

A-Book

*How to draft claims
and the introductory part of a European patent application
and pass paper A of the European Qualifying Examination*

Founding Author and Editor:

Erich Wäckerlin († 2018)

Former member of a Technical Board of Appeal of the EPO and tutor at the International Section of CEIPI, Université Robert Schumann, Strasbourg.

Co-Editor

Michael Wäckerlin

Continued by:

Harrie Marsman

European representative and tutor at CEIPI, Strasbourg.

Leseprobe



Carl Heymanns Verlag 2019

Contributions

Author and Editor, first edition:	Erich Waeckerlin
Co-Editor, first edition:	Michael Waeckerlin
Author and Editor, second edition:	Harrie Marsman
Contributors:	
Erich Waeckerlin, Harrie Marsman	Chapters 1 to 12; Appendices 1, 4-6;
Thierry Debled	Charts of of paper A 2009 Chemistry
Steef Polderdijk	Appendix 2 and 3: Model solutions of paper A 2017 and 2018 in English
Emanuel Potdevin, Marie Audrin, Thomas Lederer, Armin Zellner	Appendix 2 and 3: Translations in French and German

Detailed Contents

Foreword	VII
Preface to the first edition	IX
Preface to the second edition	XI
Contributions	XIII
Contents	XV
Abbreviations used	XXI
1 Introduction	1
1.1 Object of this book	1
1.2 Filing of European patent applications	1
1.3 Description of paper A	2
1.4 Study materials for the preparation for paper A	3
1.4.1 European Patent Convention (EPC)	3
1.4.2 Official Journal of the EPO	4
1.4.3 Guidelines for Examination in the European Patent Office	4
1.4.4 Case law of the EPO Boards of Appeal	5
1.4.5 Regulation on the European qualifying examination for professional representatives	5
1.4.6 Examination Compendium	6
1.4.7 Recommended commentaries in English, French and German	6
1.4.8 Selected guides for the preparation of the EQE	7
1.4.9 EQE online support by the EPO	7
1.5 Overall method for solving paper A	8
1.6 How to use this book	10
2 Methodology	11
2.1 Objective	11
2.2 Preliminary steps	11
2.2.1 Regulation on the EQE	12
2.2.2 Implementing provisions to the Regulation on the EQE (IPREE)	13
2.2.3 Instructions to the candidates	16
2.3 Detailed methodology for solving paper A	18
2.3.1 Step 1: Overview of the components of paper A	19
2.3.2 Step 2: Preliminary analysis	20
2.3.3 Step 3: In-depth analysis	25
2.3.4 Step 4: Determining the subject-matter to be claimed	47
2.3.5 Step 5: Drafting the independent claims	55
2.3.6 Step 6: Drafting the dependent claims	79
2.3.7 Step 7: Drafting the supplementary note	86
2.3.9 Step 9: Drafting the introductory part of the description	93
2.3.10 Step 10: Final check	100
2.4 Strategy for solving paper A	101
3 Interpretation and analysis of disclosures	107
3.1 Legal basis	107
3.2 Relevance to paper A	107
3.3 Interpreting features	107
3.3.1 Interpreting technical terms and expressions	108

3.3.2	Non-limiting features.....	108
3.3.3	Identical features.....	108
3.3.4	Generic versus specific features.....	109
3.3.5	Features incorporated by reference.....	109
3.3.6	Implicit features.....	109
3.3.7	Finding mandatory and optional features.....	110
4	State of the Art.....	113
4.1	Legal basis.....	113
4.2	Relevance to paper A.....	114
4.3	State of the art.....	114
4.4	Examples from past papers.....	115
5	Patentable and non-patentable inventions.....	121
5.1	Legal basis.....	121
5.2	Relevance to paper A.....	123
5.3	Patentable inventions.....	123
5.4	Non-inventions according to Art. 52(2), (3) EPC.....	124
5.5	Exceptions to patentability under Art. 53 EPC.....	125
5.6	Non-technical features.....	126
5.7	Industrial application.....	126
5.8	Examples from past papers.....	126
6	Novelty.....	131
6.1	Legal basis.....	131
6.2	Relevance to Paper A.....	133
6.3	Analysis of novelty.....	133
6.4	Parameters.....	135
6.5	Novelty of selection inventions.....	135
6.5.1	Selection of chemical substances or groups of substances from generic formulae comprised in the state of the art.....	136
6.5.2	Selection of sub-ranges from broader ranges comprised in the state of the art.....	136
6.5.3	Overlapping ranges.....	137
6.5.4	Multiple selections.....	137
6.6	Novelty test.....	137
6.7	Examples from past papers.....	138
7	Inventive Step.....	145
7.1	Legal basis.....	145
7.2	Relevance to Paper A.....	146
7.3	Outlines of the problem and solution approach.....	147
7.4	The meaning of the requirement of inventive step in Paper A.....	149
7.5	Examples from past papers.....	150
8	Claims.....	155
8.1	Legal basis.....	155
8.2	Requirements according to Art. 84 EPC.....	155
8.3	Provisions regarding the form and content of claims.....	156
8.4	Kinds of claims.....	157
8.5	Clarity and interpretation of claims.....	158
8.6	Support of the claims by the description.....	159
8.7	Combinations of independent claims in different categories.....	159
8.8	More than one independent claim in the same category.....	160
9	Drafting independent claims.....	161
9.1	Legal basis.....	161
9.2	General principles.....	161

