression "technical problem" should be interpreted broadly; it does not necessarily imply that the technical solution is a technical improvement over the prior art. Thus the problem could be simply to seek an alternative to a known device or process providing the same or similar effects or which is more cost-effective.

Sometimes, the objective technical problem must be regarded as an aggregation of a plurality of "**partial problems**". This is the case where there is no technical effect achieved by all the distinguishing features taken in combination, but rather a plurality of partial problems is independently solved by different sets of distinguishing features (see IV, 11.8 and T 389/86, OJ 3/1988, 87).

11.7.3 Could-would approach

In the third stage the question to be answered is whether there is any teaching in the prior art as a whole that **would** (not simply could, but would) have prompted the skilled person, faced with the objective technical problem, to modify or adapt the closest prior art while taking account of that teaching, thereby arriving at something falling within the terms of the claims, and thus achieving what the invention achieves (see IV, 11.4).

In other words, the point is not whether the skilled person could have arrived at the invention by adapting or modifying the closest prior art, but whether he **would have done** so because the prior art incited him to do so in the hope of solving the objective technical problem or in expectation of some improvement or advantage (see T 2/83, OJ 6/1984, 265). This must have been the case for the skilled person before the filing or priority date valid for the claim under examination.

11.8 Combining prior-art documents

It is permissible to combine the disclosure of one or more documents, parts of documents or other pieces of prior art (e.g. a public prior use) with the closest prior art. However, the fact that more than one disclosure must be combined with the closest prior art in order to arrive at a combination of features may be the sign of the presence of an inventive step.

A different situation occurs where the invention is a solution to a plurality of independent "partial problems" (see IV, 11.5 and 11.7.2). Indeed, in such a case it is necessary to separately assess, for each partial problem, whether the combination of features solving the partial problem is obviously derivable from the prior art. Hence, a different document can be combined with the closest prior art for each partial problem (see T 389/86, OJ 3/1988, 87). For the subject-matter of the claim to be inventive, it suffices however that one of these combinations of features involves an inventive step.

In determining whether it would be obvious to combine two or more distinct disclosures, the examiner should also have regard in particular to the following:

- (i) whether the content of the disclosures (e.g. documents) is such as to make it likely or unlikely that the person skilled in the art, when faced with the problem solved by the invention, would combine them - for example, if two disclosures considered as a whole could not in practice be readily combined because of inherent incompatibility in

disclosed features essential to the invention, the combining of these disclosures should not normally be regarded as obvious;

- (ii) whether the disclosures, e.g. documents, come from similar, neighbouring or remote technical fields;
- (iii) the combining of two or more parts of the same document would be obvious if there is a reasonable basis for the skilled person to associate these parts with one another. It would normally be obvious to combine with a prior-art document a well-known textbook or standard dictionary; this is only a special case of the general proposition that it is obvious to combine the teaching of one or more documents with the **common general knowledge** in the art. It would, generally speaking, also be obvious to combine two documents one of which contains a clear and unmistakable reference to the other (for references which are considered an integral part of the disclosure, see IV, 7.1 and 9.1). In determining whether it is permissible to combine a document with an item of prior art made public in some other way, e.g. by use, similar considerations apply.

11.9 Indicators

11.9.1 Predictable disadvantage; non-functional modification; arbitrary choice

It should be noted that if the invention is the result of a foreseeable disadvantageous modification of the closest prior art, which the skilled person could clearly predict and correctly assess, and if this predictable disadvantage is not accompanied by an unexpected technical advantage, then the claimed invention does not involve an inventive step (see T 119/82, OJ 5/1984, 217, and T 155/85, OJ 3/1988, 87). In other words, a mere foreseeable worsening of the prior art does not involve an inventive step. However, if this worsening is accompanied by an unexpected technical advantage, an inventive step might be present. Similar considerations apply to the case where an invention is merely the result of an arbitrary non-functional modification of a prior-art device or of a mere arbitrary choice from a host of possible solutions (see T 72/95, not published in OJ, and T 939/92, OJ 6/1996, 309).

11.9.2 "Ex post facto" analysis; surprising technical advantage

It should be remembered that an invention which at first sight appears obvious might in fact involve an inventive step. Once a new idea has been formulated it can often be shown theoretically how it might be arrived at, starting from something known, by a series of apparently easy steps. The examiner should be wary of ex post facto analysis of this kind. He should always bear in mind that the documents produced in the search have, of necessity, been obtained with foreknowledge of what matter constitutes the alleged invention. In all cases he should attempt to visualise the overall state of the art confronting the skilled person before the applicant's contribution and he should seek to make a "real-life" assessment of this and other relevant factors. He should take into account all that is known concerning the background of the invention and give fair weight to relevant arguments or evidence submitted by the applicant. If, for example, an invention is shown to be of considerable technical value, and particularly if it provides a technical advantage which is new and surprising and which is not merely achieved as a bonus effect in a "one-way street" situation (see below), and this technical advantage can convincingly be related to one or more of the features included in the claim defining the invention, the examiner should be hesitant in pursuing an objection that such a claim lacks inventive step.

11.9.3 Unexpected technical effect; bonus effect

An unexpected technical effect may be regarded as an indication of inventive step. However, if, having regard to the state of the art, it would already have been obvious for a skilled person to arrive at something falling within the terms of a claim, for example due to a lack of alternatives thereby creating a "one-way street" situation, the unexpected effect is merely a bonus effect which does not confer inventiveness on the claimed subject-matter (see T 231/97, not published in OJ and T 192/82, OJ 9/1984, 415).

11.9.4 Long-felt need; commercial success

Where the invention solves a technical problem which workers in the art have been attempting to solve for a long time, or otherwise fulfils a long-felt need, this may be regarded as an indication of inventive step.

Commercial success alone is not to be regarded as indicative of inventive step, but evidence of immediate commercial success when coupled with evidence of a long-felt want is of relevance provided the examiner is satisfied that the success derives from the technical features of the invention and not from other influences (e.g. selling techniques or advertising).

11.10 Arguments and evidence submitted by the applicant

The relevant arguments and evidence to be considered by the examiner for assessing inventive step may either be taken from the originally-filed patent application or submitted by the applicant during the subsequent proceedings (see 11.7.2 above and VI, 5.3.4, 5.3.5 and 5.3.7).

Care must be taken, however, whenever new effects in support of inventive step are referred to. Such new effects can only be taken into account if they are implied by or at least related to the technical problem initially suggested in the originally filed application (see also IV, 11.7.2, T 386/89, not published in OJ, and T 184/82, OJ 6/1984, 261).

Example of such a new effect:

The invention as filed relates to a pharmaceutical composition having a specific activity. At first sight, having regard to the relevant prior art, it would appear that there is a lack of inventive step. Subsequently, the applicant submits new evidence which shows that the claimed composition exhibits an unexpected advantage in terms of low toxicity. In this case, it is allowable to reformulate the technical problem by including the aspect of toxicity, since pharmaceutical activity and toxicity are related in the sense that the skilled person would always contemplate the two aspects together.

The reformulation of the technical problem may or may not give rise to amendment or insertion of the statement of the technical problem in the description. Any such amendment is only allowable if it satisfies the conditions listed in VI, 5.3.7. In the above example of a pharmaceutical composition, neither the reformulated problem nor the information on toxicity could be introduced into the description without infringing Art. 123(2).

11.11 Selection inventions

The subject-matter of selection inventions differs from the closest prior art in that it represents selected sub-sets or sub-ranges. If this selection is connected to a particular technical effect, and if no hints exist leading the

skilled person to the selection, then an inventive step is accepted (this technical effect occurring within the selected range may also be the same effect as attained with the broader known range, but to an unexpected degree). The criterion of "seriously contemplating" mentioned in connection with the test for novelty of overlapping ranges should not be confused with the assessment of inventive step. For inventive step, it has to be considered whether the skilled person would have made the selection or would have chosen the overlapping range in the hope of solving the underlying technical problem or in expectation of some improvement or advantage. If the answer is negative, then the claimed matter involves an inventive step.

11.12 Dependent claims; claims in different categories

If an independent claim is new and non-obvious, there is no need to investigate the novelty and the non-obviousness of any claims dependent thereon, except in situations where the subject-matter of a dependent claim has a later effective date than the independent claim and intermediate documents are to be considered (see V, 2.4.3).

Similarly, if a claim to a product is new and non-obvious there is no need to investigate the novelty and non-obviousness of any claims for a process which inevitably results in the manufacture of that product or of any claims for a use of that product. In particular, analogy processes, i.e. processes which themselves would otherwise not involve an inventive step, are nevertheless patentable insofar as they provide a novel and inventive product (see T 119/82, OJ 5/1984, 217). It should, however, be noted that in cases where the product, process and use claims have different effective dates, a separate examination as to novelty and inventive step may still be necessary in view of intermediate documents.

11.13 Examples

The annex to this chapter gives examples of circumstances where an invention may be regarded as obvious or where it may involve an inventive step. It is to be stressed that these examples are only for illustrative purposes and that the applicable principle in each case is "was it obvious to a person skilled in the art?" (see IV, 11.7). Examiners should avoid attempts to fit a particular case into one of these examples if it is not clearly applicable. Also, the list is not exhaustive.

CHAPTER IV – Annex

EXAMPLES RELATING TO THE REQUIREMENT OF INVENTIVE STEP – INDICATORS
(see IV, 11.13)

1. Application of known measures?

1.1 Inventions involving the application of known measures in an obvious way and in respect of which an inventive step is therefore to be ruled out:

- (i) the teaching of a prior document is incomplete and at least one of the possible ways of **"filling the gap"** which would naturally or readily occur to the skilled person results in the invention;

Example: The invention relates to a building structure made from aluminium. A prior document discloses the same structure and says that it is of light-weight material but fails to mention the use of aluminium.

- (ii) the invention differs from the known art merely in the use of **well-known equivalents** (mechanical, electrical or chemical);

Example: The invention relates to a pump which differs from a known pump solely in that its motive power is provided by a hydraulic motor instead of an electric motor.

- (iii) the invention consists merely in a new use of a well-known material employing the **known properties** of that material;

Example: Washing composition containing as detergent a known compound having the known property of lowering the surface tension of water, this property being known to be an essential one for detergents.

- (iv) the invention consists in the substitution in a known device of a recently developed material whose properties make it plainly suitable for that use ("**analogous substitution**");

Example: An electric cable comprises a polyethylene sheath bonded to a metallic shield by an adhesive. The invention lies in the use of a particular newly developed adhesive known to be suitable for polymer-metal bonding.

- (v) the invention consists merely in the use of a known technique in a closely analogous situation ("**analogous use**").

Example: The invention resides in the application of a pulse control technique to the electric motor driving the auxiliary mechanisms of an industrial truck, such as a fork-lift truck, the use of this technique to control the electric propulsion motor of the truck being already known.

1.2 Inventions involving the application of **known measures** in a **non-obvious** way and in respect of which an inventive step is therefore to be recognised:

- (i) a known working method or means when used for a **different purpose** involves a new, **surprising effect**;

Example: It is known that high-frequency power can be used in **inductive** butt welding. It should therefore be obvious that high-frequency power could also be used in **conductive** butt welding with similar effect. However, if high-frequency power were used for the continuous conductive butt welding of coiled strip but without removing scale (such scale removal normally being necessary during conductive welding in order to avoid arcing between the welding contact and the strip), there is the unexpected additional effect that scale removal is found to be unnecessary because at high frequency the current is supplied in a predominantly capacitive manner via the scale which forms a dielectric. In that case, an inventive step would exist.

- (ii) a new use of a known device or material involves **overcoming technical difficulties** not resolvable by routine techniques.

Example: The invention relates to a device for supporting and controlling the rise and fall of gas holders, enabling the previously employed external guiding framework to be dispensed with. A similar device was known for supporting floating docks or pontoons but practical difficulties not encountered in the known applications needed to be overcome in applying the device to a gas holder.

2. Obvious combination of features?

2.1 Obvious and consequently **non-inventive combination** of features:

The invention consists merely in the **juxtaposition** or association of known devices or processes functioning in their normal way and not producing any non-obvious working inter-relationship.

Example: Machine for producing sausages consists of a known mincing machine and a known filling machine disposed side by side.

2.2 Not obvious and consequently **inventive combination** of features:

The combined features mutually support each other in their effects to such an extent that a new technical result is achieved. It is irrelevant whether each individual feature is fully or partly known by itself. However, if the combination of features is a bonus effect, e.g. as the result of a "one-way street" situation, the combination might lack an inventive step.

Example: A mixture of medicines consists of a painkiller (analgesic) and a tranquilliser (sedative). It was found that through the addition of the tranquilliser, which intrinsically appeared to have no painkilling effect, the analgesic effect of the painkiller was intensified in a way which could not have been predicted from the known properties of the active substances.

3. Obvious selection?

3.1 Obvious and consequently **non-inventive selection** among a number of known possibilities:

- (i) the invention consists merely in choosing from a number of **equally likely alternatives**;

Example: The invention relates to a known chemical process in which it is known to supply heat electrically to the reaction mixture. There are a number of well-known alternative ways of so supplying the heat, and the invention resides merely in the choice of one alternative.

- (ii) the invention resides in the choice of particular dimensions, temperature ranges or other parameters from a limited range of possibilities, and it is clear that these parameters could be arrived at by routine trial and error or by the application of **normal design procedures**;

Example: The invention relates to a process for carrying out a known reaction and is characterised by a specified rate of flow of an inert gas. The prescribed rates are merely those which would necessarily be arrived at by the skilled practitioner.

- (iii) the invention can be arrived at merely by a **simple extrapolation** in a straightforward way from the known art;

Example: The invention is characterised by the use of a specified minimum content of a substance X in a preparation Y in order to improve its thermal stability, and this characterising feature can be derived merely by extrapolation on a straight-line graph, obtainable from the known art, relating thermal stability to the content of substance X.

- (iv) the invention consists merely in **selecting** particular chemical compounds or compositions (including alloys) **from a broad field**.