9.3	Drafting independent claims	161
9.4	Things to avoid when drafting independent claims.	165
9.5	Relevance to Paper A	166
9.6	Examples of independent claims	166
10	Drafting dependent claims.	169
10.1	Legal basis	169
10.2	General principles applicable to dependent claims	169
10.3	Relevance to Paper A	171
10.4	Examples from past papers	172
11	Drafting the introductory part of the description	181
11.1	Legal basis	181
11.2	Outlines	181
11.3	Relevance to paper A	181
11.4	Drafting the introduction	182
11.5	Checking the introduction.	183
12	Special Topics	185
12.1	Generalisations in independent claims	185
12.2	How to achieve the broadest possible protection	186
12.3	Separate applications	186
12.4	Drafting a supplementary note	186
12.5	Examples from past papers	186
Appendix 1:	Template of Analysis Sheet	189
Appendix 2:	Model solution of paper A 2017	191
Appendix 3:	Model solution of paper A 2018	199
Appendix 4:	Sample of EQE lined paper	209
Appendix 5:	References to frequently required sources of information regarding the practice to be followed under the EPC	211
Appendix 6:	Checklists.	217
Appendix 6.1:	Checklist for independent claims	218
Appendix 6.2:	Checklist for dependent claims	220
Appendix 6.3:	Checklist for the set of claims as a whole	222
Appendix 6.4:	Checklist for the final check of the answer paper	223
Index.		225

1 Introduction

1.1 Object of this book

The European qualifying examination (EQE) is designed to establish whether a candidate is qualified to practise as a professional representative before the European Patent Office. Passing the examination requires a wide range of technical and legal knowledge, as well as the ability to analyse complex patent-related issues within a very short time. A clear strategy and efficient methods for solving the papers are crucial for success. 1

The first object of this book is to provide a qualitative introduction to the basic concepts of paper A. Chapter 1 is designed to make you aware of the characteristic features of paper A, and to give you some hints regarding the working tools. This chapter should not absorb too much of your time, but it is not recommended to skip it completely. 2

The presentation of the methodology for solving paper A counts among the key issues. To say it clearly: there is not just one way of performing the various tasks within the framework of the paper, and no particular method can claim to be perfect. Many roads lead to Rome, but irrespective of this it is essential to know at least one viable path which leads to the goal. Once you have studied Chapter 2 of this book, you should not only have a fairly good understanding of the problems, but also a sound idea how these problems can be overcome. This will enable you to adapt the method to your own needs and preferences. 3

There exists extensive literature dealing with the fundamental concepts of patent law such as patentable and non-patentable inventions, state of the art, novelty and inventive step. Since these concepts are well known, there is hardly any need to repeat them, thus reinventing the wheel. It is essential, however, to be aware of the relevance of the concepts to paper A. These topics are elaborated in Chapters 3 to 8. 4

The following part of the book gives a practical guide to drafting the answer paper. It comprises four chapters devoted to the drafting of the independent and the dependent claims (Chapters 9 and 10) and the drafting of the introductory part of the description (Chapter 11). 5

Some particularly important special topics such as generalisations in claims, the achievement of the broadest possible scope of protection and issues of terminology are addressed in Chapter 12. 6

You may wish to study a model solution of paper A. For this purpose, model solutions of single Papers A 2017 and 2018 have been included as Annexes. These model solutions correspond to the expectations of the Examination Committee and illustrate the format of the answer paper. 7

The preceding remarks should make clear that active participation is required to benefit from the content of this book. Simply reading or learning the topics by heart brings practically nothing. Treat every topic of the book as if you were trying to discover it yourself, using the text merely as a guide that you should leave behind. Remember that the best method of learning new things is to practice them. With this in mind, you will hopefully enjoy what is presented in the book. 8

1.2 Filing of European patent applications

The grant procedure for European patent applications comprises two stages. In the first stage an examination on filing and a formalities examination of the application are carried out (Art. 90 EPC). Subsequently, an extended European search report in the form of a European search report, normally accompanied by a non-binding opinion on patentability is drawn up (Art. 92 EPC; Rule 62 EPC). After receiving the search report and before receiving the first communication from the Examining Division, the applicant is invited (Rule 70(2) EPC; Rule 70a(1), (2) EPC) to submit substantive observations on any objections raised in the extended search report. He may also amend the description, claims and drawings of his own volition (Rule 137(1), (2) EPC). 9

- 10 The second stage comprises the substantive examination (Art. 94 EPC). Whenever the examination reveals that the application does not meet the requirements of the EPC, the Examining Division issues a reasoned first communication inviting the applicant to file observations and, if necessary, submit amendments to the description, claims and drawings (Art. 94(3) EPC; Rule 71(1), (2) EPC). The applicant is required to respond to the search opinion within the time limit for filing the request for examination. All objections raised by the Examining Division should be considered, so that the examination procedure can be completed after as few actions as possible. If, after examining the response from the applicant, the application is still not ready for grant, the examination is continued. Further written communications are issued as often as necessary (Art. 94(3) EPC), but no further amendments are possible without the consent of the Examining Division (Rule 137(3) EPC).
- 11 The examination procedure leads to the decision to grant the patent, or to refuse the application (Art. 97(1), (2) EPC), depending on whether the application is in conformity with the requirements of the EPC, or not.
- 12 After validation, filings of European patent applications take effect in all designated contracting states to the EPC. The centralised grant procedure in one language is an effective alternative to separate national filings in each of the concerned states.