Example: The prior art includes disclosure of a chemical compound characterised by a specified structure including a substituent group designated "R". This substituent "R" is defined so as to embrace entire ranges of broadly-defined radical groups such as all alkyl or aryl radicals either unsubstituted or substituted by halogen and/or hydroxy, although for practical reasons only a very small number of specific examples are given. The invention consists in the selection of a particular radical or particular group of radicals from amongst those referred to as the substituent "R" (the selected radical or group of radicals not being specifically disclosed in the prior-art document since the question would then be one of lack of novelty rather than obviousness). The resulting compounds:

- (a) are neither described as having nor shown to possess any advantageous properties not possessed by the prior art examples; or
- (b) are described as possessing advantageous properties compared with the compounds specifically referred to in the prior art, but these properties are ones which the person skilled in the art would expect such compounds to possess, so that he is likely to be led to make this selection.

3.2 Not obvious and consequently **inventive selection** among a number of known possibilities:

- (i) the invention involves **special selection** in a process of particular operating conditions (e.g. temperature and pressure) within a known range, such selection producing **unexpected effects** in the operation of the process or the properties of the resulting product;

Example: In a process where substance A and substance B are transformed at high temperature into substance C, it was known that there is in general a constantly increased yield of substance C as the temperature increases in the range between 50 and 130 °C. It is now found that in the temperature range from 63 to 65 °C, which previously had not been explored, the yield of substance C was considerably higher than expected.

- (ii) the invention consists in selecting **particular** chemical compounds or compositions (including alloys) from a broad field, such compounds or compositions having **unexpected advantages**.

Example: In the example of a substituted chemical compound given at (iv) under 3.1 above, the invention again resides in the selection of the substituent radical "R" from the total field of possibilities defined in the prior disclosure. In this case, however, not only does the selection embrace a particular area of the possible field, and result in compounds that can be shown to possess advantageous properties (see IV, 11.10 and VI, 5.3.5) but there are no indications which would lead the person skilled in the art to this particular selection rather than any other in order to achieve the advantageous properties.

4. Overcoming a technical prejudice?

As a general rule, there is an inventive step if the prior art leads the person skilled in the art away from the procedure proposed by the invention. This applies in particular when the skilled person would not even consider carrying out experiments to determine whether these were alternatives to the known way of overcoming a real or imagined technical obstacle.

Example: Drinks containing carbon dioxide are, after being sterilised, bottled while hot in sterilised bottles. The general opinion is that immediately after withdrawal of the bottle from the filling device the bottled drink must be automatically shielded from the outside air so as to prevent the bottled drink from spurting out. A process involving the same steps but in which no precautions are taken to shield the drink from the outside air (because none are in fact necessary) would therefore be inventive.

CHAPTER V**PRIORITY****1. The right to priority****1.1 Filing date as effective date**

According to Art. 80, a European application is accorded as its date of filing the date on which it satisfies the requirements of Rule 40, or, if filed under the PCT, the date on which it satisfies Art. 11 PCT. This date remains unchanged except in the special circumstances of late-filed drawings or parts of the description provided for in Rule 56 EPC and Art. 14(2) PCT.

Rule 40

The date of filing may be the only effective date of the application. It will be of importance for fixing the expiry of certain time limits (e.g. the date by which the designation of the inventor must be filed under Rule 60), for determining the state of the art relevant to the novelty or obviousness of the subject-matter of the application, and for determining, in accordance with Art. 60(2), which of two or more European applications from separate persons for the same invention is to proceed to grant.

1.2 Priority date as effective date

However, in many cases, a European application will claim the right of priority of the date of filing of a previous application. In such cases, it is the priority date (i.e. the date of filing of the previous application) which becomes the effective date for the purposes mentioned in the preceding paragraph.

Art. 89

1.3 Validly claiming priority

For a valid claim to priority, the following conditions must be satisfied:

Art. 87(1) and (5)

- (i) the previous application must have been made in or for a Member State of the Paris Convention, a Member of the World Trade Organization (WTO) or in a State which has concluded an equivalent bilateral or multilateral agreement with the Office (to date, no such agreements have been concluded);
- (ii) the previous application whose priority is claimed must have been filed by the applicant of the European application or his predecessor in title;
- (iii) the previous application must have been filed not more than 12 months before the filing date of the European application; and
- (iv) the previous application must have been the "first application" filed in respect of the same invention as the one to which the European application relates (see V, 1.4 and 1.4.1).

As concerns (i), the words "in or for" any Member State of the Paris Convention or Member of the WTO mean that priority may be claimed in respect of a previous national application, European application or PCT application. If the previous application was filed in or for an EPC Contracting State, this State may also be designated in the European application. The previous application may be for a patent or for the registration of a utility model or for a utility certificate. However, a priority right based on the deposit of an industrial design is not recognised (see J 15/80, OJ 7/1981, 213). So long as the contents of the application were sufficient to establish a filing date, it can be used to create a priority

Art. 87(2) and (3)

date, no matter what the outcome of the application may be; for example, it may subsequently be abandoned or refused.

As concerns (ii) and (iii), see A-III, 6.1 and 6.6, respectively.

Art. 87(1)

As concerns (iv), the expression "the same invention" in Art. 87(1) means that the subject-matter of a claim in a European application may enjoy the priority of a previous application only if the skilled person can derive the subject-matter of the claim directly and unambiguously, using common general knowledge, from the previous application as a whole. This means that the specific combination of features present in the claim must at least implicitly be disclosed in the previous application (see V, 2.2 and G 2/98, OJ 10/2001, 413).

1.4 First application

Art. 87(1)

The filing date of the "first application" must be claimed as a priority, i.e. the application disclosing for the first time any or all of the subject-matter of the European application. If it is found that the application to which the priority claim is directed is in fact not the first application in this sense, but some or all of the subject-matter was disclosed in a still earlier application filed by the same applicant or his predecessor in title, the priority claim is invalid insofar as the subject-matter was already disclosed in the still earlier application (see V, 1.4.1).

To the extent the priority claim is invalid, the effective date of the European application is the date of its filing. The previously disclosed subject-matter of the European application is not novel if the still earlier application referred to above was published prior to the effective date of the European application (Art. 54(2)) or if the still earlier application is also a European application which was published on or after the effective date of the European application in question (Art. 54(3)).

1.4.1 Subsequent application considered as first application

Art. 87(4)

A subsequent application for the same subject-matter and filed in or for the same State or Member of the WTO is considered as the "first application" for priority purposes if, at the date this subsequent application was filed, the still earlier application had been withdrawn, abandoned or refused, without being open to public inspection and without leaving any rights outstanding, and had not served as a basis for claiming priority. The EPO will not consider this question unless there is evidence of the existence of a still earlier application as, for example, in the case of a United States continuation-in-part application. Where it is clear that a still earlier application for the same subject-matter exists, and where the priority right is important because of intervening prior art (see V, 2.1), the applicant should be required to establish by evidence from an appropriate authority (normally a national patent office) that there were no rights outstanding in the still earlier application in respect of the subject-matter of the application being examined.

1.5 Multiple priorities

Art. 88(2) and (3)

"Multiple priorities may be claimed" – i.e. a European application may claim rights of priority based on more than one previous application. The previous application may have been filed in or for the same or different States or Members of the WTO, but in all cases the earliest application must have been filed not more than 12 months before the date of filing of the European application. Subject-matter of a European application will be accorded the

priority date of the earliest priority application which discloses it. If, for instance, the European application describes and claims two embodiments (A and B) of an invention, A being disclosed in a French application and B in a German application, both filed within the preceding 12 months, the priority dates of both the French and German applications may be claimed for the appropriate parts of the European application; embodiment A will have the French priority date and embodiment B the German priority date as effective dates. If embodiments A and B are claimed as alternatives in one claim, these alternatives will likewise have the different priority dates as effective dates. If, on the other hand, a European application is based on one previous application disclosing a feature C and a second previous application disclosing a feature D, neither disclosing the combination of C and D, a claim to that combination will be entitled only to the date of filing of the European application itself. In other words, it is not permitted to "mosaic" priority documents. An exception might arise where one priority document contains a reference to the other and explicitly states that features from the two documents can be combined in a particular manner.

2. Determining priority dates

2.1 Examining the validity of a right to priority

As a general rule, the examiner should not make any investigation as to the validity of a right to priority. However, the priority right assumes importance if prior art has to be taken into account which has been made available to the public within the meaning of Art. 54(2) on or after the priority date claimed and before the date of filing (e.g. an intermediate document, see IV, 6.3) or if the content of the European patent application is totally or partially identical with the content of another European application within the meaning of Art. 54(3), such other application claiming a priority date within that period. In such cases, (i.e. cases where the art in question would be relevant if of earlier date) the examiner must investigate whether the priority date(s) claimed may be accorded to the appropriate parts of the application he is examining and should inform the applicant of the outcome and whether, in consequence, the particular prior art under consideration, e.g. the intermediate document, or the other European application forms part of the state of the art within the meaning of Art. 54. Also, in the case of possible conflict with another European application under Art. 54(3), it may be necessary in addition to allocate effective dates to the appropriate parts of that other application and to communicate this to the applicant analogously (see also IV, 6.3). When the examiner needs to consider the question of priority date, he should bear in mind all the matters which are mentioned in V, 1.3 to 1.5 above.

If in case of a Euro-PCT application, where the EPO is acting as a designated or elected Office, the priority document is not on file, substantive examination may nevertheless be started. In such a case, without the priority document being on file, the application may even, where appropriate, be refused because the claimed subject-matter lacks novelty or inventive step, provided that the relevant state of the art is neither an intermediate document nor an Art. 54(3) application. However, no European patent may be granted until such time as the priority document is on file. In such a case, the applicant is informed that the decision to grant will not be taken as long as the priority document is missing.

If intermediate documents or Art. 54(3) applications exist and the patentability of the subject-matter claimed depends on the validity of the priority right, substantive examination cannot be finalised as long as the priority document is missing. Where the applicant has complied with

Rule 17.1(a) or (b) PCT, he may not be requested to file the priority document. The proceedings have to be stayed and the applicant is informed that, since the patentability of the subject-matter claimed depends on the validity of the priority right, substantive examination cannot be finalised as long as the priority document is not on file.

2.2 The same invention

The basic test to determine whether a claim is entitled to the date of a priority document is, as far as the requirement of "the same invention" is concerned (see V, 1.3(iv)), the same as the test for determining whether or not an amendment to an application satisfies the requirement of Art. 123(2) (see VI, 5.3). That is to say, for the priority date to be valid in this respect the subject-matter of the claim must be directly and unambiguously derivable from the disclosure of the invention in the priority document, also taking into account any features implicit to a person skilled in the art in what is expressly mentioned in the document (see G 2/98, OJ 10/2001, 413). As an example of an implicit disclosure, a claim to an apparatus including "releasable fastening means" would be entitled to the priority date of a disclosure of that apparatus in which the relevant fastening element was, say, a nut and bolt, or a spring catch or a toggle-operated latch, provided the general concept of "releasable" is implicit in the disclosure of such element.

Art. 88(4)

It is not necessary that the subject-matter for which priority is claimed be found among any claims in the previous application. It is sufficient that the documents of the previous application taken as a whole "specifically disclose" such subject-matter. The description and any claims or drawings of the previous application should, therefore, be considered as a whole in deciding this question, except that account should not be taken of subject-matter found solely in that part of the description referring to prior art, or in an explicit disclaimer.

The requirement that the disclosure must be specific means that it is not sufficient if the subject-matter in question is merely referred to in broad and general terms. A claim to a detailed embodiment of a certain feature would not be entitled to priority on the basis of a mere general reference to that feature in a priority document. Exact correspondence is not required, however. It is enough that, on a reasonable assessment, there is in substance a disclosure of all the subject-matter of the claim.

A disclaimer not originally disclosed which is allowable under Art. 123(2) and therefore does not provide a technical contribution (see VI, 5.3.11) does not change the identity of the invention within the meaning of Art. 87(1). Also, a disclaimer which does not provide a technical contribution could be allowably introduced when drafting and filing a European patent application, without affecting the right to priority from the first application not containing the disclaimer (G 1/03, OJ 8-9/2004, 413 and G 2/03, OJ 8-9/2004, 448).

2.3 Priority claim not valid

If the tests set out in V, 2.2 are not satisfied in relation to a particular previous application, then the effective date of the subject-matter of the claim in question will either be the filing date of the earliest application which does provide the required disclosure and of which the priority is validly claimed (see G 3/93, OJ 1-2/1995, 18) or, in the absence of such, will be the date of filing of the European application itself (or the new date of filing if the application has been re-dated under Rule 56).

2.4 Some examples of determining priority dates

Note: the dates used are merely illustrative; they do not take account of the fact that the filing offices of the EPO are closed on weekends and certain public holidays.

2.4.1 Intermediate publication of the contents of the priority application

P is the application from which priority is claimed by EP, D is the disclosure of the subject-matter of P.

1.1.90	1.5.90	1.6.90
filing	publication	filing
P	D	EP

D is state of the art under Art. 54(2) if the priority claim of P is not valid.

2.4.2 Intermediate publication of another European application

P1 is the application from which priority is claimed by EP1, P2 the one from which EP2 claims priority. EP1 and EP2 are filed by different applicants.

1.2.89	1.1.90	1.2.90	1.8.90	1.1.91
filing	filing	filing	publication	filing
P1	P2	EP1	EP1	EP2
A + B	A + B	A + B	A + B	A + B

EP1 is state of the art under Art. 54(3) if the respective priority claims of P1 and P2 are valid. This does not change if the publication of EP1 takes place after the filing date of EP2. The publication of EP1 is state of the art under Art. 54(2) if the priority claim of P2 is not valid.

2.4.3 Multiple priorities claimed for different inventions in the application with an intermediate publication of one of the inventions

EP claims priority of P1 and P2, D is the disclosure of A+B.

1.1.90	1.2.90	1.3.90	1.6.90
filing	publication	filing	filing
P1	D	P2	EP
A + B	A + B	A + B + C	claim 1: A + B claim 2: A + B + C

Claim 1 has a valid priority of P1 for its subject-matter, thus publication D is not state of the art under Art. 54(2) against this claim. Claim 2 cannot benefit from the priority of P1, as it does not concern the same subject-matter. Thus publication D is state of the art under Art. 54(2) for this claim (see G 3/93, OJ 1-2/1995, 18). It is immaterial whether claim 2 is in the form of a dependent or an independent claim.