1.3 Description of paper A

- 13 The framework of paper A is laid down in Art. 1(4) of the Regulation on the European qualifying examination for professional representatives (REE) and Rule 23 of the Implementing provisions to the Regulation on the European qualifying examination (IPREE). In addition, the Regulation on the European qualifying examination for professional representatives in Supplementary publication 2 of OJ EPO 2019 comprises instructions to candidates.
- 14 Paper A tests the candidate's ability to draft claims and the introductory part of a European patent application. It concerns the stage before filing the application. Subsequent steps of the filing procedure, such as responding to the extended European search report and replying to communications issued by the Examining Division are not objects of paper A, but rather of paper B.

Paper A used to be set in two technical fields, namely Electricity/Mechanics and Chemistry, and candidates were free to choose between the two alternatives. However, as from 2017, a single paper A is set in a technical field that is accessible to everyone.

- 15 According to Rule 23 IPREE, the duration of the paper is three and a half hours; yet as from 2017, candidates sitting paper A are granted an additional thirty minutes (Decision of the Supervisory Board, 17 November 2016 (Supplementary publication 2 – OJ EPO 2017, 43). At first sight this seems like a lot of time, but what is said in the “*C-Book*” on paper C applies also to paper A; “*The many pieces of information to be considered, the number of decisions to be taken and the parts of the solution to be written mean that good time management is essential*” (p. 3).
- 16 The general scenario of paper A is a letter from the client/applicant which includes a description of an invention for which the client wishes to obtain a European patent. In addition, references to the most pertinent state of the art known to the client are given. The number of parts that make up paper A may vary from one year to another.
- 17 The text of single paper A in the 2017, 2018 and 2019 EQEs comprised a letter from the applicant accompanied by drawings, and two documents representing the state of the art.
- 18 In the years before 2017, the text of paper A Electricity/Mechanics comprised always a letter from the client accompanied by one or more drawings. No further parts were included in 2006, 2008 and 2009. Usually, a few documents and drawings representing the state of the art formed also part of the paper. In the years most recent to 2017, two documents, each accompanied by a set of drawings, were included, but throughout the years the number varied from one to three.
- 19 The structure of paper A Chemistry was similar, but not identical. There was again always a letter from the client, called “*letter from the applicant*” since the year 2003. In the

majority of cases, two documents representing the state of the art were added. Exceptionally, the number of such documents was one or three. Drawings were consistently incorporated in the documents and not specified separately. An extraordinary situation occurred in 2003, when the letter from the applicant was complemented by a fax wherein the applicant provided further information on the invention.

The main task of paper A is to draft one or more independent claims which offer the broadest possible protection in accordance with the EPC. A reasonable number of dependent claims should also be drafted in order to provide a fall-back position in case the independent claims are rejected. All claims have to meet the requirements of the EPC, in particular regarding novelty, inventive step, clarity and unity of invention. When drafting the claims due consideration should be given to the recommendations contained in the Guidelines for Examination in the EPO. 20

Another important task is to draft an introduction, i.e. that part of the description, which precedes the examples and/or the explanation of the drawings. The introduction has to be drafted in a manner providing support for the claims as required by Art. 84 EPC. In particular, candidates have to give consideration to the advisability of mentioning the advantages of the invention in the introduction. 21

Candidates are free to draft, in addition to the claims and the introduction, a supplementary note. Therein, they may outline the reasons for the choice of answer, for example why they have selected a particular form of claim, or why they have used a particular piece of prior art as the starting point. However, supplementary notes cannot replace essential parts of the answer (Rule 23(6) IPREE). 22

Although the tasks involved in paper A reflect to a certain extent the daily work of a professional representative before the EPO, candidates should bear in mind that, unavoidably, the scenario of the paper is quite artificial. In this respect paper A resembles paper C. It would be unrealistic to expect a close correspondence between paper A and real-life situations. When sitting the examination, it is for example impossible to ask the applicant any questions. Moreover, candidates have only very limited control over the time which is available for performing the individual tasks. What makes things worse: both the set of claims and the introduction have to meet the requirements of the EPC from the outset, since there is no opportunity to enter into a dialogue with the Examining Division and to effect any subsequent amendments. Candidates who consider these circumstances and their implications have an advantage, whereas disrespect for them may lead to failure. 23

When enrolling for the examination, candidates may request to submit their answer in an official language of a contracting state which is not an official language of the EPO. In this case, the Secretariat arranges for a translation into one of the EPO official languages (Art. 12(3) REE; Rule 5 (1) IPREE). It is important to note, however, that the examination papers are drawn up only in the three official languages of the EPO, namely English, French and German. All candidates receive them in all three languages (Art. 12(1) REE). These copies are the basis for elaborating the answer paper. 24

1.4 Study materials for the preparation for paper A

The following list gives an overview of legal sources, commentaries and other materials for the preparation of the examination. 25

Legal texts

1.4.1 European Patent Convention (EPC)

The 16th printed edition published in June 2016 is available in English, French and German. It contains the following texts: 26

- European Patent Convention (EPC)
- Implementing Regulations to the EPC (usually also abbreviated EPC)

(7) Draft the supplementary note, if any	(Rdn. 689–711)	
(8) Checking the claims	(Rdn. 712–717)	
(9) Drafting the introductory part of the description	(Rdn. 718–752)	
(10) Performing the final check	(Rdn. 753–755)	
These steps are explained in detail in the following sections.		186

2.3.1 Step 1: Overview of the components of paper A

Paper A comprises always a letter from the client in which one or more inventions are described for which the client wishes to obtain a patent (see Rule 23(2) IPREE). Moreover, there is at least one separate document representing the state of the art. 187

A quick look at the front page of paper A gives a first impression of the components comprised in the paper.

Examples:

The front page of single papers A 2017 and 2018 illustrates the standard configuration of a letter from the client accompanied by two documents representing the state of the art: 188

“This paper comprises:

Letter from the applicant

Document D1

Document D2”

Single paper A 2019 also refers to:

Drawings of the application

These single papers A contained drawings at the end of the letter of the applicant. In one of the prior art documents of paper A 2017 and in both prior art documents of paper A 2019 also a drawing was present. 189

Realising that only three single papers A are at the moment of writing this book available (and one Mock Paper A provided as an example by the EQE committee), yet wishing to provide some additional examples, we will refer herein-below to some earlier Electricity/Mechanics and Chemistry papers A.

The Electricity/Mechanics papers contained always drawings usually presented in the form of separate documents.

In contrast, in Chemistry papers drawings are an exception. Whenever generic formulae form part of the paper, they are integrated in the text. The front page of paper A 2014 Chemistry illustrates the standard configuration: 190

“This paper comprises:

Letter from the applicant

Document D1

Document D2”

The number of documents pertaining to the state of the art varied from one year to another and ran from one to three. In 2009, 2008 and 2006, the paper A Electricity/Mechanics contained no separate document pertaining to the state of the art, but these were exceptional situations. 191

A special example is paper A 2003 Chemistry: 192

“This paper comprises:

Letter from the applicant

Document 1 (State of the art)

Document 2 (State of the art)

Fax from the applicant”

- 193 It is quite extraordinary that in this case the paper contained two documents from the client, namely a letter and a subsequent fax message. Candidates who did not realise this at the very beginning were at risk to overlook essential information when drawing their answer. Others became aware of the fax message, but only after having drafted their set of claims.

In step 1 of the method, you should do the following things:

- Sign the coloured labelled cover sheet which you receive at the examination (see Point 7 of the Instructions)
- Check, whether you have copies of paper A in English, French and German (see Art. 12 REE; Point 23(a) Instructions)
- Arrange the material and tools that you need for solving the paper (EQE lined paper, pens, books, etc.)
- Have a look at your copy of paper A to find out what the different parts are
- Check whether each part is complete (see Point 7 Instructions)

Example: Paper A 2009 Chemistry

- 194 On the basis of single papers A 2017, 2018 and 2019, we believe that paper A 2009 Chemistry is a suitable and illustrative example for teaching purposes; also because we believe that it is not too difficult to understand for non-chemists. Because of the low number of available single papers A, some remarks will be made herein-below on Electricity/Mechanics papers A and Chemistry papers A.

A quick look at the front page of the paper provides the following information:

- 195 Paper A 2009 Chemistry consists of the letter from the applicant (pages 1 to 7) and two documents representing the state of the art D1, D2 (pages 8–9 and 10–11, respectively).

2.3.2 Step 2: Preliminary analysis

- 196 This step serves the purpose of providing a rough idea what the paper is about. It consists in browsing the text of the letter from the client and the documents representing the state of the art. The result is a first impression of the technical content of the paper. Try to understand the outlines of the paper, but do not spend time on details. The comprehensive in-depth analysis will be made later.

- 197 All conclusions drawn in step 2 are provisional, of course. They are subject to revision in the subsequent steps.

- 198 Paper A Electricity/Mechanics described normally one single invention. In most years, several distinct embodiments of the invention were disclosed in the letter from the applicant that could be claimed in one independent claim. Exceptionally, there is more than one invention, for example a device and a method for its manufacture.

- 199 In contrast, paper A Chemistry related only exceptionally to less than three separate embodiments to be claimed in at least two, but often at least three independent claims or claims of different categories.

- 200 Quite often, but not always, it was possible to recognise at first sight, whether there is more than one invention, or not. Whatever the situation is, there is no need to spend time on the issue of unity of invention at the stage of preliminary analysis. Unity will be analysed later.

So far, for the single papers A, at least two independent claims or categories were aimed at.

- 218 Once you have reached the end of the letter from the client, you know what is disclosed. Arrange the information now in a systematic order. For this purpose the analysis sheet recording technique can be used. This technique offers the advantage, that you can use it also in paper B and paper C (see C-Book, section 2.2.2, p. 14–15).
- 219 At the end of the preliminary analysis, you should be able to give *ad hoc* answers to the following questions:
1. Which is the technical area the client is interested in?
 2. What does the client believe the invention is?
 3. Does the client describe several separate embodiments of the invention? If so, what are these embodiments?
 4. Is there more than one invention? If so, what are they?
 5. How relevant is each piece of the prior art in terms of novelty?
 6. Does the client give any specific instructions?
- 220 Note your answers on a sheet of EQE lined paper. Later, you may cut out portions of the text and paste into your answer paper.