2.4.4 A situation in which it has to be checked whether the application from which priority is actually claimed is the "first application" in the sense of Art. 87(1)

P1 is the earliest application of the same applicant containing the invention. EP claims the priority of the later US application P2, which is a "continuation-in-part" of P1. D is a public disclosure of A+B.

1.7.89	1.1.90	1.6.90	1.12.90
filing	filing	publication	filing
P1	P2 (cip)	D	EP
A + B	A + B A + B + C	A + B	claim 1: A + B claim 2: A + B + C

The priority claim of P2 for claim 1 is not valid as P2 is not the "first application" for this subject-matter in the sense of Art. 87(1), but P1, which has "left rights outstanding" in that P2 is a "continuation-in-part" thereof. Therefore Art. 87(4) does not apply and this is not altered by an abandonment, withdrawal, refusal or non-publication of P1. D is prior art pursuant to Art. 54(2) against claim 1, but not against claim 2, as the latter claim has the earlier priority of P2.

3. Claiming priority

3.1 General remarks

Art. 88(1)
Rule 52(1)
Rule 53(1) and (3)

An applicant who wishes to claim priority must file a declaration of priority giving particulars of the previous filing, as specified in Rule 52(1), together with a certified copy of the previous application and, if necessary for the assessment of patentability, a translation of it into one of the EPO official languages (see A-III, 6).

3.2 Declaration of priority

Rule 52(1) and (2)

A declaration of priority from an earlier filing should preferably be made at the time of filing the European application, although this can be done at any time within 16 months from the earliest priority date claimed (see A-III, 6.5.1). The declaration of priority must indicate the date of the priority application, the relevant State party to the Paris Convention or Member of the WTO, and the file number.

Rule 52(3)

A declaration of priority may be corrected within 16 months from the earliest priority date. This time limit cannot expire earlier than four months after the filing date (see A-III, 6.5.2).

3.3 Certified copy of the previous application (priority document)

Rule 53(1)

The certified copy of the previous application, i.e. the priority document, must be filed within 16 months of the priority date (see also A-VII, 3.5), unless such a copy is already on file because it has been supplied in the context of a request pursuant to Rule 56, see A-III, 6.7.

Rule 53(2)

Moreover, in accordance with Rule 53(2) and the Decision of the President of the EPO dated 12 July 2007 (Special edition No. 3, OJ EPO 2007, B.1), the EPO will include a copy of the previous application in the file of the European patent application without charging a fee, if the previous application is:

- (i) a European patent application;
- (ii) an international application filed with the EPO as receiving Office under the PCT;
- (iii) a Japanese patent or utility model application;
- (iv) an international application filed with the Japanese Patent Office as receiving Office under the PCT;
- (v) a United States provisional or non-provisional patent application; or
- (vi) a Korean patent or utility model application.

No request is necessary to this end. As soon as the EPO has included in the file of the European patent application a copy of the previous application, it informs the applicant accordingly.

3.4 Translation of the previous application

A translation of the previous application into one of the official languages of the EPO is required only if it is needed for determining the validity of the priority claim, where this is of relevance to the patentability of the underlying invention. The translation must be filed within the time limit set by the EPO. Alternatively, a declaration that the European patent application is a complete translation of the previous application may be submitted within that same time limit. If this is not the case, or if the European application contains more or less text than is contained in the previous application as filed, such a declaration cannot be accepted and a complete translation must be filed. Where the European application contains claims on its date of filing and the priority application did not contain claims on its filing date or contained fewer claims on its filing date than the subsequent European application, the declaration cannot be accepted (see A-III, 6.8). A merely different arrangement of the various elements of the application (e.g. presenting the claims before the description, or vice versa) does not affect the validity of such a declaration (see Legal Advice No. 19/99 (OJ 5/1999, 296)).

Art. 88(1)
Rule 53(3)

The translation or declaration under Rule 53(3) must also be filed in those cases where the EPO adds a copy of the previous application to the file (Notice from the EPO, OJ 4/2002, 192).

If the applicant has already provided the EPO with a translation of the priority document as part of a request under Rule 56 (see A-II, 5.4(vi)) to base missing parts of the description or drawings on the priority application itself, then there is no need for the applicant to file the translation a second time.

Rule 56

If the required translation or declaration is not filed within the time limit, then the intermediate document(s) which resulted in the validity of the priority claimed becoming relevant for the assessment of patentability will be considered to belong to the prior art under Art. 54(2) or Art. 54(3), as applicable (see A-III, 6.8). However, for reasons of legal certainty the right of priority remains effective for determining the state of the art for the purposes of Art. 54(3) (see V, 2.1 and 3.5) in respect of any other European patent application. In that respect it is immaterial whether the translation or declaration has been filed, as changes taking effect after the date of publication do not affect the application of Art. 54(3).

3.5 Abandonment of priority claim

An applicant may voluntarily abandon a claimed priority at any time. If he does so before the technical preparations for publication have been completed, then the priority date is not effective and the publication is deferred until 18 months after the filing date. If it is abandoned after the technical preparations for publication have been completed, then the application is still published 18 months after the priority date originally claimed (see A-VI, 1.1 and C-IV, 7.1.1).

3.6 Re-establishment of rights in respect of the priority period

An applicant may file a request for re-establishment of rights in respect of the priority period under Art. 122 (see A-III, 6.6). Any request for re-establishment of rights in respect of the period specified in Art 87(1) must be filed within two months of expiry of that period, according to Rule 136(1), second sentence. Where a request for re-establishment in respect of the priority period has been allowed, the examiner should carefully review the relevance of prior art documents cited previously in the search report or communications.

Art. 122
Rule 136(1)

CHAPTER VI

EXAMINATION PROCEDURE

This chapter sets out the general procedure for examination, together with guidance on particular matters where necessary. It does not provide detailed instructions on matters of internal administration.

1. The start of examination

1.1 Request for examination

In order that examination of a European application can begin, the applicant is required to file a request for examination, which, however, is not deemed to be filed until after the examination fee has been paid. The request for examination may be filed from the date on which the application is filed up to the end of six months after the date on which the European Patent Bulletin mentions the publication of the European search report. If the request for examination is not filed within this period, the application is deemed to be withdrawn. However, in such a case, the applicant has the possibility of filing a request for further processing pursuant to Art. 121. According to Rule 70(1), the request for examination may not be withdrawn.

Art. 94
Art. 121
Rule 70
Art. 122(4)
Rule 136(3)

The responsibility for examining the application passes from the Receiving Section to the Examining Division at the time when a request for examination is filed. This is subject to two exceptions:

Rule 10
Rule 70(2)

- (i) if the applicant has filed a request for examination before the European search report has been sent to him, then the Examining Division is responsible only from the time when the confirmation of the request is received by the EPO following an invitation under Rule 70(2);
- (ii) if the applicant has filed a request for examination before the European search report has been sent to him and has also waived the right to receive an invitation to confirm under Rule 70(2), then the Examining Division is responsible only from the time when the search report is sent to the applicant.

1.1.1 Confirmation of early request for examination

If the applicant has filed a request for examination before the search report has been transmitted to him, the EPO will invite him to confirm, within the six-month period, that he desires to proceed further with his application. If the applicant fails to reply in due time to this invitation, the application will be deemed to be withdrawn. In this case, however, the means of redress provided for in Art. 121 (further processing of the application) will apply (see A-VI, 2.2 and 2.3). For the conditions applicable to a refund of the examination fee if the application is withdrawn, refused or deemed to be withdrawn, see A-VI, 2.5.

Rule 70(2) and (3)
Art. 121
Art. 11 RFees

1.1.2 Acceleration of examination procedure

Where the applicant files a request for examination before the search report is transmitted to him, he may also dispense with the need to comply with the invitation pursuant to Rule 70(2), and file a categorical request for examination whatever the result of the search may be, by which the procedure can also be accelerated (see Notice from the EPO dated 14 July 2007, Special edition No. 3, OJ EPO 2007, F.1). In this case, confirmation that he desires to proceed further with his application is deemed

Rule 70(2)
Art. 11(b) RFees
Rule 62(1)

to be given when the search report is transmitted to him, so that in accordance with Rule 62(1) the search report is not accompanied by a search opinion. Under these circumstances, if the application is not in order for grant, a communication under Art. 94(3) and Rule 71(1) and (2) is transmitted to the applicant. If the application is in order for grant, the subsequent procedure will depend on whether or not it is possible at that time to carry out the search for conflicting European applications according to Art. 54(3) (see VI, 8.1 and B-XII, 8). If that search can be carried out, and assuming that it does not identify any conflicting applications, then the communication under Rule 71(3) is transmitted to the applicant. If it cannot yet be carried out, then the communication from the examining division will be postponed until the said search is completed and the applicant will be informed accordingly. If the European patent application is subsequently withdrawn before the substantive examination has begun, 75% of the examination fee will be refunded. For other ways of accelerating the European grant procedure, e.g. under the PACE programme, see E-VIII, 3.

1.1.3 Euro-PCT applications

Art. 153(4), (6) and (7)
Art. 150(2)
Rule 159(1)(f)

If the application has proceeded via the PCT (Euro-PCT application), the above-mentioned six-month period begins with the publication of the PCT search report or the declaration under Art. 17(2)(a) PCT. However, as is laid down in Art. 150(2), the time limit for requesting examination in a Euro-PCT case does not expire before the time prescribed in Art. 22 PCT and Art. 39 PCT (i.e. not before the time limit of Rule 159(1)(f)). The time limit will not be affected by whether a supplementary European search pursuant to Art. 153(7) needs to be made or whether the international application pursuant to Art. 153(4) is again published by the EPO.

Art. 121
Rule 136(3)
Rule 160(1)

If the request for examination of a Euro-PCT application has not been filed within the time limit, the application is deemed withdrawn under Rule 160(1). In such a case, however, the applicant has the possibility of filing a request for further processing pursuant to Art. 121.

1.1.4 Invention to be examined

Rule 36

It is to be noted that where the search report and the search opinion have been drawn up to cover several inventions lacking unity, the applicant is free to select the invention to be examined in the application under consideration. The others will be subject to objections of lack of unity, and may be divided out according to Rule 36 (see III, 7.9 to 7.11).

1.2 Allocation of the application

The dossier will normally be allocated to an Examining Division responsible for the examination of applications in the technical field in which the particular application has been classified by the Search Division or ISA which carried out the search. There may be instances where it is appropriate to allocate the application to an Examining Division comprising examiners who are not normally responsible for the indicated part of the IPC. There are a number of possible reasons for this: e.g. if examination of an application requires very specialist technical knowledge; or to make it possible, where appropriate, that an original and a divisional application are dealt with by the same Examining Division (this could sometimes be more efficient even when the two applications are classified in different technical fields); or if the classification of the published application does not correspond to the subject-matter of the application in the form in which it

reaches the substantive examiner (e.g. because the application has been amended after receipt of the search report).

1.3 Examining Division

An Examining Division will normally consist of three technical examiners. However, within the Examining Division made responsible for the application, one member will, as a general rule, be entrusted to carry out all the work up to the point of a decision to grant a patent or refuse the application. This means that this examiner is entrusted to act on behalf of the Examining Division in all communications with the applicant up to that point, but he may confer informally with the other members of the Division at any time if a special point of doubt or difficulty arises (see VI, 7.1). Where reference is made in this Part C of the Guidelines to the "examiner", this normally means the examiner entrusted with the work in this way, and it should be understood that this primary examiner is always acting in the name of the Examining Division. This examiner is normally the examiner who drafted the search report.

Art. 18(2)

1.4 Designation fee(s), extension fees

Under Rule 39(1), the designation fee(s) can be validly paid up to the same time limit as the examination fee and therefore will be generally paid at the same time as the examination fee. The examination whether and to what extent a designation fee has been validly paid has been entrusted to the formalities officer by virtue of Rule 11(3); see the Decision of the President of the EPO dated 12 July 2007 (Special edition No. 3, OJ EPO 2007, F.2). The same applies to the examination as to whether extension fees have been paid, see A-III, 12.2.

Rule 39(1)
Art. 90(3)

2. Examination procedure in general

2.1 Purpose of examination

The purpose of examination is to ensure that the application and the invention to which it relates meet the requirements set out in the relevant Articles of the EPC and the Rules of its Implementing Regulations. The prime task of the Examining Division is to deal with the substantive requirements; the criteria by which an examiner judges whether they have been met are dealt with in detail, insofar as appears necessary, in Chapters II to V. As for the formal requirements (see Part A), these are initially the responsibility of the Receiving Section. As soon as the application has passed to the Examining Division under Rule 10, that Division will have ultimate responsibility, but formal matters will normally be dealt with by a formalities officer. The examiner should not spend time checking the work done by the Receiving Section or the formalities officer, but if he believes a formalities report is incorrect or incomplete he should refer the application to the formalities officer for further consideration.

Art. 94(1)
Art. 164(1)

The examination is to be carried out in accordance with Art. 94(3) and (4), Art. 97, Rule 71(1) to 71(10) and Rule 72. The examiner's first step is to study the description, drawings (if any) and the claims of the application. However, as the examiner will normally already have done this when he carried out the search (see B-XII, 3), he should concentrate on any amendments and/or comments filed by the applicant in response to the search opinion.

Rule 70(2)

2.2 Topping-up search

The examiner should make a search for any additional conflicting European applications falling within the area defined by Art. 54(3) (see VI, 8.1), unless this was already covered by the search report.

2.3 Communication with the applicant

Rule 71(1) and (2)
Rule 132
Art. 94(3)

Taking into account the documents (if any) cited in the search report and any further documents found as the result of the search referred to in VI, 2.2 above, and taking account of any amendments proposed, or comments made, by the applicant in reply to the search opinion, the examiner should identify any requirements of the EPC which, in his opinion, the application does not satisfy. He will then write to the applicant giving reasons for any objections he raises and inviting the applicant within a specified period to file his observations or submit amendments. The filed application documents are not sent back to the applicant although a copy of the description and claims may be sent in appropriate cases (see E-II). When the applicant has replied, the examiner will then re-examine the application.