Example 1: Preliminary analysis of paper A 2009 Chemistry

- 221 In the paper A 2009 Chemistry, the answers to the questions set out above are as follows:
1. The interest of the client lies in the area of roofing materials (page 1 of the letter from the applicant). The client intends to commercialise a process for forming artificial patinas and a solution used in the process (page 2).
 2. The client describes a process for forming artificial patinas and solutions suitable for use in the process. Moreover, he describes a specific product of the process, namely patinated roofing panels (pages 6–7, examples 2, 3).
 3. To answer this question, a thorough analysis is needed. This will be done later.
 4. The description mentions several distinct inventions, including a process for forming artificial patinas, patinating solutions and patinated roofing materials.
 5. Both documents D1 and D2 concern processes for forming artificial patinas, patinating solutions and patinated roofing materials. At first sight, they could destroy the novelty of the inventions described by the client
 6. There are no specific instructions by the client.

Example 2: Preliminary analysis of paper A 2018

- 222 In paper A 2018, the answers to the questions set out above may be:
1. The client deals with building elements such as windows and glass facades and intends to license the invention to glazing manufacturers [001].
 2. The client has invented a new method to create protrusions directly on the surface of glass panes [002]. These glass panes can be used in Vacuum-Insulated-Glass (VIG) glazing, wherein the protrusions can be used as spacer to keep the glasses at a particular distance from each other [002].
 3. There are examples wherein one or more protrusions are created [007]; there are glass panes described with protrusions on both glass surfaces [017]; there is double and triple VIG glazing described [014], [015], [020]-[021].
 4. The description mentions several distinct inventions, including a method for providing protrusions on a glass pane, the glass pane per se and VIG glazing with such panes.
 5. Document D1 teaches a process to form irregular protrusions on the surface of a glass pane and states that such a pane can be used in VIG glazing. Document D2 describes VIG windows wherein spacers are used that are separate convex elements.

When these spacers are made of glass, the optical properties of the window are improved. At first sight they are highly relevant in respect of novelty.

- 6. The client is not willing to pay any claims fees [001]. Thus, the number of claims has to be limited to a maximum of 15 (Rule 162(1) EPC).

2.3.3 Step 3: In-depth analysis

Overview of the analysis sheets recording technique 223

The in-depth analysis is an essential part of the method and a key to success or failure. If the conclusions drawn in the in-depth analysis are wrong, even the best claim drafter is in a hopeless situation. Therefore, there is every reason to perform step 3 with greatest care. Spend sufficient time on the proper analysis of the paper and try to arrive at the proper conclusions in the first round. There is no room for quick shots and decisions taken in haste. As a consequence of haste you may need a second or third round, and you have to read the texts twice or thrice. When sitting the examination, you cannot afford such escapades. 224

The layout of the analysis sheets may be produced in a simple manner by formatting sheets of EQE lined paper with the aid of a ruler. This offers the advantage that portions of the text can be cut out and pasted it into the answer. Although admissible, it is not advisable to bring your own analysis sheets to the examination, because they cannot be used for cutting and pasting (Point 6 Instructions). It is recommended, however, to bring a template of the analysis sheet to the examination. Appendix 1 shows a sample. 225

The following figure shows the layout of an analysis sheet (see Appendix 1).

Paper _____

	Invention	D1	D2
TF:				
I:				
F:				
Difference:				
E:				
Remarks:				

In the upper right corner there is a field for the number of the analysis sheet. 226

The template includes six sections with the following headings:

TF: technical fields mentioned in the letter from the client

I: invention concerned

F: mandatory technical features of the invention as described by the client

Difference: distinguishing features of the invention

E: technical effects of the invention

Remarks: any supplementary information regarding the invention or the state of the art

The left margin is used for indicating where in the letter from the client each information can be found.

In the right margin there is a separate column for each document representing the state of the art. Normally, two columns for D1 and D2, respectively, are sufficient.

- 227 The analysis of the letter from the client is performed by writing down in a structured manner the information needed for preparing the answer, starting with the technical fields mentioned by the client.
- 228 Under the heading “I:” the designation of the invention is indicated. For each invention described in the letter from the client a separate analysis sheet is drawn up, provided that the number of separate inventions is small. If an invention is described in terms of a small number of distinct embodiments or examples, it is practical to draw up separate analysis sheet for each embodiment/example.
- 229 In the third section of the analysis sheet with the heading “F:”, all mandatory features of the invention as described by the client are listed. As far as the identification of the features is concerned, the statements made in the letter from the client are decisive, unless there is an obvious error. Any technical findings given in the letter should be accepted and nothing added from the special knowledge you may have of the technical field of the invention (Rule 22(3) IPREE). In paper A, as in any other paper of the EQE, there is no room for calling the technical facts into question or extend them by expert knowledge or speculation. It is important to bear in mind, however, that the client is not supposed to be an expert in the field of patents. His views regarding the patentability of the invention may be sketchy or even wrong. While the technical disclosure of the invention is reliable and not open to challenge, the same does not apply to the conclusions drawn by the client on issues of patentability. In fact, it has to be analysed in-depth, whether and to what extent the subject-matter described in the letter from the client meets the requirements of the EPC. The gist of paper A consists precisely in finding out what kind of objects can be claimed, and how the subject-matter has to be defined to provide the broadest possible protection for the client in accordance with the EPC. In particular, the requirements of the EPC regarding novelty, inventive step, and unity of invention, as well as the recommendations contained in the Guidelines for Examination have to be met (Rule 23(3), (5) IPREE).
- 230 When filling out the analysis sheet, it is important to use the same terminology as in the letter from the client; this also avoids the use of information not given in paper A. Make sure that the references in the left margin of the analysis sheets are correct and expressed in a suitable standard format. Usually it is practical to indicate the paragraph numbers given in square brackets in the text of the EQE papers, e.g. “[017]” or simply “[17]”. If the paragraph referred to is short and straightforward, there is no need to indicate line numbers within the paragraph. Otherwise, the line numbers of the statement referred to should be indicated. Another suitable format for references is the indication of the page and line numbers, e.g. “p. 3, l. 5”. Any reference must be clear.
- 231 The template of the analysis sheet contains a special section relating to the effects of the invention. All effects should be taken into consideration, irrespective of whether they are mentioned explicitly in the letter of the client and designated as such, or whether they can be derived, be it from the client’s letter or from the documents representing the state of the art. Occasionally, effects of the invention are hidden somewhere in the text of paper A and have to be retrieved. For this reason all documents should be read with great care, even if it appears at first sight that certain passages of a document are irrelevant.

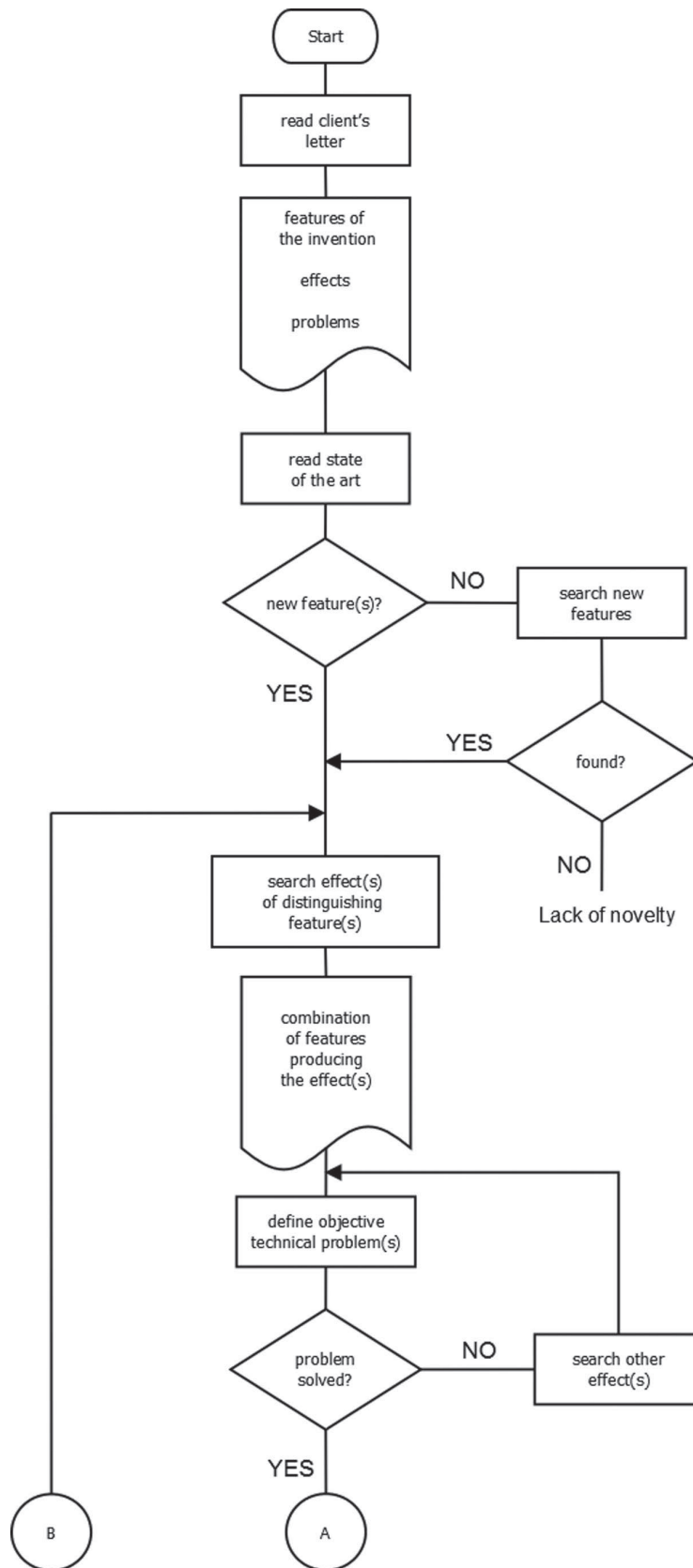
Example: Paper A 2009 Chemistry

- 232 According to paragraph [019] of the letter from the client it is known that basic copper sulphate and basic copper chloride are present in natural patinas. The research paper D2 confirms this finding by stating that natural patina was found to consist of two distinct layers, namely an inner layer of copper oxide and an outer layer consisting mainly of basic copper sulphate with some basic copper chloride [D2, 003]. D2 reports in addition that artificial patina has a different structure [D2, 005]. This corresponds to the results of the tests performed by the client, where a further crystalline phase of unknown composition