2.3.1 Requesting information from the applicant

Art. 124
Rule 141

The EPO may invite the applicant to submit information on prior art which has been taken into consideration in national or regional patent proceedings concerning an invention to which the European patent application relates. Failure on the part of the applicant to comply with this invitation results in the application being deemed to be withdrawn under Art. 124(2).

2.4 Re-examination, refusal, appeal, interlocutory revision

Art. 94(3)
Art. 97
Rule 111(2)
Art. 113(1)
Art. 109
Art. 111(1) and (2)

The examiner should be guided at the re-examination stage by the over-riding principle that a final position (grant or refusal) should be reached in as few actions as possible, and he should control the procedure with this always in mind. The EPC provides that the process of communicating with the applicant described in VI, 2.3 is repeated "as often as necessary". Nevertheless, if despite the applicant's submissions, i.e. amendments or counter-arguments, objections persist, then even at the first re-examination stage the examiner should bring the application before the other members of the Examining Division, which may then decide to refuse the application. In any event, at some stage, the examiner will make a short written recommendation to the Division either that the application should be refused or that a patent should be granted. If the Division intends to refuse the application, a written reasoned decision is necessary and this will normally be prepared by the examiner entrusted with the examination of the application. In preparing the decision, the examiner must take care to abide by the general principles set out in Art. 113(1), i.e. the decision must be based on grounds or evidence on which the applicant has had the opportunity to comment. If the applicant appeals against the decision and the Examining Division considers, in the light of the applicant's statement, that the appeal is admissible and well-founded, it should rectify its decision accordingly within three months after receipt of the statement of grounds. Otherwise, the appeal will be considered by a Board of Appeal. If a decision to refuse a patent is reversed on appeal, the application may be referred back to the Examining Division for further examination. In such a case, the further examination will normally be entrusted to the examiner who performed the original examination. The Examining Division is bound by the ratio decidendi of the Board of Appeal, insofar as the facts are the same.

2.5 Communication under Rule 71(3)

If the Examining Division considers that a European patent may be granted, it will first issue a communication under Rule 71(3) in order to inform the applicant of the text in which it intends to grant the patent. In this communication, the applicant is requested to pay the fee for grant and publishing and to file a translation of the claims in the two official languages of the EPO other than the language of the proceedings within a period of four months. The translation should meet the requirements pursuant to Rule 50(1). If the applicant pays the fee and files the translation within the period of four months, he is deemed to have approved the text intended for grant.

Rule 71(3) and (10)
Rule 50(1)

In the communication under Rule 71(3), if applicable, the applicant is also requested to pay claims fees pursuant to Rule 71(6) within the same period.

Rule 71(6)

The communication must contain a reference to the relevant pages on the EPO website where information concerning translation requirements of the Contracting States under Art. 65(1) is published (Rule 71(10)).

Rule 71(10)

For further details of the procedure at the final stage of examination, see VI, 14.

2.6 Grant of a patent

If the applicant has fulfilled the requirements set out in VI, 2.5, it is decided that a European patent be granted, provided that renewal fees and any additional fees already due have been paid.

Art. 97(1)

2.7 Application deemed withdrawn

If the applicant does not pay the fee for grant and publishing or the claims fees or does not file the translation in due time, the application is deemed to be withdrawn.

Rule 71(7)

2.8 Amendments

If the applicant files amendments or other requests in reply to the communication pursuant to Rule 71(3), the proceedings are continued as set out in VI, 14.4.

Rule 71(4)

2.9 Examination stages

The different stages of the examination procedure are considered in more detail in the following sections.

3. The first stage of examination

3.1 Missing drawings or parts of the description filed under Rule 56 or claims filed after accordance of a date of filing

Where the applicant has supplied missing drawings or parts of the description after accordance of a filing date (see A-II, 5) under Rule 56, and the Receiving Section has determined that the missing drawings or parts of the description are “completely contained” in the claimed priority application, the application is not re-dated to the date on which the missing drawings or parts of the description were supplied. The Examining Division may review the findings of the Receiving Section on the applicability of Rule 56(3), unless those findings have become final after a decision of a Board of Appeal. Should the Examining Division come to the conclusion

Rule 56

that the missing elements are not “completely contained” in the priority document, contrary to the original finding of the Receiving Section, it must communicate this to the applicant and, once it has been established that the right to be heard under Art. 113(1) has been observed, notify him of the new date of filing (see A-II, 5). The Examining Division must also inform the applicant that the missing drawings or parts of the description can still be withdrawn within one month from the date of notification of the new date of filing. If the applicant opts for withdrawal, the re-dating of the application will be deemed not to have been made (see also B-XII, 2.1 and 2.2). For Euro-PCT applications a review is possible under Rule 82ter PCT.

Art. 123(2) If the claims were not present at the date of filing the application, the Examining Division must check whether the subsequently filed claims satisfy the requirements of Art. 123(2).

3.2 Filing of comments and amendments by the applicant; PACE

Rule 137(2) Following receipt of the search report and prior to the first communication
Rule 70(2) from the examining division, the applicant may file comments on the search report and if applicable on the search opinion, and file amendments to the description, claims or drawings. These amendments may be submitted to overcome the objections raised in the search opinion or they may be suggested for some other reason, e.g. to remedy some obscurity which the applicant himself has noted in the original documents.

With a written request for accelerated examination under the programme for accelerated prosecution of European patent applications (PACE), the applicant can speed up the proceedings at the examination stage (see Notice from the EPO dated 14 July 2007, Special edition No. 3, OJ EPO 2007, F.1 and E-VIII, 3).

3.3 Amendments by the applicant following the EESR and made of his own volition

Rule 137(2) The amendments referred to in VI, 3.2 are made by the applicant "of his own volition". This means that the applicant is not restricted to amendment(s) necessary to remedy a defect in his application. It does not, however, mean that the applicant is free to amend in any way he chooses. Any amendment must satisfy the following conditions:

- Art. 123(2)
- (i) it must not add subject-matter to the content of the application as filed (see VI, 5.3 to 5.3.11); and
 - (ii) it must not itself cause the application as amended to be objectionable under the EPC, e.g. the amendment must not introduce obscurity.

If the amendments do not meet these conditions, the applicant should be told that the amended application cannot be allowed. Apart from the amendments referred to above, which are admissible under Rule 137(2), the applicant may correct obvious errors at any time (see VI, 5.4).

3.4 Unity of invention

Art. 82 An objection of lack of unity of invention, if applicable, should already have been raised at the search stage. If such an objection was not raised, but the Examining Division nevertheless considers that the requirements of Art. 82 are not met, the question of lack of unity will be addressed as early as possible during examination. If the applicant has paid further search fees in response to an invitation of the Search Division under Rule 64(1) and has

requested a refund of these, the Examining Division will have to reconsider the matter (see also III, 7.9 to 7.11).

If the applicant has not responded to the above-mentioned invitation of the Search Division to pay a further search fee in respect of certain subject-matter, it must nevertheless be taken into account that the final responsibility for establishing whether the application meets the requirement of unity of invention ultimately rests with the Examining Division (T 631/97, OJ 1/2001, 13). The Examining Division will normally uphold the position taken in the search opinion (see III, 7.10 and B-XII, 1.2) and the examination will proceed only for the invention which has been the subject of the search and the applicant will have to limit the application to that subject-matter by excising those parts which relate to the non-searched subject-matter (see G 2/92, OJ 10/1993, 591). The applicant may, however, file a divisional application for that subject-matter.

If the applicant has responded to the above-mentioned invitation to pay further search fees, he will be invited at the beginning of the substantive examination to state, if he has not yet done so, on which invention the prosecution of the application should be based and to limit the application accordingly by excising those parts belonging to the other inventions. For the latter, the applicant may file divisional applications.

Rule 36

3.5 First communication

If no search opinion has been issued (see 1.1.2 above, III, 7.11.1(ii) and B-XII, 1.1), the examiner's first communication under Art. 94(3) will, as a general rule (see B-XII, 3), cover all objections to the application (but see B-XII, 3.4). These objections may relate to formal matters (e.g. failure to comply with one or more of the requirements specified in Rules 30 to 34, 41 to 43, 46 and 48 to 50), to substantive matters (e.g. the subject-matter of the application is not patentable), or to both.

If a search opinion according to Rule 62(1) has been issued, and if the applicant has not replied to it, a communication referring to the search opinion and setting a time limit for reply will be issued as the first communication under Art. 94(3). Failure to respond to this communication in due time will result in the application being deemed withdrawn according to Art. 94(4). If the applicant has filed amendments or comments in response to the search opinion, they will be taken into account when drafting the first communication.

Art. 94(3) and (4)
Rule 62(1)

3.5.1 Euro-PCT applications

If the EPO acted as ISA and/or IPEA, a Written Opinion of the ISA and/or an International Preliminary Examination Report will already have been transmitted to the applicant during the PCT phase. In this case:

- (i) if the applicant has filed amendments or comments upon entry into the regional phase before the EPO, they will be taken into account when drafting the first communication.
- (ii) if the applicant has not filed any amendments or comments upon entry into the regional phase before the EPO, the first communication will essentially be based on the content of said Written Opinion or Preliminary Examination Report.

Where the application under consideration derives from an International application for which the EPO did not act as ISA and/or IPEA, the application is subject to a supplementary search under Art. 153(7)

(see B-II, 4.3) and normally an EESR is issued accordingly (see B-XII, 1 and 2). The first communication is then issued as in 3.5 above.

3.6 Reasoned objections

For each objection the communication should indicate the part of the application which is deficient and the requirement of the EPC which is not met, either by referring to specific Articles or Rules, or by other clear indication; it should also give the reason for any objection where this is not immediately apparent. For example, where prior art is cited and only part of a cited document is relevant, the particular passage relied upon should be identified. If the cited prior art is such as to demonstrate lack of novelty or inventive step in the independent claim or claims, and if, consequently, there is lack of unity between dependent claims (see III, 7.8), the applicant should be informed of this situation (see VI, 5.2(i)). Substantive matters should normally be set out first. The communication should be drafted in such a manner as to facilitate re-examination of the amended application and, in particular, to avoid the need for extensive rereading (see VI, 4.2).

3.7 Invitation to file comments and amendments

Rule 71(1)
Art. 94(3) and (4)

The communication should include an invitation to the applicant to file his observations, to correct any deficiencies and, if necessary, to submit amendments to the description, claims and drawings. It must also state the period within which the applicant must reply. Failure to reply in due time will cause the application to be deemed withdrawn (see E-VIII, 1).

3.8 Late arrival of amendments by the applicant following the EESR and made of his own volition

Rule 137(2)

Between receipt of the search report and receipt of the first communication from the examiner, issued according to VI, 3.5 and 3.5.1 above, the applicant may submit amendments of his own volition and in response to the search opinion. These amendments may occasionally arrive after despatch of the communication. In such a case, the examiner may have to withdraw the previous first communication and issue a new first communication taking these amendments into consideration and specifying a new period for reply.

4. Further stages of examination

4.1 General procedure

Following the applicant's reply to the first communication, the examiner must re-examine the application taking into account observations or amendments made by the applicant.

In the case of one or more subsidiary request(s) (sometimes referred to as "auxiliary requests") directed to alternative texts for grant of a patent, every such request qualifies as a text submitted or agreed by the applicant within the meaning of Art. 113(2) and therefore must be dealt with in the order indicated or agreed to by the applicant, up to and including the highest-ranking allowable request, if any (see also Legal Advice No. 15/05 (rev. 2), OJ 6/2005, 357 and 15.1).

4.2 Extent of re-examination

After the first examination stage, provided that the first communication was comprehensive and clear (see VI, 3.5 and 3.6) the examiner will not normally need to completely reread the application but rather should concentrate on the amendments themselves, the related passages, and the deficiencies noted in the first communication.

4.3 Further action upon re-examination

In most cases, the applicant will have tried to deal with all the examiner's objections.

If re-examination shows that despite the applicant's submissions objections persist and provided the applicant has been given the right to be heard (Art. 113(1)), i.e. the decision is based solely on grounds on which he has had an opportunity to comment, the application is to be refused (T 201/98, not published in OJ).

Art. 113(1)

If re-examination shows that the applicant has not dealt with all the main objections in his reply, it may be appropriate to draw the deficiencies to his attention, e.g. by telephone. But if no positive reaction is to be expected, the examiner should consider recommending to the other members of the Examining Division that the application be refused immediately.

In most cases, however, re-examination will show that there are good prospects of bringing the proceedings to a positive conclusion, i.e. in the form of a decision to grant. In such cases, if there are still objections to be met, the examiner must consider whether they can best be resolved by a further written communication, a telephone discussion or a personal interview. If substantial differences of opinion exist, the issues are generally best dealt with in writing. If, however, there seems to be confusion about points in dispute, e.g. the applicant seems to have misunderstood the examiner's arguments or the applicant's own arguments are unclear, then an interview may be useful. If, on the other hand, the matters to be resolved are minor, they can be settled more expeditiously over the telephone. Interviews or telephone discussions with the applicant or his representative are more fully considered in VI, 6. Telephone discussions or interviews do not constitute oral proceedings (see E-III).

4.4 Later stages of re-examination

Similar considerations apply to later stages of re-examination on the understanding that, having regard to the principle stated in VI, 2.4, the greater the number of actions which have already taken place, the greater is the likelihood that the most appropriate action is to refer the application to the other members of the Examining Division for a decision. Where this decision is to refuse the application, particular care should be taken to ensure that the decision does not offend against Art. 113(1).

4.5 Decision according to the state of the file

A special case is where the applicant does not file comments or amendments in reply to the examiner's communication but requests a decision "according to the state of the file" or "on the file as it stands", meaning that the applicant wishes to close the debate and a decision is taken on the basis of the current status of the application and any supporting arguments. The decision, which may be appealed, may only be

based on grounds and evidence on which the applicant has had an opportunity to present his comments (Art. 113(1)). The decision will be of a standard form, simply referring to the previous communication(s) for its grounds and to the request of the applicant for such a decision (see also E-X, 4.4).

4.6 Examination of amendments

Any amendment must satisfy the conditions listed in VI, 3.3. When it was effected must also be established.