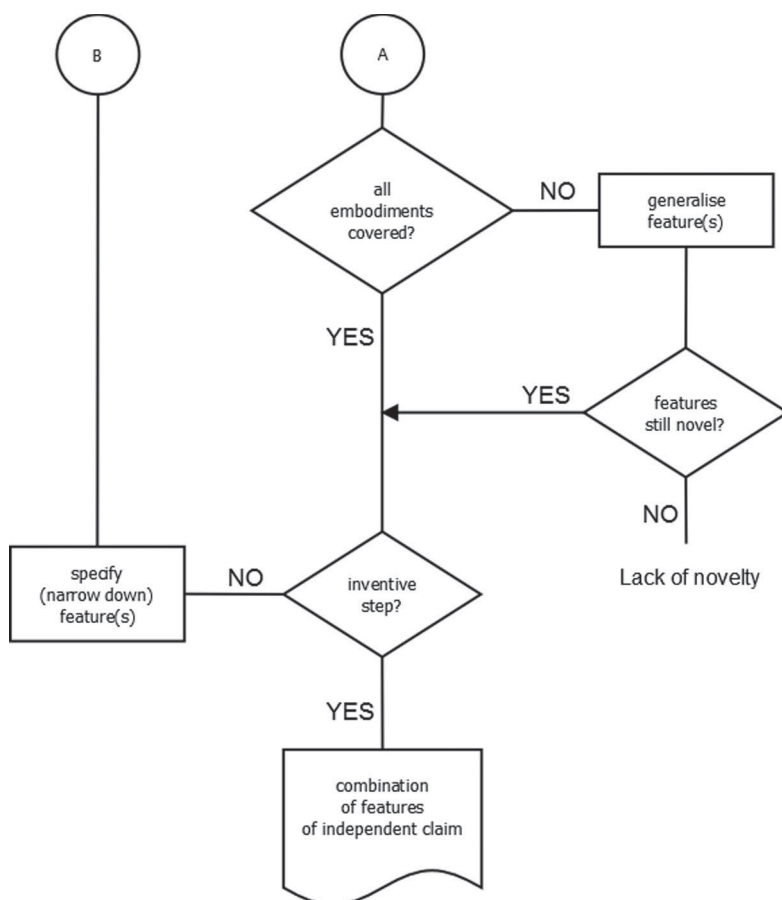
The general concept of the invention

In view of the need to save as much time as possible, it is important to address the question of the general concept at an early stage of the analysis. 334

The following flowchart illustrates the procedure for analysing the invention.



Flowchart continued ...



335 The first part of the flowchart is concerned with the procedure for finding at least one distinguishing feature of the invention. If no distinguishing feature can be found, an objection of lack of novelty arises, which means that the subject-matter concerned cannot be claimed.

336 If there exists at least one feature that distinguishes the invention from the closest prior art, the next step is to identify the technical effects associated with the distinguishing features. In this context the term “*associated*” means that the distinguishing features must be responsible for, or at least make a contribution to the technical effects under consideration. Very often, there is no one-to-one correspondence between a specific feature and a particular effect. Instead, the effect is produced by a feature in combination with other features of the invention.

337 Knowledge of the effects associated with the distinguishing features allows the formulation of the so called “*objective technical problem*” underlying the invention. It consists in modifying or adapting the closest prior art to provide the technical effects that the invention provides (Guidelines G-VII, 5.2). The objective technical problem derived in this way may not be what the client presents as “*the problem*” in his letter.

338 In a further step it has to be investigated, whether the combination of mandatory features of the invention does, in fact, solve the technical problem. This step is essential in view of the requirement of inventive step. The technical problem may be regarded as being solved only if it is credible that substantially all embodiments encompassed by the combination of features of the invention exhibit the technical effects upon which the invention is based. Whenever it is found that the problem is not solved or, what is much more often the case, that the problem is not solved by substantially all embodiments, then a reformulation of the technical problem is required. 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. The reformulation may lead to the definition of a less ambitious problem than initially envisaged (Guidelines G-VII, 5.2).

3 Interpretation and analysis of disclosures

3.1 Legal basis

EPC Articles and Rules

767

Art. 69 EPC

Protocol on the Interpretation of Art. 69 EPC of 5 October 1973 as revised by the Act revising the EPC of 29 November 2000

Guidelines

B-III, 3.2: Interpretation of claims

F-IV, 4.2: Interpretation

Case Law Book

I.C.4: Determining the content of the relevant prior art

I.C.4.1: General rules of interpretation

I.C.4.2: Combinations within a prior art document

I.C.4.3: Taking implicit features into account

Further reference

C-Book, Chapter 4, p. 83–102: Interpretation and analysis

3.2 Relevance to paper A

First of all, the description of the invention given by the client has to be interpreted and understood. Then the technical content of the documents representing the state of the art has to be determined. This may also need interpretation. Finally, the claims directed to the invention have to satisfy the rules of interpretation applicable to the procedures before the EPO set out in the Guidelines. It is obvious that the documents comprised in the state of the art should be interpreted according to the same standards as those applied to the claims.

768

The EPC does not contain any provisions on the interpretation of terms and expressions used in the items making up a European patent application or a patent, but there is extensive case law by the Boards of Appeal. Accordingly, a number of principles of interpretation have been established, including those outlined below.