4.7 Admissibility of amendments made by the applicant

Rule 137(2)

After receiving the European search report and before receipt of the first communication from the Examining Division, the applicant may, of his own volition, amend the description, claims and drawings.

Rule 137(3) Rule 71(1)

After receipt of the first communication from the examiner, the applicant may "of his own volition, amend once the description, claims and drawings" provided that the amendment is filed at the same time as his reply. After replying to the first communication the applicant may amend only if the examiner consents to the amendments proposed. Giving the Examining Division this discretion is intended to ensure that the examination procedure is brought to a conclusion in as few actions as possible (see VI, 2.4). If an amendment is admissible, subsequent proceedings are based on the description, claims and drawings as amended. Consent to an amendment does not necessarily imply that the application as amended is free from any objection under the EPC. Distinctions should be drawn between different types of amendments.

Art. 94(3)

Amendments remedying a deficiency in response to the preceding communication must always be admitted, provided they do not give rise to some new deficiency. Amendments limiting a claim which is already considered allowable should normally be admitted. The same applies to amendments improving the clarity of the description or claims in a manner clearly desirable.

A further factor is the amount of alteration to the application documents involved. Extensive reworking of the description or claims may be a proper response to highly relevant further prior art of which the applicant has only just become aware (e.g. either through further citation by the examiner or through knowledge obtained from another source). Regarding less extensive amendments, the examiner should adopt a reasonable approach, trying to balance fairness to the applicant against the need to avoid unnecessary delay and excessive and unjustified additional work for the EPO. Any subsequent request to withdraw an amendment is itself a request for further amendment; thus, if this subsequent request occurs after reply to the first communication from the examiner, the corresponding amendment will be admitted only if the examiner consents. In exercising his discretion under Rule 137(3), the examiner should bear in mind the length of the proceedings to date and whether the applicant has already had sufficient opportunity for amendments. He should refuse in particular amendments reintroducing deficiencies previously pointed out to and removed by the applicant.

In deleting subject-matter from an application, the applicant should avoid any statement which could be interpreted as abandonment of that subject-matter. Otherwise the subject-matter cannot be reinstated.

4.8 Examples of inadmissible amendments

Any request by an applicant to replace the text of the application on the basis of which a patent could be granted by a text that has been extensively revised should be refused, unless the applicant gives good reasons for proposing the changes only at this stage in the proceedings. This applies particularly in cases where the Examining Division has indicated that a version of the claims proposed by the applicant is grantable and that the applicant has only to bring the description into line with that version.

Rule 137(3)

4.9 Amendments filed in reply to a communication under Rule 71(3)

The communication under Rule 71(3) (see VI, 2.5 and 14.1 to 14.3) does not constitute an opportunity for the applicant to call into question the outcome of the earlier procedure. At this stage of the proceedings, the substantive examination has already been completed and the applicant has had the opportunity to amend the application and therefore normally only those amendments which do not appreciably delay the preparations for grant of the patent will be admitted under Rule 137(3). It is, however, appropriate to admit separate sets of claims for one or more designated States that made a reservation under Art. 167(2) EPC 1973 (see III, 8.3) or for which prior national rights exist (see III, 8.4).

Rule 71(3)
Rule 137(3)

If, on reviewing the proposed text for grant, the applicant wishes to make minor amendments and/or corrections, he should file them, together with a translation of the claims as amended and/or corrected, and should pay the fee for grant and publishing within the period set under Rule 71(3), as required by Rule 71(4). If the amendments and/or corrections do not relate to the claims, then translations of the claims as in the communication under Rule 71(3) should be filed. Failure to file the translations or pay the fee within this time limit will result in the application being deemed withdrawn, in accordance with Rule 71(7). The three situations specified in VI, 14.4.1 in which this requirement does not apply (maintenance of a higher request, maintenance of the existing request without the amendments made by the Examining Division in the communication under Rule 71(3) and the issuing of the communication under Rule 71(3) on the basis of the wrong documents) should be noted.

Rule 71(4)

If, under Rule 137(3), the Examining Division consents to the amendments and/or corrections and considers them allowable, it can immediately proceed to grant pursuant to Art. 97(1).

Rule 71(4)

If, however, a request for amendment is to be refused under Rule 137(3), the applicant must first in compliance with Rule 71(5) and Art. 113(1) be sent a communication giving the reasons for refusing the amendment and giving him the opportunity to either withdraw his request for amendment or submit his observations and any amendments considered necessary by the Examining Division and, where the claims are amended, a translation of the claims as amended.

Rule 71(5)
Rule 137(3)
Art. 113(1)

If the applicant maintains his request for the amendment, and the Examining Division sees no reason to change its opinion not to consent to the amendments pursuant to Rule 137(3), the application must be refused under Art. 97(2), since, in these circumstances, there is no text of the application which has been agreed by the applicant and allowed by the Examining Division (Art. 113(2)).

Art. 97(2)
Art. 113(2)

It should be noted that if no communication under Art. 94(3) has preceded the communication under Rule 71(3), the latter is a "first communication"

Rule 137(3)

within the meaning of Rule 137(3). This means that the applicant may amend the description, claims and drawings of his own volition (see VI, 3.3 for the conditions any amendment must satisfy). The provisions of Rule 71(4) concerning the filing of translations of the amended claims and payment of fees nonetheless still apply in this case, unless the applicant's response corresponds to one of the exceptions defined in VI, 14.4.1. In these circumstances however, if the Examining Division is of the opinion that the amendments are inadmissible or not allowable, then the examination procedure should normally be resumed in accordance with VI, 14.5. As in the cases referred to in VI, 4.11, if this leads to a version which meets the requirements of the EPC, a second communication under Rule 71(3) is issued. An exception to this procedure would be when the objections of the Examining Division are of a relatively minor nature, such that they could be resolved by means of a telephone conversation, in which case resumption of the examination procedure would be unnecessary.

4.10 Further requests for amendment after approval

Rule 137(3)

Once the applicant has approved the text communicated to him pursuant to Rule 71(3), by paying the fees and filing the translation of the claims, possibly including minor amendments and/or corrections, further requests for amendment will only exceptionally be allowed under the discretionary power of the Examining Division given by Rule 137(3). A clear example of an allowable request is where the applicant files separate sets of claims for designated States that made reservations under Art. 167(2) EPC 1973 (see III, 8.3) or for which prior national rights exist (see III, 8.4). Similarly, it is appropriate to admit minor amendments which do not require re-opening of the substantive examination and which do not appreciably delay the issue of the decision to grant (see G 7/93, OJ 11/1994, 775). If these amendments involve changes to the claims, these should of course be accompanied by translations, as required by Rule 71(4).

Rule 140

However, once the decision to grant is handed over to the EPO's internal postal service for transmittal to the applicant, the Examining Division is bound by it (see G 12/91, OJ 5/1994, 285) and can only amend it to the limited extent provided for in Rule 140 (see E-X, 10).

4.11 Resumption of the examination proceedings

Paragraphs 4.9 and 4.10 above do not prevent the Examining Division from resuming the proceedings of its own motion where it becomes aware of circumstances which are such as to render non-patentable the subject-matter claimed. Such circumstances may be brought to the Examining Division's attention by the applicant or following observations by third parties under Art. 115 and can be considered up to the moment the decision is handed over to the EPO's internal postal service. In the resumed proceedings, substantive amendments to resolve this problem are possible. Where this leads to a version which meets the requirements of the EPC, a second communication under Rule 71(3) is issued, and 4.9 and 4.10 above apply again.

5. Amendments

5.1 Making amendments

The general considerations relating to the procedures for making amendments are set out in E-II.

5.2 Allowability of amendments

The question of allowability of amendments is legally a question of whether the application as so amended is allowable. An amended application must of course satisfy all the requirements of the EPC including, in particular, inventive step and the other matters listed in B-XII, 3.6 (see also VI, 3.3). Also, however, especially when the claims have been substantially limited, the examiner should bear in mind that the following questions may require special consideration at the amendment stage.

(i) Unity of invention

Do the amended claims still satisfy the requirements of Art. 82? If the search report seems to reveal lack of novelty or inventive step in the concept common to all the claims, but the amended claims do not necessitate further search, the examiner should consider carefully whether an objection of lack of unity is justified at this stage of the proceedings (see III, 7.7). If, however, the claims lack a common inventive concept and a further search is necessary, objection should be raised.

(ii) Changing to unsearched subject-matter

Rule 137(4)

If amended claims are directed to subject-matter which has not been searched (e.g. because it only appeared in the description and the Search Division did not find it appropriate to extend the search to this subject-matter, see B-III, 3.5) and which does not combine with the originally claimed and searched invention or group of inventions to form a single general inventive concept, such amendments are not admissible. This applies particularly when this unsearched subject-matter alone is now claimed, whereas it should not be applied if a feature originally disclosed in the description is added to an originally-filed claim in order to meet an objection, e.g. lack of novelty or inventive step, raised by the examiner. In the latter case, however, an additional search (see VI, 8.2) may be required.

Thus, if an objection under Rule 137(4) is to be raised, the applicant should be informed that he may continue to pursue such subject-matter only in the form of a divisional application under Art. 76. If no such objection is raised, the Examining Division should consider requesting an additional search (see VI, 8.2).

However, applicants should bear in mind that the examining procedure should be brought to a conclusion in as few actions as possible. So the Examining Division may exercise its right not to admit further amendments under Rule 137(3) (see VI, 4.7).

(iii) Agreement of description and claims

If the claims have been amended, will the description require corresponding amendment to remove serious inconsistency between them? For example, is every embodiment of the invention described still within the scope of one or more claims? (see III, 4.3). Conversely, are all of the amended claims supported by the description? (see III, 6). Also, if the categories of claims have been altered, will the title require corresponding amendment? It is important also to ensure that no amendment adds to the content of the application as filed and thus offends against Art. 123(2), as explained in the following paragraphs.

5.3 Additional subject-matter

Art. 123(2)

There is normally no objection to an applicant introducing, by amendment, further information regarding prior art which is relevant; indeed this may be required by the examiner (see II, 4.3 and 4.19). Nor will the straightforward clarification of an obscurity or the resolution of an inconsistency be objected to. If, however, the applicant seeks to amend the description (other than references to the prior art), the drawings or the claims in such a way that subject-matter which extends beyond the content of the application as filed is thereby introduced, the application as so amended cannot be allowed.

5.3.1 Basic principle; priority document

The underlying idea of Art. 123(2) is that an applicant is not allowed to improve his position by adding subject-matter not disclosed in the application as filed, which would give him an unwarranted advantage and could be damaging to the legal security of third parties relying on the content of the original application (see G 1/93, OJ 8/1994, 541). An amendment should be regarded as introducing subject-matter which extends beyond the content of the application as filed, and therefore unallowable, if the overall change in the content of the application (whether by way of addition, alteration or excision) results in the skilled person being presented with information which is not directly and unambiguously derivable from that previously presented by the application, even when account is taken of matter which is implicit to a person skilled in the art. At least where the amendment is by way of addition, the test for its allowability normally corresponds to the test for novelty given in IV, 9.2 (see T 201/83, OJ 10/1984, 481).

Under Art. 123(2) it is impermissible to add to a European application matter present only in the priority document for that application (see T 260/85, OJ 4/1989, 105). For correction of errors, see VI, 5.4.

Rule 56

The procedure under Rule 56 allows the applicant to file missing drawings or parts of the description subsequently, and to rely on the priority document in order to avoid re-dating of the application to the date of filing of the missing parts. Under Rule 56(3), re-dating is only avoided where the missing parts were "completely contained" in the priority document (see VI, 3.1 and A-III, 5). The provisions of Rule 56(3) apply only to the filing stage of the application, without further implications: in particular, it is not permissible at later stages of the procedure to rely on the priority documents to correct or amend the application as filed (in keeping with G 3/89 and G 11/91, OJ 3/1993, 117 and 125, respectively). For Euro-PCT applications a review is possible under Rule 82ter PCT.

5.3.2 Examples

For example, if an application relates to a rubber composition comprising several ingredients and the applicant seeks to introduce the information that a further ingredient may be added, then this amendment should normally be objected to as offending against Art. 123(2). Likewise, in an application which describes and claims apparatus "mounted on resilient supports", without disclosing any particular kind of resilient support, objection should be raised if the applicant seeks to add the specific information that the supports are, or could be, e.g. helical springs.

If, however, the applicant were able to demonstrate that the drawings, as interpreted by the skilled person, show helical springs, the specific mention of helical springs would be allowable.

However, care should be taken when amendments are based on details which may only be derived from the schematic drawings of the original

application. The manner in which a particular feature is depicted in the drawings may be accidental. In such cases, the skilled person must be able to clearly and unmistakably recognise from the drawings, in the context of the whole description, that the added feature is the deliberate result of the technical considerations directed to the solution of the technical problem involved. For example, the drawings may depict a vehicle in which approximately two thirds of the height of the engine is located below a plane tangent to the top of the wheels. An amendment which defines that the major portion of the engine is located below the given level would not infringe Art. 123(2) if the skilled person would recognise that such a spatial arrangement of the engine with respect to the wheels is in fact a deliberate measure directed to the solution of the technical problem (see T 398/00).

5.3.3 Clarification of a technical effect

Where a technical feature was clearly disclosed in the original application but its effect was not mentioned or not mentioned fully, yet it can be deduced without difficulty by a person skilled in the art from the application as filed, subsequent clarification of that effect in the description does not contravene Art. 123(2).

5.3.4 Introduction of further examples and new effects

Amendment by the introduction of further examples should always be looked at very carefully in the light of the general considerations outlined in paragraphs VI, 5.3 to 5.3.3. The same applies to the introduction of statements of new (i.e. previously not mentioned) effects of the invention such as new technical advantages. For example, if the invention as originally presented related to a process for cleaning woollen clothing consisting of treating the clothing with a particular fluid, the applicant should not be allowed to introduce later into the description a statement that the process also has the advantage of protecting the clothing against moth damage.

Art. 123(2)

5.3.5 Evidence

Under certain circumstances, however, later filed examples or new effects, even if not allowed into the application, may nevertheless be taken into account by the examiner as evidence in support of the patentability of the claimed invention. For instance, an additional example may be accepted as evidence that the invention can be readily applied, on the basis of the information given in the originally filed application, over the whole field claimed (see III, 6.3). Similarly a new effect (e.g. the one mentioned in VI, 5.3.4) may be considered as evidence in support of inventive step, provided that this new effect is implied by or at least related to an effect disclosed in the originally filed application (see IV, 11.10).

Art. 123(2)

5.3.6 Supplementary technical information

Any supplementary technical information submitted after the filing date of the application will be added to the part of the file which is open to public inspection, unless excluded from public inspection pursuant to Rule 144(d). From the date on which the information is added to the open part of the file, it forms part of the state of the art within the meaning of Art. 54(2). In order to notify the public of the existence of such information submitted after the application was filed and not included in the specification, an appropriate mention will be printed on the cover page of the patent specification.

5.3.7 Revision of stated technical problem

Care must also be taken to ensure that any amendment to, or subsequent insertion of, a statement of the technical problem solved by the invention meets Art. 123(2). For example it may happen that following restriction of the claims to meet an objection of lack of inventive step, it is desired to revise the stated problem to emphasise an effect attainable by the thus restricted invention but not by the prior art. It must be remembered that such revision is only permissible if the effect emphasised is one deducible by a person skilled in the art without difficulty from the application as filed (see 5.3.3 and 5.3.4 above).

5.3.8 Reference document

Features which are not disclosed in the description of the invention as originally filed but which are only described in a cross-referenced document which is identified in such description are *prima facie* not within "the content of the application as filed" for the purpose of Art. 123(2). It is only under particular conditions that such features can be introduced by way of amendment into the claims of an application.

Such an amendment would not contravene Art. 123(2) if the description of the invention as originally filed leaves no doubt to a skilled reader (see T 689/90, OJ 10/93, 616) that:

- (i) protection is or may be sought for such features;
- (ii) such features contribute to solving the technical problem underlying the invention;
- (iii) such features at least implicitly clearly belong to the description of the invention contained in the application as filed (Art. 78(1)(b)) and thus to the content of the application as filed (Art. 123(2)); and
- (iv) such features are precisely defined and identifiable within the disclosure of the reference document.

Moreover, documents not available to the public on the date of filing of the application can only be considered if (see T 737/90, not published in OJ):

- (i) a copy of the document was available to the EPO on or before the date of filing of the application; and
- (ii) the document was made available to the public no later than on the date of publication of the application under Art. 93 (e.g. by being present in the application dossier and therefore made public under Art. 128(4)).

5.3.9 Alteration, excision or addition of text

Alteration or excision of the text, as well as the addition of further text, may introduce fresh subject-matter. For instance, suppose an invention related to a multi-layer laminated panel, and the description included several examples of different layered arrangements, one of these having an outer layer of polyethylene; amendment of this example either to alter the outer layer to polypropylene or to omit this layer altogether would not normally be allowable. In each case, the panel disclosed by the amendment example would be quite different from that originally disclosed and, hence, the amendment would introduce fresh subject-matter and therefore be unallowable.

5.3.10 Replacement or removal of a feature from a claim

The replacement or removal of a feature from a claim does not violate Art. 123(2) if the skilled person would directly and unambiguously recognise that:

- (i) the feature was not explained as essential in the disclosure;
- (ii) the feature is not, as such, indispensable for the function of the invention in the light of the technical problem the invention serves to solve; and
- (iii) the replacement or removal requires no real modification of other features to compensate for the change.

In case of a replacement by another feature, the replacing feature must of course find support in the original application documents, so as not to contravene Art. 123(2) (see T 331/87, OJ 1-2/1991, 22).

5.3.11 Disclaimers not disclosed in the application as filed

Limiting the scope of a claim by using a "disclaimer" to exclude a technical feature not disclosed in the application as filed does not infringe Art. 123(2) in the following cases (see G 1/03, OJ 8-9/2004, 413, and G 2/03, OJ 8-9/2004, 448, and III, 4.20):

- (i) restoring novelty over a **disclosure under Art. 54(3)**;
- (ii) restoring novelty over an **accidental anticipation** under Art. 54(2). "An anticipation is accidental if it is so unrelated to and remote from the claimed invention that the person skilled in the art would never have taken it into consideration when making the invention". The status of "accidental" should be ascertained without looking at the available further state of the art. A related document does not become an accidental anticipation merely because there are other disclosures even more closely related. The fact that a document is not considered to be the closest prior art is insufficient for achieving the status of "accidental". An accidental disclosure has nothing to do with the teaching of the claimed invention, since it is not relevant for examining inventive step. For example, this is the case when the same compounds serve as starting materials in entirely different reactions yielding different end products (see T 298/01, not published in OJ). A prior art, the teaching of which leads away from the invention, however, does not constitute an accidental anticipation; the fact that the novelty destroying disclosure is a comparative example is also insufficient for achieving the status of "accidental" (see T 14/01 and T 1146/01, both not published in OJ);
- (iii) removing subject-matter which, under Art. 52 to Art. 57, is excluded from patentability for **non-technical reasons**. For example, the insertion of "non-human" in order to satisfy the requirements of Art. 53(a) is allowable.

However, an undisclosed disclaimer is **not** allowable if:

- (i) it is made in order to exclude **non-working embodiments** or remedy **insufficient disclosure**;
- (ii) it makes a **technical contribution**.

An undisclosed disclaimer is, **in particular**, **not** allowable in the following situations:

- (i) the limitation is relevant for assessing inventive step;

- (ii) the disclaimer, which would otherwise be allowable on the basis of a conflicting application alone (Art. 54(3)), renders the invention novel or inventive over a separate prior art document under Art. 54(2), which is a **not accidental** anticipation of the claimed invention;
- (iii) the disclaimer based on a conflicting application removes also a deficiency under Art. 83;

A disclaimer should remove no more than is necessary either to restore novelty or to disclaim subject-matter excluded from patentability for non-technical reasons. A claim containing a disclaimer must meet the clarity and conciseness requirements of Art. 84. In the interest of the patent's transparency, the excluded prior art should be indicated in the description in accordance with Rule 42(1)(b) and the relation between the prior art and the disclaimer should be shown.

5.4 Correction of errors

Rule 139
Art. 123(2)

Correction of errors is a special case involving an amendment, therefore the requirements of Art. 123(2) apply likewise.

Linguistic errors, errors of transcription and other mistakes in any document filed with the EPO may be corrected at any time. However, where the mistake is in the description, claims or drawings, both the error and the correction must be such that it is immediately evident (at least once attention is directed to the matter):

- (i) that an error has occurred; and
- (ii) what the correction should be.

Regarding (i), the incorrect information must be objectively recognisable for a skilled person, using common general knowledge, from the originally-filed application documents (description, claims and drawings) taken by themselves.

Regarding (ii), the correction should be within the limits of what a skilled person would derive directly and unambiguously, using common general knowledge, and seen objectively and relative to the date of filing, from the originally-filed application documents.

Evidence of what was common general knowledge on the date of filing may be furnished in any suitable form.

The priority documents cannot be used for the purposes mentioned under (i) and (ii) above (see G 3/89 and G 11/91, OJ 3/1993, 117 and 125, respectively).

Correction under Rule 139, second sentence, is of a strictly declaratory nature and establishes what a skilled person, using common general knowledge, would already derive on the date of filing from the parts of a European patent application, seen as a whole, relating to the disclosure (see G 3/89 and G 11/91 mentioned above). Therefore, the complete replacement of the application documents (i.e. description, claims and drawings) by other documents is not possible (see G 2/95, OJ 10/1996, 555).

Such requests for correction can only be considered until such time as the decision to grant a patent or to refuse the application has been handed over to the EPO's internal postal service, for transmittal to the applicant (in written proceedings) or has been pronounced in oral proceedings (see G 12/91, OJ 5/1994, 285).

5.5 Plural forms of amendment

A situation may arise in which, as a result of amendment, the application has two or more distinct sets of claims (see IV, 7.1.1 and III, 8.1). Rule 138

In examining the sets of claims referred to above, it will generally be found expedient to deal with each one quite separately, especially where the difference between them is substantial. The communication to the applicant will thus be divided into two or more parts, and the aim will be to have each set of claims, together with the description and drawings, brought into a state where it is in order to proceed to grant.

If the examiner considers that the description and drawings are so inconsistent with either set of claims as to create confusion, he should require the applicant to amend the description and drawings to remedy this. If the applicant voluntarily proposes such amendment the examiner should admit it only if he considers it necessary.

Hence this type of application will, after amendment, either consist of two or more distinct sets of claims each supported by the same description and drawings, or two or more sets of claims each supported by different descriptions and drawings.

A similar situation may arise where a final decision on entitlement to the grant of a European patent applies to only some of the States designated in the application (see VI, 9.2.4). Rule 18(2)

6. Discussion with the applicant

6.1 General remark

In this section the term "applicant" is intended to mean "representative" where he has appointed one. Where the applicant has appointed a representative, the communication should be with that representative.

6.2 Telephone conversation, personal interview

The circumstances in which it may be appropriate for the examiner to communicate with the applicant by telephone or propose an interview rather than send a further written action are considered in VI, 4.3. If the applicant requests an interview, the request should be granted unless the examiner believes that no useful purpose would be served by such a discussion. With regard to the issue of telephone conversations and personal interviews in response to the EESR, before the application has entered the examination phase, see B-XII, 9.

When an interview is arranged, whether by telephone or in writing, and whether by the examiner or the applicant, the matters for discussion should be stated. If the arrangement is made by telephone, the examiner should record the particulars and briefly indicate, in the file, the matters to be discussed.

The interview will normally be conducted solely by the examiner dealing with the application. It is not a formal procedure (for formal oral proceedings before the Examining Division, see E-III), and the recording of the interview depends upon the nature of the matters under discussion. Where the interview is concerned with the clarification of obscurities, the resolution of uncertainties, or putting the application in order by clearing up a number of minor points it will usually be sufficient if the examiner makes a note in the file of the matters discussed and the conclusions reached or amendments

agreed. If, however, the interview is concerned with resolving weightier matters, such as questions of novelty, inventive step, or whether the amendment introduces fresh subject-matter, then a fuller note of the matters discussed should be made in the file. It should always be made clear to the applicant that any agreement reached must ultimately be subject to the views of the other members of the Examining Division.

If a fresh objection of substance is raised at an interview and no amendment to meet it is agreed at the time, the objection must be confirmed by a communication giving the applicant a fresh period within which he may reply if he so wishes. Otherwise, time limits may not be altered as a result of an interview.

When the telephone is used to settle outstanding matters, the normal procedure should be for the examiner to telephone the applicant stating the number of the application he wishes to discuss and requesting the applicant to telephone back at a specified time. A note must be made in the file, giving particulars and identifying the matters discussed and any agreements reached. Any matters on which agreement was not reached should also be noted and the arguments adduced by the applicant should be summarised.

The records of interviews or telephone conversations should always indicate whether the next action is due to come from the applicant or the examiner.

7. Work within the Examining Division

7.1 General remarks

As stated in VI, 1.3, the examiner may seek the advice of other members of the Examining Division, if necessary, at any stage in the examination. However, a point will be reached when it becomes appropriate for the examiner to refer the case formally to the other members of the Examining Division. This will arise if he considers the case is in order to proceed to grant or, alternatively, where there seems no possibility of amendment which would overcome his objections or where the applicant has not overcome these objections, and the examiner considers the case is in order to proceed to refusal. There are also other circumstances in which reference to the Examining Division is appropriate, e.g. oral proceedings may be suggested by the examiner or requested by the applicant because an impasse has been reached. In considering whether to refer the application to the Division, the examiner should be guided by the principle stated in VI, 2.4.

7.2 Recommendation to grant

If the examiner considers that the application satisfies the requirements of the EPC and is thus in order to proceed to grant, he should make a brief written report (the "votum"). As a general rule, it will be appropriate in this report for the examiner to give the reasons why, in his opinion, the subject-matter as claimed in the application is not obvious having regard to the state of the art. He should normally comment on the document reflecting the nearest prior art and the features of the claimed invention which make it patentable, although there may be exceptional circumstances where this is not necessary, e.g. where patentability is based on a surprising effect. He should also indicate how any apparently obscure but important points have ultimately been clarified, and if there are any borderline questions which the examiner has resolved in favour of the applicant he should draw attention specifically to these.

7.3 Recommendation to refuse

When referring to the Examining Division an application which is not in order for grant of a patent, the examiner should make a written report which sets out the points at issue, summarises the case history to the extent necessary to enable the other members to obtain a quick grasp of the essential facts, and recommends the action to be taken, e.g. refusal, or grant conditional upon certain further amendments. As the other members will need to study the case themselves, there is no need for a detailed exposition. It will be useful, however, to draw attention to any unusual features or to points not readily apparent from the documents themselves. If the report recommends refusal and the issue seems clear-cut, the examiner may include with his report a draft reasoned decision for issue by the Examining Division (see VI, 2.4); if the issue is not clear-cut, the drafting of the reasoned decision should be deferred until the Division has discussed the case.

7.4 Tasks of the other members of the Examining Division

When an application is referred to the other members of the Division, they will first consider the case individually and each will indicate his opinion on the course of action to be taken. If there is complete agreement with the recommendation of the primary examiner, no meeting of the Division will be necessary. When further action is needed, the primary examiner will be entrusted with the work. If, however, there is not complete agreement immediately with the primary examiner, or at least one member of the Division wishes to discuss the case, a meeting of the Division will be arranged. At such a meeting, the Division should try to reach a unanimous opinion by discussion, but where this seems unlikely, the difference of opinion must be resolved by voting. When the Division is enlarged to four members (see VI, 7.8), the chairman has a casting vote should this be necessary.

Art. 18(2)

The other members of the Examining Division should bear in mind that their function generally is not to perform a complete re-examination of the application. If, following a discussion, the conclusions of the examiner entrusted with the examination are generally considered to be reasonable, the other members should accept them.