769

3.3 Interpreting features

Any document contained in the state of the art has to be considered as a whole. It is not permissible to consider individual paragraphs of a document, let alone individual phrases or words in isolation. Each part of a document has to be construed taking the content as a whole into account.

770

For the interpretation of the content of a document, it is decisive how a skilled person would have understood the document at the publication date. The content of a document is what the skilled person derives directly and unambiguously from the text, taking common general knowledge into account.

771

It is not permissible to combine two or more separate documents, or to combine separate parts belonging to different embodiments described in a single document, unless such a combination is suggested explicitly. The content of a document cannot be construed to be a reservoir, from which features pertaining to separate embodiments may be drawn in order to artificially create a further embodiment.

772

- 773 Any document has to be read with an attempt to make technical sense out of it. Such a reading may involve a departure from the strict literal wording. The interpretation must not be made on the basis of a narrow, literal or academic approach.

3.3.1 Interpreting technical terms and expressions

- 774 The terms and expressions in a document have to be read giving the words the meaning and scope which they normally have in the relevant technical field, unless a special meaning is expressly stated in the document. If such a special meaning is indicated, it takes precedence over the usual meaning. A document may be its own dictionary.
- 775 Any non-specific definitions of terms and expressions should be given the broadest technically reasonable meanings.

3.3.2 Non-limiting features

- 776 Expressions such as “preferably”, “for example”, “such as”, “particularly”, “typically”, “normally”, “usually” or “may” have no limiting effect; that is to say, the feature following any such expression is to be regarded as optional (Guidelines F-IV, 4.9)

777 Examples:

There are many different antimicrobial agents on the market that could be used, such as triclosan or chloroxymenol (paper A 2019).

PVA usually has an average molecular weight lying within the range of from 1 000 to 1 000 000 g/mol. Preferred average molecular weights lie between 10 000 and 300 000 g/mol, more preferably between 20 000 and 150 000 g/mol (paper A 2017).

As mentioned above, our dishwashing products can also contain liquid components. In one of the preferred examples, a combination of liquid and solid components, packaged in different connected pouches, is used (paper A 2017).

The mouthpiece (1) and the conduit (2) are preferably made of plastic. The ball (3) is preferably made of metal (paper A 2013 Electricity/Mechanics).

The weight (22) can for example be made from iron. To improve the stability of the devices when they are floating, the devices can have a body which is elongated, for example cylinder-shaped (paper A 2012 Electricity/Mechanics).

The incubation may take place under cooled conditions (such as 4 °C) or at ambient temperature (between 20 °C and 25 °C) (paper A 2014 Chemistry).

The reaction temperatures preferably employed are from 0 °C to 150 °C, in particular from 10 °C to 100 °C, particularly preferably from 20 °C to 80 °C (paper A 2012 Chemistry).

The absorbent core is usually a mixture of a superabsorbent polymer and fibres (paper A 2011 Chemistry).

3.3.3 Identical features

- 778 A specific feature may have different names. It is possible that a feature described by the client as pertaining to the invention is disclosed in a document representing the state of the art, but not with the same wording. Whether such a situation of synonyms exists has to be investigated on a case to case basis, using the information provided by the examination paper as a guide.

779 Examples:

The drug “salbutamol” is a synonym for “albuterol” (T 956/05).

The expression “monotonous” is a synonym for the expressions “monotonic” and “monotone” (T 777/00).

The expression “aerodynamic diameter” is a synonym of “aerodynamic particle size” (T 1664/10).

The term “filtering paper” is not considered by the skilled person as the only possible interpretation of the term “water permeable membrane” (T 452/05). Consequently, the two terms are not synonyms.

3.3.4 Generic versus specific features

A generic disclosure does not usually take away the novelty of any specific example falling within the terms of that disclosure, but a specific disclosure does take away the novelty of a generic claim embracing that disclosure (Guidelines G-VI, 5). 780

Examples: 781

A disclosure of copper takes away the novelty of metal as a generic concept, but not the novelty of any metal other than copper.

A disclosure of rivets takes away the novelty of fastening means as a generic concept, but not the novelty of any fastening means other than rivets, such as nails or adhesives.

The generic term “alkane” is not novelty-destroying for the compound “methane” (i.e. the alkane having one atom of carbon and four atoms of hydrogen), but “methane” destroys the novelty of “alkane”.

3.3.5 Features incorporated by reference

If a document representing the state of the art explicitly refers to another document as providing more detailed information on certain specific features, the teaching of the latter document is to be regarded as incorporated (Guidelines G-IV, 8). 782

Example: 783

The consistency of the mortars is determined by means of a flow table as described in the standard specification ASTM C 230 (T 641/07).

The moulded single piece body (3) of the climbing shoe is made of rubber or any other material of similar characteristics as described in DE-U-83 27 868 (paper C 2000).

3.3.6 Implicit features

The disclosure of a document is not limited to what is explicitly described, but includes everything that is “directly and unambiguously derivable” from the document. In particular, the state of the art comprises implicit features. The limitation to features “derivable directly and unambiguously” from the document is essential. According to the case law of the Boards of Appeal and the Guidelines, the teaching of a document must not be interpreted as embracing equivalents not disclosed explicitly in the document (Guidelines G-VI, 2). 784

Examples: 785

The term “emulsion” requires implicitly the presence of an oil phase in the compositions of the invention. The sunscreen compositions must contain at least one oil phase (paper A 2012 Chemistry).