7.5 Further communication with the applicant

If, in the opinion of the Examining Division, the possibility exists of amending the application to bring it into a form which meets the requirements of the EPC, then the primary examiner should be entrusted with the task of informing the applicant that the Examining Division is of the opinion that the application should be refused on certain grounds unless satisfactory amendments are submitted within a stated period. If, within the time limit, satisfactory amendments are made, the examiner will then report back to the Examining Division recommending that the application should proceed to grant. If not, he should report back recommending refusal.

7.6 Refusal

If, on the other hand, the Examining Division is satisfied that the applicant has had sufficient opportunity to amend and that all the requirements are still not met, it should issue a decision to refuse the application; this decision will normally be drafted by the primary examiner.

Art. 113(1)
Art. 97(2)
Rule 111

The grounds of refusal must be stated and full reasons must be given. Refusal may be based only on grounds on which the applicant has had an opportunity to put forward comments. In addition, the applicant's attention must be directed to the provisions for appeal laid down in Art. 106 to 108. If oral proceedings take place (see E-III), the decision may be given orally but must subsequently be notified in writing, the time for appeal then running from the date of such notification.

7.7 Decision

Rule 113

Any decision is issued by the Examining Division as a whole and not by an individual examiner. All members, therefore, sign the written decision irrespective of whether or not it was a unanimous one. A seal may replace the signature.

7.8 Enlargement of the Examining Division; consultation of a legally qualified examiner

Art. 18(2)

If the Examining Division considers that the nature of the decision so requires, it is enlarged by the addition of a legally qualified examiner.

The participation of a legally qualified examiner or at least internal consultation of Directorate Patent Law, the department responsible for providing legally qualified members for Examining and Opposition Divisions, will be required if a difficult legal question arises which has not yet been solved by the Guidelines or by jurisprudence.

If the Examining Division has been enlarged by the addition of a legally qualified examiner, it consists of four members. In this case, in the event of parity of votes, the vote of the chairman will be decisive. As a rule, this enlargement of the Examining Division will be required in cases where evidence has to be taken according to Rule 117. The addition of a legally qualified examiner is to be considered also in the case of oral proceedings.

Depending on the nature of the problem, as an alternative to the enlargement of the Examining Division, internal consultation of a legally qualified examiner in Directorate Patent Law may take place. For instance, doubts may arise whether an application concerns an invention within the meaning of Art. 52(2) or whether the claimed invention is excluded from patentability by virtue of Art. 53. Consultation of a legally qualified examiner may also be appropriate in cases where legal considerations are predominant in respect to a decision, as in proceedings following a request for re-establishment of rights according to Art. 122. The formalities officer may also consult Directorate Patent Law in cases within the scope of the duties transferred to him according to Rule 11(3).

8. Search-related issues in examination

8.1 Search for conflicting European applications

As stated in VI, 2.2, the examiner will need to make a "topping-up" search for conflicting European applications falling within the area defined by Art. 54(3). This is because as a general rule the search files will not be complete in respect of such material at the time the main search is made. Since priority dates claimed (if any) may not be accorded to all or part of the application but may be accorded to the appropriate part of a conflicting application (see V, 2.1), this search should be extended so as to cover all European applications published up to eighteen months after the filing of the application under consideration. If the examiner is unable to complete

this "topping-up" search at the time the search opinion or the first communication under Art. 94(3) is prepared, he should ensure that such search is completed before the application is reported to be in order for the grant of a patent. In the rare case in which the application is found to be in order before this search can be completed (e.g. due to a request for accelerated prosecution of an application not claiming priority ("PACE", see Notice from the EPO dated 14 July 2007, Special edition No. 3, OJ EPO 2007, F.1), the grant of a patent should be postponed until the topping-up search can be completed.

8.2 Additional searches during examination

An additional search will sometimes be required either at the first stage of amendment or subsequently. This may arise for a number of reasons. First, an additional search may be necessary where a declaration or a partial search taking the place of the search report under Rule 63 has been issued at the search stage, and subsequently the deficiencies which rendered a meaningful search impossible have been corrected by amendment, or successfully refuted by the applicant. Secondly, an additional search may be necessary where a particular part of the application has not been searched because of an objection of lack of unity of invention, and the arguments put forward by the applicant have convinced the Examining Division that unity is given. Thirdly, an additional search may be necessary where the claims have been so amended that their scope is no longer covered by the original search. Exceptionally, an additional search may be required if the applicant resiles from an acknowledgement of prior art (see IV, 11.7.1) or if the examiner believes that material relevant to obviousness might be found in technical fields not taken into account during the search. Fourthly, an additional search may be necessary if the applicant has introduced a new priority claim after the date of filing: it is possible that the search examiner was unaware of the new priority claim and consequently focused the search strategy on the assumption that the filing date (or original priority date) was the "cut-off point". The new priority date could lead to the exclusion of one or more of the documents cited in the original search report from the state of the art.

If the application has been filed under the PCT, the search report will be the international search report made under the PCT, which will be accompanied by a supplementary European search report, unless the Administrative Council has decided that a supplementary report is to be dispensed with (see E-IX, 5.4). Both of these reports will have to be considered by the examiner when deciding whether any additional search is required.

Art. 153(6) and (7)

8.3 Search at the examination stage

Although in principle all search work (other than for Art. 54(3) material) should be done at the search stage, in exceptional circumstances the examiner is not barred from looking for a relevant document whose existence he knows of or has reason to suspect, if he can retrieve that document in a short time.

8.4 Citing documents not mentioned in the search report

A copy of any document cited by the examiner but not mentioned in the search report, for example one found in a search under VI, 8.1 or 8.2, should be sent to the applicant, and a further copy placed in the dossier so as to be available to the public.

9. Special applications

9.1 Divisional applications (see also A-IV, 1)

9.1.1 General remarks

Art. 76(1)

Subsequent to the filing of a European application, a divisional application may be filed. The divisional application is accorded the same filing date as the parent application and has the benefit of any right of priority of the parent application in respect of the subject-matter contained in the divisional application. A European application may give rise to more than one divisional application. A divisional application may itself give rise to one or more divisional applications.

9.1.2 Voluntary and mandatory division

Art. 82

The applicant may file a divisional application of his own volition (voluntary division). The most common reason, however, for filing a divisional application is to meet an objection under Art. 82 due to lack of unity of invention (mandatory division). If the examiner raises an objection due to lack of unity, the applicant is allowed a period (see VI, 10) in which to limit his application to a single invention. The limitation of the parent application has to be clear and unconditional. The communication inviting the applicant to limit the application due to lack of unity should therefore include a reference to the fact that if the application is not limited within the set time limit the application may be refused.

9.1.3 Time limit; abandonment of subject-matter

Rule 36(1)

For a divisional application to be validly filed, the parent application must be pending. An application is pending up to (but **not** including) the date on which the European Patent Bulletin mentions the grant of the patent (OJ 2/2002, 112). For further details, see A-IV, 1.1.1. ==

The mere deletion of subject-matter in the parent application is not prejudicial to the later filing of a divisional application. When deleting subject-matter, the applicant should, however, avoid any statements which could be interpreted as abandonment with substantive effect, thereby impeding the valid filing of a divisional application for that subject-matter (see also VI, 4.7, last paragraph).

9.1.4 Examination of a divisional application

Art. 76(1)

The substantive examination of a divisional application should in principle be carried out as for any other application but the following special points need to be considered. The claims of a divisional application need not be limited to subject-matter already claimed in claims of the parent application. However, under Art. 76(1), the subject-matter may not extend beyond the content of the parent application as filed. If a divisional application as filed contains subject-matter additional to that contained in the parent application as filed and the applicant is unwilling to remedy this defect by removal of that additional subject-matter, the divisional application must be refused under Art. 97(2) due to non-compliance with Art. 76(1). It cannot be converted into an independent application taking its own filing date. Moreover, a further divisional application for this additional subject-matter should also be refused under Art. 97(2) due to non-compliance with Art. 76(1).

Art. 123(2)

Amendments made to a divisional application subsequent to its filing must comply with the requirements of Art. 123(2), i.e. they may not extend the

subject-matter beyond the content of the divisional application as filed (see T 873/94, OJ 10/1997, 456).

If the subject-matter of a divisional application is restricted to only a part of the subject-matter claimed in the parent application, this part of the subject-matter must be directly and unambiguously derivable from the parent application as being a separate part or entity, i.e. one which can even be used outside the context of the invention of the parent application (see T 545/92, not published in OJ).

9.1.5 Description and drawings

The description and drawings of the parent application and the or each divisional application should in principle be confined to matter which is relevant to the invention claimed in that application. However, amendment of the description should be required only where it is absolutely necessary. Thus the repetition in a divisional application of matter in the parent application need not be objected to unless it is clearly unrelated to or inconsistent with the invention claimed in the divisional application. As for the matter of cross-references, there is no need for the examiner to check in the description since, under present practice, cross-references are always made between the parent and divisional applications. These appear on the front page of the respective application and patent published after receipt of the divisional application, unless the technical preparations for publication have already been completed.

9.1.6 Claims

The parent and divisional applications may not claim the same subject-matter (see IV, 7.4). This means not only that they must not contain claims of substantially identical scope, but also that one application must not claim the subject-matter claimed in the other, even in different words. The difference between the claimed subject-matter of the two applications must be clearly distinguishable. As a general rule, however, one application may claim its own subject-matter in combination with that of the other application. In other words, if the parent and divisional applications claim separate and distinct elements A and B respectively which function in combination, one of the two applications may also include a claim for A plus B.

9.2 Applications resulting from a decision under Art. 61

9.2.1 General remarks

In certain circumstances, before a patent has been granted on a particular application, it may be adjudged as a result of a final decision of a national court that a person other than the applicant is entitled to the grant of a patent thereon. In this event this third party may either:

- (i) prosecute the application as his own application in place of the applicant; Art. 61(1)(a)
- (ii) file a new European patent application in respect of the same invention; or Art. 61(1)(b)
- (iii) request that the application be refused. Art. 61(1)(c)

(See also IV, 10.3).

If the third party adopts the first of these options, he becomes the applicant in place of the former applicant and the prosecution of the application is continued from the position at which it was interrupted.

Art. 61(1) and (2)
Rule 17(1)

If, however, the third party files a new application under Art. 61(1)(b), the provisions of Art. 76(1) apply to this new application *mutatis mutandis*. This means that the new application is treated as though it were a divisional application i.e. it takes the date of filing and the benefit of any priority right of the original application. The examiner must therefore ensure that the subject-matter content of the new application does not extend beyond the content of the original application as filed. The original application is deemed to be withdrawn on the date of filing of the new application for the designated States concerned.

9.2.2 Original application no longer pending

In cases where the original application has been withdrawn, refused or deemed to be withdrawn and is thus no longer pending, Art. 61(1)(b) is applicable, thus allowing the third party to still file a new European patent application in respect of the same invention (see G 3/92, OJ 9/1994, 607).

9.2.3 Partial entitlement

Rule 18(1)

If, by a final decision, it is adjudged that a third party is entitled to the grant of a European patent in respect of only part of the matter disclosed in the European patent application, then the foregoing considerations apply only to that part. In such a case, option (i) mentioned in VI, 9.2.1 is not open to the third party and, regarding option (ii), the new application must be confined to that part of the original subject-matter to which he has become entitled. Similarly, the original application must, for the designated States concerned, be confined to the subject-matter to which the original applicant remains entitled. The new application and the amended original application will stand in a relationship to each other similar to that pertaining between two divisional applications, and they will each stand in a relationship to the original application similar to that in which divisional applications stand in relation to the application from which they are divided. The guidance set out in VI, 9.1.4, 9.1.5 and 9.1.6 is therefore applicable to this situation.

9.2.4 Entitlement for certain designated States only

Rule 18(2)

Where the final decision on entitlement applies only to some of the designated States, the original application may contain different claims, description and drawings for those States compared with the others (see VI, 5.5, last paragraph, and III, 8.2).

If the sole result of the application of Art. 61(1) is to divide the right to the grant between the original applicant and the third party so that each may apply for the entire subject-matter for different designated States, each application should be examined in the normal way without regard to the other, with the proviso that the subject-matter of each application must not extend beyond that of the original application.

9.3 Applications where a reservation has been entered in accordance with Art. 167(2)(a) EPC 1973

See III, 8.3.

9.4 International applications (Euro-PCT applications)

Art. 153

The general considerations relating to PCT applications are set out in E-IX. The examination of European applications made under the provisions of

the PCT should be carried out in exactly the same way as for other European applications. Where, however, the search is performed by an ISA other than the EPO, the examiner may have to consider both the international search report (with the corresponding International Preliminary Report on Patentability or the International Preliminary Examination Report) and a supplementary search report (with the corresponding search opinion) prepared by the EPO (see B-II, 4.3).

Rule 161 lays down the framework for amending the application after entry into the European phase. Without prejudice to Rule 137(2) to (4), the application may be amended once, within a non-extendable period of one month as from notification of a communication informing the applicant accordingly, the communication being issued promptly after expiry of the time limit for entry into the European phase. Where applicable, the application as amended serves as the basis for any supplementary search under Art. 153(7) (see B-II, 4.3).

Rule 161

Where the EPO is an elected Office, the international preliminary examination report and the documents attached to it must be considered in accordance with E-IX, 6.4.

10. Time limits for response to communications from the examiner

10.1 General considerations

The general considerations relating to time limits are set out in E-VIII. The time limit for response to a communication from the examiner should in general be between two and four months in accordance with Rule 132. The period to be allowed will be determined by the examiner taking all the factors relevant to the particular application into account. These include the language normally used by the applicant or his representative; the number and nature of the objections raised; the length and technical complexity of the application; the proximity of the EPO to the applicant or, if he has one, his representative; and the distance separating applicant and representative.

10.2 Special circumstances

In certain special circumstances the examiner may allow up to six months for the time limit. The six-month period may be appropriate, for instance, if the applicant resides a long way from his representative and the language of the proceedings is not one to which the applicant is accustomed; or if the subject-matter of the application or the objections raised are exceptionally complicated.

The search opinion is not a communication under Art. 94(3) and therefore no time limit is set.

11. Examination of observations by third parties

The general considerations relating to observations from third parties are set out in E-VI, 3. In the context of substantive examination, such observations are not taken into account unless a request for examination has been filed.

12. Oral proceedings

The general considerations relating to oral proceedings are set out in E-III.

13. Taking of evidence

13.1 General remark

The general considerations relating to the taking of evidence are set out in E-IV. This section deals only with the kind of evidence most likely to arise in pre-grant proceedings, viz. written evidence.

13.2 Producing evidence

An Examining Division would not, as a general rule, require evidence to be produced. The primary function of the examiner in proceedings before grant is to point out to the applicant any ways in which the application does not meet the requirements of the EPC. If the applicant does not accept the view of the examiner, then it is for the applicant to decide whether he wishes to produce evidence in support of his case and, if so, what form that evidence should take. The Examining Division should afford the applicant a reasonable opportunity of producing any evidence which is likely to be relevant.

However, this opportunity should not be given where the Examining Division is convinced that no useful purpose would be served by it, or that undue delay would result.

13.3 Written evidence

Written evidence could include the supply of information, or the production of a document or of a sworn statement. To take some examples:

To rebut an allegation by the examiner of lack of inventive step, the applicant might supply information as to the technical advantages of the invention. Again he might produce a sworn statement, either from himself or from an independent witness, purporting to show that workers in the art have been trying for a long time unsuccessfully to solve the problem with which the invention is concerned, or that the invention is a completely new departure in the relevant art.

14. The final stage of examination

14.1 Communication under Rule 71(3)

Rule 71(3)

Once the Examining Division has decided that a patent can be granted it must inform the applicant of the text on the basis of which it intends to do so. This text may include amendments and corrections made by the Examining Division on its own initiative which it can reasonably expect the applicant to accept.

Rule 71(3)

The text is communicated to the applicant by despatching a communication under Rule 71(3), in which the applicant is furthermore invited to pay the fee for grant and publishing and to file a translation of the claims in the two official languages of the EPO other than the language of the proceedings within a period of four months, which is non-extendable. Note that for European patent applications filed before 1 April 2009 and international applications entering the regional phase before that date the fee for grant and printing may include an element depending on the number of pages, but for applications filed or entering the regional phase on or after that date this additional element is payable as part of the filing fee (see A-III, 13.2).

If during examination proceedings a main and subsidiary requests have been filed (see VI, 4.1 and E-X, 3) and one of the requests is allowable, the communication pursuant to Rule 71(3) is to be issued on the basis of the (first) allowable request and must be accompanied by an explanation of the

reasons why the higher-ranking requests are not allowable (see also Legal Advice No. 15/05 (rev. 2), OJ 6/2005, 357).

If the application contains different sets of claims for particular Contracting States (see III, 8), a translation of all the sets of claims must be filed.

Only one copy of the translation need be filed.

The examiner should not concern himself with the quality of the translation filed.

If the text of the European patent application serving as the basis for grant contains more than fifteen claims, the Examining Division requests the applicant to pay, within the period under Rule 71(3), claims fees in respect of each claim over and above that number, unless he has already done so under Rule 45(1) or Rule 162(1) and 162(2) (see A-III, 9). Where there is more than one set of claims, fees are incurred under Rule 45(1), Rule 162(1) and 162(2) or Rule 71(6) only for the set with the greatest number of claims.

Rule 71(6)
Rule 45(1)
Rule 162(1) and (2)

In the communication under Rule 71(3), the applicant is asked whether he requests a paper copy of the patent specification to be supplied to him with the certificate for the European patent. This paper copy of the specification is supplied free of charge on request. For further details see VI, 14.10.

Rule 74

An annex to the communication under Rule 71(3) states the Contracting States which have been validly designated, the title of the invention in the three EPO official languages, the international patent classification and the registered name of the applicant.

The communication under Rule 71(3) also contains a reference to the relevant pages on the EPO website where information concerning translation requirements of the Contracting States under Art. 65(1) is published.

Art. 65(1)
Rule 71(10)

14.2 Grant of a patent

If the applicant pays the fee for grant and publishing and files the translation of the claims within the specified period, he is deemed to have approved the text intended for grant. Once all the requirements set out in VI, 14.1, are met, it is decided that a European patent is granted, provided that renewal fees and any additional fees already due have been paid.

Rule 71(3)
Art. 97(1)

If a renewal fee becomes due after notification of the Rule 71(3) communication but before the expected date of publication of the mention of the grant of the European patent, the mention is not published until the renewal fee has been paid. The applicant is informed accordingly. If the renewal fee or any additional fee is not paid in time, the application is deemed to be withdrawn.

Rule 71(9)
Art. 86(1)

In the rare case that examination was accelerated to such an extent that the communication under Rule 71(3) is issued before the designation fee becomes due, the mention of grant of the patent will not be published until the designation fee has been paid. The applicant is informed accordingly. For European patent applications filed before 1 April 2009 or international applications entering the regional phase before that date this publication will not take place until the designation fees have been paid and the designation of States for which no designation fees have been paid has been withdrawn (see also A-III, 11.1 and 11.3).

Rule 71(8)

Art. 97(3)	The decision to grant does not take effect until the date on which the grant is mentioned in the European Patent Bulletin.	
	14.3 Application deemed withdrawn	
Rule 71(7)	If the applicant fails to pay the fee for grant and publishing or the claims fees or to file the translation in due time, the application is deemed to be withdrawn. This applies also if the applicant merely states in his reply to the communication under Rule 71(3) that he does not approve of the text proposed for grant.	⊢
	14.4 Amendments filed in reply to a communication under Rule 71(3)	
Rule 71(3) Rule 137(3)	The communication under Rule 71(3) does not constitute an opportunity for the applicant to call into question the outcome of the earlier procedure. At this stage of the proceedings, substantive examination has already been completed and the applicant has had the opportunity to amend the application and therefore normally only those amendments which do not appreciably delay the preparations for grant of the patent will be admitted under Rule 137(3). It is, however, appropriate to admit separate sets of claims for one or more designated States that made a reservation under Art. 167(2) EPC 1973 (see III, 8.3) or for which prior national rights exist (see III, 8.4).	
Rule 137(3)	However, if no communication under Art. 94(3) has preceded the communication under Rule 71(3) the latter is a "first communication" within the meaning of Rule 137(3). This means that the applicant may amend the description, claims and drawings of his own volition (see VI, 3.3 for the conditions any amendment must satisfy). Nonetheless, unless the applicant's response corresponds to one of the exceptions defined in VI, 14.4.1, the fee for grant and publishing must be paid and the translations of the claims filed, as required by Rule 71(4).	⊢
Rule 71(4)	If, in reply to the communication under Rule 71(3) and within the specified period, the applicant files a request for amendments under Rule 137(3) and/or a correction of errors under Rule 139, and these concern the claims, the request should be accompanied by a translation of the claims as amended and/or corrected. This applies regardless of whether the request is an explicit request for amendment or is drafted as an approval which is conditional on the filed amendments. Failure to observe this requirement results in the application being deemed withdrawn (Rule 71(7)). Provided that the applicant has filed the translation of the claims as amended and/or corrected and has paid the fee for grant and publishing within the specified period, he is deemed to have approved the grant of the patent as amended and/or corrected.	⊢
	If the Examining Division gives its consent under Rule 137(3) to these amendments and/or the correction and considers them allowable without issuing a further communication under Art. 94(3), it does not issue a second communication under Rule 71(3), but proceeds to the grant of the patent pursuant to Art. 97(1).	
Rule 71(5)	If, under Rule 137(3), the Examining Division does not admit the amendments and/or corrections proposed (cf. VI, 4.7 - 4.9) or does not allow the amendments and/or corrections because the application does not comply with the requirements of the EPC (see VI, 3.3, 5.2 and 5.4), the Examining Division informs the applicant of this fact, stating its reasons and giving him an opportunity to submit within a specified period his observations and any amendments considered necessary by the Examining Division and, where	

the claims are again amended, a translation of the claims as amended. The procedure may subsequently continue e.g. as follows:

- (i) if the applicant fails to reply within the specified period, the application is deemed to be withdrawn (Art. 94(4));
- (ii) if the applicant withdraws the amendments and/or corrections he requested with his reply to the Rule 71(3) communication, a translation of the claims as annexed to the Rule 71(3) communication must be filed within the specified period;
- (iii) if the applicant submits his observations while maintaining the requested amendments and/or corrections and the Examining Division sees no reason to change its opinion not to admit the amendments pursuant to Rule 137(3) or not to allow them, for the reasons given, the application is refused under Art. 97(2), since, in these circumstances, there is either no text of the application which has been agreed by the applicant and admitted by the Examining Division (Art. 113(2)) or the application does not meet the requirements of the EPC; or Art. 113(2)
- (iv) if the applicant files further amendments, and these concern the claims, a translation of these claims must be filed within the specified period.

The procedure under Rule 71(5) should however not normally be applied if the communication under Rule 71(3) was the first communication from the examining division (see VI, 4.9, last paragraph). In these circumstances the normal procedure following the filing of amendments which are not allowable would be the resumption of the examination procedure as described in VI, 14.5.

14.4.1 Exceptions to the requirement of Rule 71(4)

The requirement of Rule 71(4) concerning the filing of translations and payment of fees however does not apply in the three following situations, in which the changes to the applicant's requests do not represent amendments within the meaning of Rule 137(3):

- (i) if the communication under Rule 71(3) was based on a subsidiary request, and the applicant replies by maintaining one or more higher requests which do not meet the requirements of the EPC (see also Legal Advice 15/05 (rev. 02), OJ 6/2005, 357);
- (ii) if the communication under Rule 71(3) included amendments to the claims carried out by the examining division (see VI, 14.1, first paragraph), and the applicant responds by indicating that he does not approve of these amendments and maintains his request as on file when the communication under Rule 71(3) was issued; or
- (iii) if due to an error on the part of the EPO, the communication under Rule 71(3) was based on the wrong documents, and the applicant replies by pointing out or correcting that error.

If, as described in paragraph (i) above, the applicant maintains a higher ranking request which is not allowable, or if, as described in paragraph (ii) above, he does not agree to the amendments proposed by the examining division but instead maintains his request in an unallowable form, then a reasoned refusal under Art. 97(2) would be issued, preceded where necessary by a communication setting out the reasons why the request is not allowable. If on the other hand, agreement is reached on an allowable text, where necessary following further communication from the examining division and response from the applicant, a second communication under

Rule 71(3) will have to be issued in order to indicate the requirement for the translations and fees and to reset the related time limits. However, no further communication under Rule 71(3) would be required under the circumstances of paragraph (iii) above if the applicant replied to the original communication under Rule 71(3) by filing, of his own volition, the correct documents together with the translations and paid the fee, in which circumstances the application could proceed directly to grant.

14.5 Resumption of the examination procedure

The Examining Division may resume the examination procedure at any time up to the moment the decision to grant is handed over to the EPO's internal postal service for transmittal to the applicant. This will seldom occur, but may be necessary if e.g. the applicant files further prior art which necessitates further substantive examination, if the Examining Division becomes aware of very relevant prior art following observations by third parties under Art. 115, if one of the exceptions of VI, 14.4.1(ii) and VI, 14.4.1(iii) applies, or if the communication under Rule 71(3) was the first communication from the examining division and the applicant responds by filing amendments which are not allowable. A second Rule 71(3) communication is sent out if the resumed examination results in a text on the basis of which a patent can be granted. The fee for grant and publishing should not be paid again if they were already paid in response to the first Rule 71(3) communication.

14.6 Further processing

Art. 121 If the applicant overruns the time limit set under Rule 71(3) or 71(5), he may request further processing under Art. 121 (see E-VIII, 2.1).

14.7 Refund of fees

Rule 71(5) If the European patent application is refused, withdrawn or deemed to be withdrawn, the fee for grant and publishing and any claims fees paid under Rule 71(6) are refunded.

14.8 Publication of the patent specification

Rule 69 The decision to grant contains the date of the mention of the grant of the European patent and is sent to the applicant when the technical preparations for printing the patent specification have been completed.

Art. 98 As soon as possible after the mention of the grant is published in the
Rule 68(2) Bulletin, the EPO publishes the patent specification containing the
Rule 73 description, claims (in the three official languages) and any drawings. The
Art. 14(6) front page of the published specification shows inter alia the Contracting States which are still designated at the time of grant (or the designation of which has been withdrawn after completion of the technical preparations for printing).

Mistakes in the specification of a European patent arising in the course of its production have no effect on the content of the patent granted. For this, only the text on which the decision to grant the patent is based is decisive (see Legal Advice No. 17/90, OJ 6/1990, 260).

14.9 Withdrawal before publication of the patent specification

Rule 73 The specification of the European patent is not published if the application is withdrawn before termination of the technical preparations for publication. If after termination of the technical preparations the application

is withdrawn to avoid publication, non-publication cannot be guaranteed. The EPO will, however, try (in accordance with the principles of J 5/81, OJ 4/1982, 155) to prevent publication on a case-by-case basis if the stage reached in the publication procedure permits this reasonably easily. The application may be withdrawn by means of a signed declaration, which should be unqualified and unambiguous (see J 11/80, OJ 5/1981, 141). The applicant is bound by an effective declaration of withdrawal (see Legal Advice No. 8/80, OJ 1/1981, 6).

14.10 Certificate

As soon as the European patent specification has been published, the EPO issues the proprietor with a certificate attesting that the European patent has been granted to the person named in the certificate. Upon special request filed within the time limit of Rule 71(3) a copy of the patent specification is attached to the certificate. The proprietor may also request that a duplicate copy of the certificate with the specification attached be supplied to him upon payment of an administrative fee. For further details see the Decision of the President of the EPO dated 12 July 2007 (Special edition No. 3, OJ EPO 2007, D.2).

Rule 74

14.11 European Patent Bulletin

If no notice of opposition is recorded in the dossier of the European patent within nine months of publication of the mention of grant, the patent proprietor is informed and an appropriate entry is published in the European Patent Bulletin (point 1, Art. 1, Decision of the President of the EPO dated 12 July 2007, Special edition No. 3, OJ EPO 2007, E.1). If, subsequently, it emerges that an opposition was filed in time, the proprietor is again informed and a correction is published in the Bulletin.

Art. 129(a)